

## JUDITH C. CHOW

Nazir and Mary Ansari Chair in Entrepreneurialism and Science and Research Professor  
Division of Atmospheric Sciences, Desert Research Institute, Nevada System of Higher  
Education

<http://www.dri.edu/judith-chow>

[https://www.researchgate.net/profile/Judith\\_Chow](https://www.researchgate.net/profile/Judith_Chow)

ORCID ID: 0000-0002-1980-5891

### Education

Sc.D.	Environmental Science and Physiology	1985	Harvard University, Cambridge, MA
M.S.	Environmental Health Sciences	1983	Harvard University, Cambridge, MA
B.S.	Biology/Chemistry	1974	Fu-Jen Catholic University, Taiwan

### Background

Dr. Judith C. Chow, Nazir and Mary Ansari Chair in Entrepreneurialism and Science and Research Professor in the Division of Atmospheric Sciences (DAS) at the Desert Research Institute (DRI; <http://www.dri.edu>), has more than 40 years of experience in atmospheric, air quality, and environmental health research and education. Dr. Chow is a member of the graduate faculty in the Department of Environmental Science and Atmospheric Sciences Program at the University of Nevada, Reno (UNR), where she advises graduate students working on Master and Doctoral degrees. As founder and leader of DRI's Environmental Analysis Facility (EAF), she heads a group of research scientists and technicians in developing and applying advanced analytical methods to characterize suspended atmospheric particles for source attribution and their effects on health, climate, visibility, ecosystems, and cultural artifacts. Her current strategic priorities include expansion of EAF capabilities to obtain more information from archived samples of existing monitoring networks using thermal and mass spectrometric technologies; improving detection of brown carbon in speciation network samples; applying microsensors to human exposure estimates and fugitive dust control; and simulating source profile changes using a photochemical flow tube reactor. Current and recent projects include assessment of contributions from seaport operations to adverse air quality in southern California; measuring real-world emissions in Canada's Oil Sands Region; designing air quality networks in developing countries for the World Bank; and evaluating effects of photochemical aging on biomass burning emissions. She has been principal investigator or a major collaborator on more than 50 large atmospheric studies and many smaller ones. During her career at DRI, Dr. Chow has established cooperative agreements and collaborative research projects with environmental scientists in Hong Kong Special Administrative Region, mainland China, Taiwan, Japan, Korea, India, Canada, Mexico, El Salvador, Chile, Brazil, New Zealand, Australia, Austria, Germany, Slovenia, Croatia, Italy, South Africa, and Antarctica. Her research leadership crosses traditional university departmental lines – involving chemists, physicists, biologists, engineers, biostatisticians, toxicologists, epidemiologists, and physicians. Dr. Chow is the principal author or co-author of >600 journal articles, book chapters, and printed conference papers and >260 technical reports. She has been recognized by Scopus.com in ecology and environment, with more than 32,000 citations and an h-index of 96. She is included in the [Research.com - Leading Academic Research Portal](#) top 100 environmental scientists worldwide and [Stanford University Top 2% Scientists List 2023 PDF – InstaPDF](#).

### Professional Experience

2010–Present	Adjunct Professor, Xi'an Jiaotong University, Xi'an, Shaanxi Province, China.
2007–Present	Nazir and Mary Ansari Chair in Entrepreneurialism and Science, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV.
2007–Present	Adjunct Professor, Nankai University, Tianjin, China.
2005–Present	Adjunct Professor, Institute of Earth Environment, Chinese Academy of Sciences, Xi'an, China.
2004–Present	Graduate Faculty, Department of Environmental Sciences, University of Nevada, Reno, NV.

- 1992–Present Research Professor, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV.
- 1992–Present Graduate Faculty, Atmospheric Sciences Program, Department of Physics, University of Nevada, Reno, NV.
- 1989–1992 Associate Research Professor, Energy and Environmental Engineering Center, Desert Research Institute, Reno, NV.
- 1985–Present Director, Environmental Analysis Facility, Desert Research Institute, Reno, NV.
- 1985–1989 Assistant Research Professor, Energy and Environmental Engineering Center, Desert Research Institute, Reno, NV.
- 1982–1985 Environmental Consultant, Environmental Research and Technology, Inc., Concord, MA.
- 1982–1985 Technical Interpreter, Environmental Research and Technology, Inc., Concord, MA; Harvard University, Cambridge, MA.
- 1982–1985 Research Fellow, Harvard University, School of Public Health, Boston, MA.
- 1982–1984 Research Assistant, Energy and Environmental Policy Center, Kennedy School of Government, Harvard University, Cambridge, MA.
- 1977–1982 Environmental Scientist and Technician, Environmental Research and Technology, Inc., Concord, MA.
- 1976–1977 Chemistry Technician, Soil Science Department, North Carolina State University, Raleigh, NC.
- 1974–1976 Biology and Health Science Teacher, Dominican High School and Ching-Ching Junior High School, Kaohsiung, Taiwan.

## Honors and Awards

Honorary Member Air & Waste Management Association, 2023.

Aerosol Science and Technology 2022 Outstanding Publication Award for “Comparison of IMPROVE and NIOSH carbon measurements.” Vol. 34, pp23-24.

[World's Top Environmental Sciences Scientists: H-Index Environmental Sciences Science Ranking | Research.com, 2023.](#)

Chartered Member of U.S. EPA’s Clean Air Science Advisory Committee, 2021-2024.

[Stanford University Top 2% Scientists List 2023 PDF – InstaPDF.](#)

Desert Research Institute 35-Year Distinguished Service Award, 2021.

Atmospheric Environment 2019 Haagen-Smit Prize for Best Paper for “Chow, J.C., Watson, J.G., Pritchett, L.C., Pierson, W.R., Frazier, C.A., Purcell, R.G., (1993). Chow, J.C., Watson, J.G., Pritchett, L.C., Pierson, W.R., Frazier, C.A., Purcell, R.G., (1993). The DRI Thermal/Optical Reflectance carbon analysis system: Description, evaluation and applications in U.S. air quality studies. *Atmospheric Environment*, 27A, 1185-1201.”

Arthur C. Stern 2016 Distinguished Paper Award for “Cao, J.J., Shen, Z.X., Chow, J.C., Lee, S.C., Watson, J.G., Tie, X.X., Ho, K.F., Wang, G.H., Han, Y.M., (2012). Winter and summer PM<sub>2.5</sub> chemical compositions in 14 Chinese cities. *Journal of the Air & Waste Management Association*, 62, 1214-1226. 10.1080/10962247.2012.701193”

Invited co-author of 2017 A&WMA Critical Review “Hidy, G.M., Mueller, P.K., Altshuler, S.L., Chow, J.C., Watson, J.G., (2017). Critical review: Air quality measurements— From rubber bands to tapping the rainbow. *Journal of the Air & Waste Management Association*, 67, 637-668.”

Desert Research Institute 30-Year Distinguished Service Award, 2016.

Chinese Society of Particuology’s Outstanding Contribution Award, 2016.

Arthur C. Stern 2016 Distinguished Paper Award for “The IMPROVE\_A temperature protocol for thermal/optical carbon analysis: Maintaining consistency with a long-term database”, *JAWMA*, vol. 57, p.1014.

Air & Waste Management Association’s 2014 Charles W. Gruber Association Leadership Award.

Invited Keynote Presentation, The 7<sup>th</sup> World Congress on Particle Technology, Chinese Society of Particuology, May 2014.

Haagen-Smit 2011 Clean Air Award for Air Quality Research, California Air Resources Board, Sacramento, CA, May 2012.

Sanqin Friendship Award, The People's Government of Shaanxi Province, China, November 2011 (Presented March 2012).

Frontiers of Environmental Science & Engineering (FESE)'s 2011 Best Paper Award for "Wang, X.L.; Robbins, C.; Hoekman, S.K.; Chow, J.C.; Watson, J.G.; Schuetzle, D. (2011). Dilution sampling and analysis of particulate matter in biomass-derived syngas. *Frontiers of Environmental Science and Engineering in China*, 5(3):320-330."

Certificate of Appreciation for service as Chair of the Publication Committee, 2006–2011, Air & Waste Management Association, Pittsburgh, PA, June 2011.

Senatorial Recognition Award, John Ensign, U.S. Senator, Washington, DC, January 2011.

Certificate of Appreciation for service on the Board of Directors, 2007–2010, Air & Waste Management Association, Pittsburgh, PA, June 2010.

Certificate of Appreciation for organization of the International Specialty Conference on "Leapfrogging Opportunities for Air Quality Improvement," Air & Waste Management Association, Xi'an, China, May 2010.

Certificate of Appreciation for contribution to the success of the International Specialty Conference on "Aerosol & Atmospheric Optics: Visual Air Quality and Radiation," Air & Waste Management Association, Moab, UT, May 2008.

Certificate of Appreciation for commitment and dedication to the Science Board of the Atmospheric Radiation Measurement (ARM) Climate Research Facility (ACRF), Department of Energy, Washington, DC, 2004–2007.

Certificate of Appreciation for leadership and dedication as Chair of the Critical Review Committee, 2001–2007, Air & Waste Management Association, Pittsburgh, PA, June 2007.

Guest Professorship in recognition of honor and achievement plus acknowledgement of the esteem of Nankai University, Tianjin, China, July 2007.

Nazir and Mary Ansari Chair in Entrepreneurialism and Science Award, Nazir and Mary Ansari Foundation, Reno, NV, May 2007.

Certificate of Visitation, The Legislature of the State of Nevada, upon the request of Senator William J. Raggio, Dr. Judith Chow was extended the privilege of the floor of the Senate, Carson City, NV, March 2007.

Certificate of Appreciation, 9<sup>th</sup> China Aerosol Conference and 3<sup>rd</sup> Cross-Strait Aerosol Technical Conference on "Air Pollution: Science and Policy," Guangzhou, China, January 2007.

Certificate of Recognition, Technical Council: Air Group Coordinator, 2001–2006, Air & Waste Management Association, Pittsburgh, PA, June 2006.

Certificate of Appreciation for outstanding efforts as Chair of the Editorial Review Board, 2001–2006, Air & Waste Management Association, Pittsburgh, PA, June 2006.

Outstanding Mega Poster Session Award, the 99<sup>th</sup> Annual Air & Waste Management Association Annual Conference and Exhibition, New Orleans, LA, June 2006.

Air Quality Expert Award for her contributions to the improvement of air quality science in Taiwan, Environmental Protection Administration, Executive Yuan, and the National Central University, Jhongli, Taiwan, June 2006.

Certificate of Appreciation for service and contributions as a member of the EM Editorial Advisory Committee, 2002–2006, Air & Waste Management Association, June 2006.

Certificate of Appreciation for outstanding service to the Board of Environmental Studies and Toxicology, 2002–2005, National Research Council, Washington, DC, 2005.

Certificate of Appreciation from the 4<sup>th</sup> Asian Aerosol Conference–AAC-2005, Indian Aerosol Science and Technology Association, Mumbai, India, December 2005.

Certificate of Educational Credit for completing "Managing Today's IT and Technical Professionals," American Management Association, New York, NY, 2004.

Certificate of Appreciation for invaluable contribution to the International Conference on "High-Tech Industry, Best Air Pollution Control Technology," Environmental Protection Bureau, Taoyuan County Government, Taoyuan, Taiwan, May 2004.

Certificate of Appreciation for contribution to the Workshop on "Emission Source Characterization," Air & Waste Management Association, Hong Kong Section, Hong Kong Polytechnic University, Hong Kong University of Science and Technology, and Shenzhen Graduate School, Peking University, Hong Kong Special Administrative Region, November 2004.

Certificate of Appreciation for outstanding service to the Committee on "Research Priorities for Airborne Particulate Matter," 1997–2004, National Research Center, Washington, DC, 2004.

Certificate of Recognition as the Technical Council Measurement (AM) Division Chair, 1998–2002, Air & Waste Management Association, Pittsburgh, PA, June 2002.

Frank A. Chambers Excellence in Air Pollution Control Award, Air & Waste Management Association, Pittsburgh, PA, June 2002.

Fellow Member Award, Air & Waste Management Association, Pittsburgh, PA, June 2001.

Regents' Researcher Award, Board of Regents, Nevada System of Higher Education, Reno, NV, May 2001.

Award of Recognition for organizing the International Specialty Conference on "PM<sub>2.5</sub>: A Fine Particle Standard," Air & Waste Management Association, Eastern Sierra Chapter, Reno, NV, June 1999.

Certificate of Recognition for Excellence in "Achievement in Science, Math, and Engineering," Women in Science and Engineering Program, University and Community College System of Nevada, Reno, NV, October 1998.

Certificate of Appreciation for serving as Technical Program Chair for the International Specialty Conference on "PM<sub>2.5</sub>: A Fine Particle Standard," Air & Waste Management Association, Long Beach, CA, January 1998.

Distinguished Fellow, Institute of Environmental Engineering, National Sun Yat-Sen University, Kaohsiung, Taiwan, September 1998.

Outstanding Faculty Member Award, Board of Regents, University and Community College System of Nevada, Reno, NV, 1997–1998.

Certificate of Appreciation for Commitment and Support in providing the Environmental Lecturers for the Symposium on "Air Pollution-Recent Issues and Development," Air & Waste Management Hong Kong Section, Hong Kong Special Administrative Region, December 1997.

Alessandro Dandini Medal of Science, Desert Research Institute, Reno, NV, 1997.

Invited Environmental Lecturer, Hong Kong Section, Air & Waste Management Association, Hong Kong Special Administrative Region, November 1997.

Environmental Fellow, Nankai University, Tianjin, China, October 1996.

Outstanding Faculty Member Award, Board of Regents, University and Community College System of Nevada, Reno, NV, 1995–1996.

Certificate of Appreciation for valuable contributions as an author of *Particulate Matter Science for Policy Makers: A NARSTO Assessment*, NARSTO, February 1995.

Invited author of the A&WMA 1995 Critical Review: "Chow, J.C., (1995). Critical review: Measurement methods to determine compliance with ambient air quality standards for suspended particles. *Journal of the Air & Waste Management Association*, 45, 320-382."

Woman of Achievement Award. Nevada Women's Fund, Reno, NV, October 1995.

Distinguished Environmental Scientist Award, Taiwan Power Company and Taiwan University, Taipei, Taiwan, October 1995.

Honorary Research Associate. Schonland Research Centre for Nuclear Sciences, University of the Witwatersrand, Johannesburg, South Africa, January 1993.

Certificate of Appreciation for serving as Technical Program Chair for the International Specialty conference on "PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls," Air & Waste Management Association, San Francisco, CA, January 1992.

Outstanding Achievement Recognition Award, Board of Regents, University of Nevada, Reno, NV, October 1990.

## **Memberships**

Air & Waste Management Association (A&WMA), 1980-present.

American Association of Aerosol Research (AAAR), 2000-present.

Earth Team (E-Team, an international volunteer association of environmental advisors helping developing nations address pollution issues).

## **Committees and Offices**

### ***Journal Review/Editorial***

Guest Associate Editor, *GeoHealth* and *JGR-Atmospheres* on special collections: *Atmospheric PM<sub>2.5</sub> in China: Indoor, Outdoor, and Health Effects* and *Atmospheric PM<sub>2.5</sub> in China: Physics, Chemistry, Measurements, and Modeling*. May 2019–May 2020.

Co-Guest Editor, Special Issue "Recent Advances for Aerosol and Environment Study in Asia", *Particuology*, February 2013.

Member, American Meteorological Society, Biometeorology Award Committee, 2012 – 2016.

Co-Guest Editor, Special Issue "Leapfrogging Opportunities for Air Quality Improvement," *Journal of the Air & Waste Management Association*, November 2011.

Associate Editor, *Atmospheric Research*, 2010–2012.

Member, Editorial Board, *Journal of Earth Environment*, 2010–present.

Member, Editorial Board, *Asian Journal of Atmospheric Environment*, 2010–present.  
 Thematic Editor, *Particuology*, 2010–present.  
 Member, Editorial Advisory Board, *Atmospheric Pollution Research*, 2009–present.  
 Member, Editorial Board, *Journal of Environmental and Public Health*, 2009–2014.  
 Editor, *Aerosol and Air Quality Research (AAQR)*, an international journal, 2008–2014.  
 Member, Editorial Board, *Sustainable Environment Research*, 2007–present.  
 Chair, Publications Committee for the *Journal of the Air & Waste Management Association* and *EM*, 2006–2011.  
 Member, Editorial Board, *Journal of Environmental Science and Health, Part A*, 2006–2010.  
 Member, Board of Editors, *Journal of the Chinese Institute of Environmental Engineering*, 2006–present.  
 Member, Editorial Board, *Air Quality, Atmosphere and Health*, 2006–2021.  
 Guest Editor-in-Chief, special aerosol issue in 2006, *China Particuology*.  
 Member, Technical Committee, International Specialty Conference on “Particulate Matter Supersites Program and Related Studies,” American Association for Aerosol Research (AAAR), Atlanta, GA, 2005.  
 Co-Editor-in-Chief, *Aerosol and Air Quality Research (AAQR)*, an international journal, 2003–2008.  
 Member, Editorial Advisory Committee, *EM*, 2002–2006.  
 Member, Editorial Review Board, *The Scientific World* electronic journal, 2001—present.  
 Chair, Editorial Review Board, *Journal of the Air & Waste Management Association*, 2001–2005.  
 Chair, Air & Waste Management Association Critical Review sub-committee, 2000–2007 and 2010.  
 Member, A&WMA Editorial Review Board, 1999–present.  
 Member, A&WMA Membership Review Committee, 1999–present.  
 Member, A&WMA International Affairs Committee, 1999–present.  
 Member, A&WMA Publications Committee, 1999–present.  
 Member, A&WMA Critical Review Committee, 1999–present.  
 Member, Air & Waste Management Association Critical Review sub-committee, 1995–present.  
 Member, Editorial Review Board, *Aerosol and Air Quality Research (AAQR)*, an international journal, 2002–present.  
 External reviewer for the National Science Foundation, National Research Council, Department of Defense (DOD) Strategic Environmental Research and Development Program (SERDP), Health Effects Institute, Mickey Leland National Urban Air Toxics Research Center, Southwest Center for Environmental Research and Policy, Department of Energy (DOE) Atmospheric Radiation Measurement (ARM) Program, Environmental Protection Agency (EPA), and various journals (e.g., *Inhalation Toxicology*, *Journal of Geophysical Research*, *Energy & Fuels*, *Advances in Environmental Research*, *Environmental Monitoring and Assessment*, *Atmospheric Environment*, *Aerosol Science and Technology*, *Journal of Aerosol Science*, *Journal of the Air & Waste Management Association*, *Atmospheric Chemistry and Physics*, *Atmospheric Measurements and Techniques*, *Aerosol Science and Engineering*, *Analytical and Bioanalytical Chemistry*, *Environmental Science and Technology*, *Science of the Total Environment*, *Chemosphere*, *Atmospheric Research*, *Atmospheric Pollution Research*, *Air Quality, Atmosphere, and Health*, *Advances in Environmental Research*, *Journal of Environmental Engineering*, *Journal of Exposure Analysis and Environmental Epidemiology*, *Environmental Pollution*, *Circulation*, *Particuology*, and *Aerosol and Air Quality Research*.)

### **Conference/Workshop Committee Memberships**

Member, Scientific Committee, Faraday Discussion, Air Qualities in Megacities (2017 – present).  
 Member, International Scientific Committee, Asian Aerosol Conference, Taipei, Taiwan, 12-16 June, 2022 (2020 – present).  
 Member, International Scientific and Advisory Committee, 12<sup>th</sup> International Conference on Air Quality- Science and Application, Thessaloniki, Greece, 27 June-1 July, 2022 (2009 – present).  
 Member, Technical Steering Committee for A&WMA Visibility Special Conference “Aerosol and Atmospheric Optics: Visibility and Air Pollution,” Bryce Canyon, UT, 5-8 October, 2021.  
 Invited Plenary Presenter at the Air Pollution Conference Brazil and 4<sup>th</sup> Annual CMAS South America, Belo Horizonte, Brazil, 24 July 2019.  
 Invited Plenary Presenter at the 1<sup>st</sup> International Symposium on Aerosol Characterization and Therapies, National Sun-Yat-Sen University, Kaohsiung, Taiwan, 29 October 2019.  
 Invited Plenary Presenter at the 16<sup>th</sup> Cross-Strait Aerosol Technology Symposium, Luoyang, China, 16 November 2019.  
 International Advisory Committee Member, 18<sup>th</sup> World Clean Air Congress Conference, Istanbul, Turkey, 23-27 September 2019.  
 Scientific Committee Member, Air Quality in Megacities, 2017-present.

Member, Technical Steering Committee, A&WMA Visibility Special Conference “Aerosol and Atmospheric Optics: Visibility and Air Pollution,” Bryce Canyon, Utah, 2017-present.

Co-Chair, Scientific Steering Committee, Plenary Presenter, and Keynote Address Speaker at the Conference on “Atmospheric PM<sub>2.5</sub> in China: Change, Impact, Mitigation, and Global Perspective”, American Geophysical Union (AGU) and Chinese Academy of Science (CAS), Xi’an, China, 16-20 October 2018.

Member, International Scientific and Advisory Committee, 11th International Conference on “Air Quality – Science and Applications” Barcelona, Spain, 12-16 March 2018.

Member, Scientific Committee, The Fifth International Symposium on Regional Air Quality Improvement in Rapidly Developing Economic Regions, Guangzhou, China, 16-19 November 2017.

Member, Technical Steering Committee for A&WMA Visibility Special Conference “Aerosol and Atmospheric Optics: Visibility and Air Pollution,” Jackson Hole, WY, 26-30 September 2016.

Member, International Advisory Committee, World Clean Air Congress and Better Air Quality Conference, Ulsan, South Korea, August 29-September 2, 2016.

Member and Plenary Speaker, International Committee for the 8<sup>th</sup> International Workshop on Sand/Duststorms and Associated Dustfall, Lisbon, Portugal, 1-4 May 2016.

Member, International Scientific and Advisory Committee for the 10<sup>th</sup> International Conference on Air Quality – Science and Application, Milan, Italy, 14-18 March 2016.

Invited Speaker at the 12<sup>th</sup> National Aerosol Conference and 13<sup>th</sup> Cross Strait Workshop for Aerosol Science & Technology in Chongqing, China, 23 October 2015.

Invited Speaker at the Workshop on Receptor Modeling of Particulate Air Pollutants, New Delhi, India, 8 January 2015.

Invited Speaker at the Second Sino-U.S. Workshop on Sustainability Issues at the Nexus of Energy, Water, Climate, and Air Pollution (NEWCAP), Pasadena, CA, 9 September 2014.

Invited Speaker at the Second International Symposium on Environmental Solutions for Industrial Cities, Ulsan, South Korea, 2 September 2014.

Invited Speaker at The 7<sup>th</sup> World Congress on Particle Technology/Cross-Strait Workshop, Beijing, China, 19 May 2014.

Invited Expert Panel Speaker at the FAIRMODE Technical Meeting – WG3 Source Apportionment Workshop, Kjeller, Norway, 28 April 2014.

Invited Speaker at The 9<sup>th</sup> International Conference on Air Quality-Science and Application, Garmish-Partenkirchen, Germany, 28 March 2014.

Invited Plenary Lecturer at the 12<sup>th</sup> Cross-Strait Technical Seminar and 3<sup>rd</sup> Aerosol Air Pollution Technology Seminar, Beijing, China, 19 May 2014.

Member, International Scientific and Advisory Committee, 9<sup>th</sup> International Conference on Air Quality–Science and Application, Garmisch-Partenkirchen, Germany, 23-28 March 2014.

Invited Plenary Lecturer at the 9<sup>th</sup> International Conference on Air Quality–Science and Application, Garmisch-Partenkirchen, Germany, 28 March 2014.

Member, Academic Committee, The 4<sup>th</sup> International Workshop on Regional Air Quality Management in Rapidly Developing Economic Regions, Hong Kong, China, January 2014.

Invited Plenary Lecturer at the 4<sup>th</sup> International Workshop on Regional Air Quality Improvement, Hong Kong, China, 14 January 2014.

Invited Speaker at the A&WMA Eastern Sierra Chapter on “Effects of Black and Organic Carbon and Emission Inventory Development”, Desert Research Institute, Reno, NV, 5 April 2013.

Invited Speaker at the Terra Cotta General Dedication. Desert Research Institute, Reno, NV, 8 February 2013.

Invited Academic Committee Member, The 3<sup>rd</sup> International Workshop on Regional Air Quality Improvement in Rapidly Developing Economic Regions *Environment, Climate, and Energy*, Guangzhou, China.

Invited Speaker at the Better Air Quality 2012 Symposium on Improving Air Quality Monitoring Systems in Asia, 4 December 2012.

Invited Speaker at the “Promise and Problems of Advanced Particulate Monitoring and Analysis Methods for Routine Networks” panel at the Air & Waste Management Association Aerosol and Atmospheric Optics: Visibility and Pollution Specialty Conference, 28 September 2012.

Invited Speaker at the “PM<sub>2.5</sub> Sampling and Analysis for Extinction Calculation” for the Air & Waste Management Association’s “Aerosol and Atmospheric Optics: Visibility and Pollution Specialty Conference,” 24 September 2012.

Invited Lecturer at the two-day workshop on “Air Quality and Multipollutant Measurements at the Institute of Earth Environment,” Chinese Academy of Sciences, Xi’an, China, 20-21 September 2012.

Invited Lecturer at the “Symposium on Microscopic Applications to Ultrafine Particle/PM<sub>2.5</sub>/PM<sub>10</sub> and Source Apportionment,” Xi’an, China, 18 July 2012.

Invited Speaker at the “Special Symposium: Meeting Tomorrow’s Challenges in Air Resources,” University of Florida, Gainesville, Florida, 27 April 2012.

Invited Lecturer at the “Workshop on Novel Approaches for PM<sub>2.5</sub> and Visibility Measurements for Source Apportionment,” 3 March 2012.

Member of the International Scientific and Advisory Committee, 8<sup>th</sup> International Conference on Air Quality – Science and Application, (Athens, Greece), March 2012.

Member, Conference Committee, Air & Waste Management Association Aerosol and Atmospheric Optics: Visibility and Pollution Specialty Conference, 2011–2012.

Invited Plenary Lecturer, The Third International Workshop on “Regional Air Quality Improvement in Rapidly Developing Regions,” Guangzhou, China, November 2011.

Invited Plenary Lecturer, International Conference on “Aerosol Science and Technology,” Tainan, Taiwan, October 2011.

Invited Plenary Lecturer and Member of the Organizing Committee, 2<sup>nd</sup> International Conference on “Air Pollution and Control,” Antalya, Turkey, September 2011.

Invited Plenary Lecturer on “Managing Multiple Pollutants and Multiple Effects,” Clean Air Society of Australia and New Zealand (CASANZ) Conference, Auckland, New Zealand, July 2011.

Member, Organizing Committee, The Mainland-China-Taiwan-Pacific Rim Conference on “Climate and Air Quality,” Waikoloa, Kona, HI, March 2011.

Technical Program Chair, International Specialty Conference on “Leapfrogging Opportunities for Air Quality Improvement,” Air & Waste Management Association, Xi’an, China, May 2010.

Member, International Scientific Committee (ISC), International Conference on “Sustainable Urbanization,” Hung Hom, Kowloon, Hong Kong Special Administrative Region, November 2010.

Member, International Scientific and Advisory Committee (ISAC), International Conference on “Urban Air Quality” (UAQ), co-sponsored by the Air & Waste Management Association, Istanbul, Turkey, March 2009.

Member, Scientific Advisory Committee, 11<sup>th</sup> International Conference on “Atmospheric Sciences and Applications for Air Quality,” Jinan, China, April 2009.

Member, Technical Program Committee, International Specialty Conference on “Aerosol and Atmospheric Optics: Visual Air Quality and Radiation,” Air & Waste Management Association, Moab, UT, May 2008.

Member, Technical Program Committee, 4<sup>th</sup> Asian Aerosol Conference (AAC-2005), Mumbai, India, December 2005.

Member, General Technical Program Committee, International Specialty Conference on “Particulate Matter Supersites Program and Related Studies,” American Association for Aerosol Research, Atlanta, GA, February 2005.

Member, Conference Committee, International Specialty Conference on “Regional and Global Perspectives on Haze: Causes, Consequences and Controversies,” Air & Waste Management Association, Asheville, NC, October 2004.

Letter of Appointment, Health Effects/Impacts Work Group, American Academy of Environmental Engineers’ Air Quality Compliance Workshop, Annapolis, MD, May 1999.

Chair, Technical Steering Committee, NARSTO Technical Conference on “Tropospheric Aerosols: Science and Decisions in an International Community,” co-sponsored by the Air & Waste Management Association and the U.S. Department of Energy, Querétaro, Mexico, October 2000.

Chair, Atmospheric Sciences Topic, International Specialty Conference on “PM<sub>2000</sub>: Particulate Matter and Health—The Scientific Basis for Regulatory Decision Making,” Air & Waste Management Association, Charleston, SC, January 2000.

Chair, Technical Program Committee, International Specialty Conference on “PM<sub>2.5</sub>: A Fine Particle Standard,” Air & Waste Management Association/U.S. Environmental Protection Agency, Long Beach, CA, January 1998.

Member, Technical Program Committee, Air & Waste Management Association’s 91<sup>st</sup> Annual Meeting, San Diego, CA, June 1998.

Member, Technical Program Committee, Air & Waste Management Association’s 90<sup>th</sup> Annual Meeting in Toronto, Canada, June 1997.

Member, Technical Program Committee, International Symposium on “Acid Rain & Electric Utilities II,” Air & Waste Management Association, Scottsdale, AZ, January 1997.

Member, Technical Program Committee, International Symposium on “Acid Rain & Electric Utilities,” Air & Waste Management Association, Tempe, AZ, January 1995.

Member, Technical Program Committee, International Specialty Conference on “Aerosol and Atmospheric Optics: Radiation Balance and Visual Air Quality,” Air & Waste Management Association/American Geophysical Union, Snowbird, UT, September 1994.

Member, Technical Program Committee, International Specialty Conference on “Regional Photochemical Measurement and Modeling Studies,” Air & Waste Management Association/U.S. Environmental Protection Agency, San Diego, CA, November 1993.

Chair, Technical Program Committee, International Specialty Conference on “PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls,” Air & Waste Management Association/U.S. Environmental Protection Agency, Scottsdale, AZ, January 1992.

### ***Expert Panels***

Chartered Member of U.S. EPA’s Clean Air Science Advisory Committee, 2021-2024.

Member, Advisory Board, Air Pollution Scientific Initiative (APSI), for MATRIX, Envirocomp Institute, 2020 – present.

Member, Independent Particulate Matter Review Panel (previously CASAC), 2016 – 2021.

International Expert and Steering Committee Member, World Bank’s Pollution Management and Environmental Health Program (PMEH) Steering Committee, 2016 – 2019.

Member, Science Advisory Committee for the EPA Air, Climate, and Energy (ACE) Center at Harvard University, 2016 – 2021.

Member, Particulate Matter Review Panel, Clean Air Scientific Advisory Committee (CASAC), U.S. Environmental Protection Agency, 2016 – 2019.

Member, National Resource Council (NRC) Committee on Sources of Lead Contamination at or near Superfund Sites, 2016 – 2017.

Advisory Council Member, South Coast Air Quality Management District (SCAQMD), 2016-present.

Chartered Member of Clean Air Scientific Advisory Committee (CASAC), U.S. Environmental Protection Agency, 2015 – 2018 and 2021-2024.

Member, Sulfur Oxides Panel Review Panel for the U.S. EPA Clean Air Scientific Advisory Committee (CASAC), 2015 – 2018.

Member, Oxides of Nitrogen Review Panel, U.S. EPA Clean Air Scientific Advisory Committee (CASAC), 2015 – 2018 and 2022 – present.

Member, Secondary NAAQS for Oxides of Nitrogen and Sulfur Review Panel, U.S. EPA Clean Air Scientific Advisory Committee (CASAC), 2015 – 2018.

Reviewer, Peer Reviewed Medical Research Program Investigator-Initiated Research Award, U.S. Army Medical Research and Materiel Command, video- and tele-conference, 17-22 July and 3 December 2015.

Reviewer, Science to Achieve Results (STAR) Graduate Fellowship, U.S. Environmental Protection Agency, 8-11 September 2015.

Reviewer, National Science Foundation (NSF) Environmental Chemical Sciences (ECS) Panel A – FY13, via WebEx (online), 28–29 March 2013.

Reviewer, Small Business Innovation Research Air Quality Panel, U.S. Environmental Protection Agency, 2012.

Member, Technical Advisory Group, Multiple Air Toxics Study (MATES II, III, IV, V), South Coast Air Quality Management District, 2012 – present.

Member, Scientific and Technological Achievement Awards (STAA) Committee, Scientific Advisory Board (SAB), U.S. Environmental Protection Agency, 2012 – 2017.

Member, External Advisory Board, University of Arizona Superfund Program, 2010 – present.

Member, Peer Review Panel for Particulate Matter, National Center for Environmental Assessment’s Integrated Science Assessment, U.S. Environmental Protection Agency, 2008.

Member, Three-year Research Plan Steering Committee, South Coast Air Quality Management District, 2007–2010.

Science Advisor, The Chinese National Key 863 project “The Establishment of Pearl River Delta Regional Air Pollution Complex Monitoring Network,” 2007 – 2010.

Expert Panel Member, U.S. Environmental Protection Agency, “Outdoor Air Quality Indicators Relevant to EPA’s Report on the Environment,” 2007 – 2008.

Member, Science Advisory Board (SAB) Workgroup on Air Monitoring Plan for Hurricane Katrina, U.S. Environmental Protection Agency, September 2005.

Member, Committee on Energy Futures and Air Pollution in Urban China and the United States, National Academy of Engineering, 2005 – 2007.

Member, Ambient Air Monitoring and Measurements Subcommittee (AAMM), U.S. EPA Clean Air Scientific Advisory Committee's (CASAC), 2004-2017.

Member, Science Board, Atmospheric Radiation Measurement (ARM) Climate Research Facility, U.S. Department of Energy, 2004 – 2007.

Member, Technical Advisory Panel, Multiple Air Toxics Exposure Study (MATES) II and III, South Coast Air Quality Management District, 2003 – 2008.

Member, Board of Environmental Studies and Toxicology (BEST), National Research Council (NRC), 2002–2005.

Member, Steering Committee, Advanced Air Pollution Research Plan, South Coast Air Quality Management District, 2002 – 2005.

Member, External Scientific Advisory Committee (ESAC), National Environmental Respiratory Center (NERC), Lovelace Respiratory Research Institute, 2001 – present.

Member, Researcher Award Selection Committee, University and Community College System of Nevada's Board of Regents, 2001.

Member and Technical Expert, PM<sub>2.5</sub> Chemical Speciation Workgroup Peer Review Panel, U.S. Environmental Protection Agency, 1998–2000.

Member, Committee on Research Priorities for Airborne Particulate Matter, National Research Council, 1998 – 2003.

Stakeholder, Air and Water Stakeholder Advisory Committee for the Advanced Monitoring Systems Pilot, Environmental Technology Verification Program, U.S. Environmental Protection Agency, 1998 – 2009.

Member, Pollution Control Working Group Panel, China Council for International Cooperation on Environment and Development, China, 2000 – 2008.

Member, Science Advisory Board, Strategic Environmental Research & Development Program (SERDP), Department of Defense (DOD), 2000 – 2007.

Member, Science Advisory Board, Environmental Chemistry Program, Carlsbad Environmental Monitoring and Research Center, New Mexico State University, 2000 – 2001.

Member, Technical Committee, the Center for Environmental Resource Management, University of Texas at El Paso, 1998 – 2009.

Member, Air Toxics Study Technical Review Group, South Coast Air Quality Management District, 2000–2005.

Member, Fine Particulate Matter Science Assessment Task Force, NARSTO, 2000 – 2006.

Member, Ambient Air Monitoring and Methods (AAMM) Subcommittee, Clean Air Scientific Advisory Committee (CASAC), U.S. Environmental Protection Agency, 2004 – 2010.

Member, External Advisory Board, Fresno Asthmatic Children's Environment Study (FACES), California Air Resources Board, 2000 – 2008.

### ***Professional Society Boards and Committees***

Member, Haagen-Smit Award Committee, California Air Resources Board, 2021 – present.

Member, Chinese Academy of Science Key Laboratory of Aerosol Chemistry and Physics Academic Committee, 2016 – present.

Review Committee Member, "Marion Milligan Mason Award for Women in the Chemical Sciences," American Association for the Advancement of Science (AAAS), 2015-present.

Member, Excellence in Environmental Education Award Committee, A&WMA Sierra Chapter, 2011 – present.

Member, Membership Committee, Air & Waste Management Association, 2010 – present.

Board Member, Atmospheric Biogeosciences, American Meteorological Society, 2010–2013.

Member, Board of Directors, Air & Waste Management Association, 2007 – 2010.

Member, Nominating Committee, American Association for Aerosol Research (AAAR), 2007 – 2008.

Chair, Subcommittee #6 (Metals I), Intersociety Committee for Methods of Air Sampling and Analysis, 1993 – present.

Coordinator, Air Group, Technical Council, Air & Waste Management Association, 2001 – 2004.

Member, Board of Directors, Air & Waste Management Association Eastern Sierra Chapter, 1999 – 2005.

Chair, Measurement Division, Technical Council, Air & Waste Management Association, 1999 – 2002

Chair, AM-2 Receptor Modeling Source Apportionment Technical Committee, Air & Waste Management Association, 1996 – 1997.

Member, International Affairs Committee, Air & Waste Management Association, 1990–Present.

Member, AB-6 Visibility and Radiative Balance Technical Coordinating Committee, Air & Waste Management Association, 1990 – present.

Member, AB-1 Particulate Matter Technical Coordinating Committee, Air & Waste Management Association, 1990 – present.

Lecturer on technology transfer workshops (e.g., aerosol sampling, chemical analysis, and receptor modeling) in the U.S. (Portland, OR; Las Vegas, NV; San Francisco, Sacramento, Los Angeles, San Diego, and El Centro, CA; Pocatello, ID; Whitefish, MT; Denver, CO; Phoenix and Tucson, AZ; Research Triangle Park, NC; Pittsburgh, PA; Austin, TX; and Chicago, IL); Canada (Vancouver, B.C.); Mexico (Mexico City, Querétaro, and Cuernavaca); Central America (San Salvador, El Salvador); South America (Santiago, Chile; Vitória, and Belo Horizonte, Brazil); Europe (Milan, Italy; Zagreb, and Croatia); South Africa (Johannesburg, Durban, Cape Town, and Pretoria); Taiwan (Kaohsiung, Tainan, Taichung, Taiyuan, and Taipei); Hong Kong Special Administrative Region; China (Beijing, Chongqing, Guangzhou, Hainan Island, Shanghai, Tianjin, Tongliang, and Xi'an); Korea (Seoul and Jeju Island); India (Mumbai, Pune, New Delhi, Hyderabad, and Raipur); Vietnam (Hanoi); Thailand (Bangkok); New Zealand (Auckland and Christchurch); and Australia (Melbourne and Sydney).

## Journal Publications and Book Chapters

- Chen, L.-W.A., Wang, X.L., Lopez, B., Wu, G.Y., Ho, S.S.H., Chow, J.C., Watson, J.G., Yao, Q., Yoon, S.J. and Jung, H.J. 2023. Contributions of non-tailpipe emissions to near-road PM<sub>2.5</sub> and PM<sub>10</sub>: A chemical mass balance study. *Environ. Pollut.*, 122283. 10.1016/j.envpol.2023.122283.
- Hidy, G.M., Watson, J.G., Chow, J.C., Althshuler, S.L., Kumar, N. and Saxena, P. 2023. Peter K. Mueller (1926 - 2023). *EM*, 17:
- Hopke, P.K., Chen, Y., Rich, D.Q., Watson, J.G. and Chow, J.C. 2023. Issues with the organic and elemental carbon fractions in recent U.S. Chemical Speciation Network data. *Aerosol Air Qual. Res.*, 23:1-7. 10.4209/aaqr.230041
- Lopes, E.G., Costa, J.G., Antunes, H., Baernabe, A.C.A., Andreao, W.L., Santolim, L.C.D., Radaeli, L.A., Mathias, A.J., Kohler, L.A., Chow, J.C. and Watson, J.G. 2023. Continuous sensing and response to fugitive dust emissions at an integrated steel plant, *Proceedings, A&WMA 116th Annual Conference & Exhibition*, Pittsburgh, PA: Air & Waste Management Association. <https://www.researchgate.net/publication/372854692> Continuous Sensing and Response to Fugitive Dust Emissions at an Integrated Steel Plant A&WMA's 116 th Annual Conference Exhibition
- Lopes, E.G., Andreao, W.L., Antunes, H., Baernabe, A.C.A., Wang, X.L., Chow, J.C. and Watson, J.G. 2023. Performance of Alphasense N3 optical particle counters for measuring dispersed emissions at an integrated steel plant, *Proceedings, A&WMA 116th Annual Conference & Exhibition*, Pittsburgh, PA: Air & Waste Management Association.
- Ren, H.H., Cheng, Y., Wu, F., Gu, Z.L., Cao, J.J., Huang, Y., Xue, Y.G., Cui, L., Zhang, Y.W., Chow, J.C., Watson, J.G., Zhang, R.J., Lee, S.C., Wang, Y.L., Liu, S., (2023). Spatiotemporal characteristics of ozone and the formation sensitivity over the Fenwei Plain. *Science of the Total Environment*, 881, 163369. 10.1016/j.scitotenv.2023.163369. <https://www.researchgate.net/publication/369859284> Spatiotemporal characteristics of ozone and the formation sensitivity over the Fenwei Plain
- Roy, P., Chen, L.-W.A., Gebreselassie, A., Li, Y., Chow, J.C., Watson, J.G., Chen, Y.T., (2023). High time-resolution fenceline air quality sensing and dispersion modeling for environmental justice-centered source attribution. *Atmospheric Environment*, 305, 119778. 10.1016/j.atmosenv.2023.119778. <https://www.researchgate.net/publication/370138663> High time-resolution fenceline air quality sensing and dispersion modeling for environmental justice-centered source attribution
- Verma, S., Pervez, S., Chow, J.C., Watson, J.G., Andrabi, S., Mandal, P., Khan, N., Tiwari, S., Dumka, U., Chakrabarty, R., Verma, M., Pervez, Y., Mishra, A., Tamrakar, A., Sowmya, H., Deb, M., Ghosh, K., Jain, V., Karbhal, I., Shrivastava, K. and Satnami, M. 2023. Optical properties of fine mode aerosols over high altitude Himalayan glacier region. *ACS Earth and Space Chemistry*,
- Wang, X.L., Gronstal, S., Lopez, B., Jung, H.J., Chen, L.-W.A., Wu, G.Y., Ho, S.S.H., Chow, J.C., Watson, J.G., Yao, Q., Yoon, S.J., (2023). Evidence of non-tailpipe emission contributions to PM<sub>2.5</sub> and PM<sub>10</sub> near southern California highways. *Environmental Pollution*, 120691. 10.1016/j.envpol.2022.120691. <https://www.sciencedirect.com/science/article/pii/S0269749122019054>
- Wang, X., Firouzkhohi, H., Chow, J.C., Watson, J.G., Carter, W. and De Vos, A.S.M. 2023. Characterization of gas and particle emissions from open burning of household solid waste. *EGUsphere*, 2023:1-24. 10.5194/egusphere-2023-866.
- Chow, J.C., Watson, J.G., Wang, X.L., Abbasi, B., Reed, W.R., Parks, D.A., (2022). Review of filters for air sampling and chemical analysis in mining workplaces. *Minerals*, 12, 1314. 10.3390/min12101314. <https://www.mdpi.com/2075-163X/12/10/1314>

- Shen, M., Ho, K.F., Dai, W., Liu, S., Zhang, T., Wang, Q., Meng, J., Chow, J.C., Watson, J.G., Cao, J., Li, J., (2022). Distribution and stable carbon isotopic composition of dicarboxylic acids, ketocarboxylic acids and  $\alpha$ -dicarbonyls in fresh and aged biomass burning aerosols. *Atmos. Chem. Phys.*, 22, 7489-7504. 10.5194/acp-22-7489-2022. <https://acp.copernicus.org/articles/22/7489/2022/>
- Vega, E., Ramírez, O., Sánchez-Reyna, G., Chow, J.C., Watson, J.G., López-Veneroni, D., Jaimes-Palomera, M., (2022). Volatile organic compounds and carbonyls pollution in Mexico City and an urban industrialized area of central Mexico. *Aerosol and Air Quality Research*, 22, 10.4209/aaqr.210386. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130978770&doi=10.4209%2faaqr.210386&partnerID=40&md5=0e09341c5948d9fdb34e90da3fb7b126>
- Verma, S.R., Pervez, S., Mandal, P., Chow, J.C., Watson, J.G., Andrabi, S.M., Verma, M., Dugga, P., Khan, N.A., Pervez, Y.F., Mishra, A., Deb, M.K., Karbhal, I., Tiwari, S., Ghosh, K.K., Shrivastava, K., Satnami, M.L., (2022). Atmospheric abundance of PM<sub>2.5</sub> carbonaceous matter and their potential sources at three high-altitude glacier sites over the Indian Himalayan range. *Acs Earth and Space Chemistry*, 6, 2919-2928. 10.1021/acsearthspacechem.2c00216. [https://www.researchgate.net/publication/365400571\\_Atmospheric\\_Abundance\\_of\\_PM\\_25\\_Carbonaceous\\_Matter\\_and\\_Their\\_Potential\\_Sources\\_at\\_Three\\_High-Altitude\\_Glacier\\_Sites\\_over\\_the\\_Indian\\_Himalayan\\_Range](https://www.researchgate.net/publication/365400571_Atmospheric_Abundance_of_PM_25_Carbonaceous_Matter_and_Their_Potential_Sources_at_Three_High-Altitude_Glacier_Sites_over_the_Indian_Himalayan_Range)
- Wang, X.L., Chen, L.-W.A., Lu, M.G., Ho, K.F., Lee, S.C., Ho, S.H.H., Chow, J.C., Watson, J.G., (2022). Apportionment of vehicle fleet emissions by linear regression, positive matrix factorization, and emission modeling. *Atmosphere*, 13, 1066. 10.3390/atmos13071066. <https://www.mdpi.com/2073-4433/13/7/1066>
- Yuan, M., Wang, Q., Zhao, Z., Zhang, Y., Lin, Y., Wang, X., Chow, J.C., Watson, J.G., Tian, R., Liu, H., Tian, J., Cao, J.J., (2022). Seasonal variation of optical properties and source apportionment of black and brown carbon in Xi'an, China. *Atmospheric Pollution Research*, 13, 10.1016/j.apr.2022.101448.
- Abbasi, B., Wang, X.L., Chow, J.C., Watson, J.G., Peik, B., Nasiri, V., Riemenschmitter, K.B., Elahifard, M., (2021). Review of respirable coal mine dust characterization for mass concentration, size distribution and chemical composition. *Minerals*, 11, 426. 10.3390/min11040426.
- Alshammari, D., Bloss, W., Chen, Y., Chow, J.C., Gani, S., Harrison, R.M., Hu, D.W., Li, G., McFiggans, G., Milsom, A., Oyarz'un Aravena, A.M., Pfrang, C., Shi, Z.B., Srivastava, D., Styring, P., Su, H., Watson, J.G., Xu, J.S., (2021). General discussion: Multiphase atmospheric chemistry, and source apportionment. *Faraday Discussions*, 226, 314-333. 10.1039/D1FD90015C.
- Chen, L.-W.A., Chow, J.C., Wang, X.L., Cao, J.J., Mao, J.Q., Watson, J.G., (2021). Brownness of organic aerosol over the United States: Evidence for seasonal biomass burning and photobleaching effects. *Environmental Science and Technology*, online.
- Cheng, Y., Chow, J.C., Watson, J.G., Zhou, J.M., Liu, S.X., Cao, J.J., (2021). Decreasing concentrations of carbonaceous aerosols in China from 2003 to 2013 *Scientific Reports*, 11, 5352. 10.1038/s41598-021-84429-w.
- Chow, J.C., Chen, L.-W.A., Wang, X.L., Green, M.C., Watson, J.G., (2021). Improved estimation of PM<sub>2.5</sub> brown carbon contributions to filter light attenuation. *Particuology*, 56, 1-9. 10.1016/j.partic.2021.01.001. <https://www.sciencedirect.com/science/article/pii/S1674200121000158>
- Johnson, M.M., Chow, J.C., Wang, X.L., Chen, L.-W.A., Arnott, W.P., Watson, J.G., (2021). Multiwavelength light absorption measurements on Teflon and quartz filters with a UV-VIS spectrometer. *Aerosol Science and Engineering*, in preparation.
- Mendes-Emygdio, A.P., Andrade, M.F., Teixeira-Gonçalves, F.L., Chen, L.-W.A., Engling, G., Watson, J.G., Chow, J.C., (2021). Source apportionment of particulate organic and inorganic matter in the metropolitan area of São Paulo, Brazil. *Environmental Pollution*, submitted.
- Nava, V., Das, K.C., Amin, V., Gronstal, S., Wang, X.L., Chow, J.C., Watson, J.G., Yang, Y., (2021). Quantification of carboxyl-functionalized multiwall carbon nanotubes in plant tissues with programmed thermal analysis. *Journal of Environmental Quality*, 50, 278–285. 10.1002/jeq2.20180.
- Shen, M.X., Xu, H.M., Liu, S.X., Zhang, Y., Zhang, N.N., Zhou, J.M., Chow, J.C., Watson, J.G., Cao, J.J., (2021). Spatial distribution of PM<sub>2.5</sub>-bound elements in eighteen cities over China: policy implication and health risk assessment. *Environmental Geochemistry and Health*, 10.1007/s10653-021-00913-2.
- Stevenson, E.D., Kleinman, M.T., Bai, X., Barlaz, M., Abraczkinskas, M., Guidry, V., Watson, J., Chow, J., (2021). Critical review on PFOA, kidney cancer, and testicular cancer. *Journal of the Air and Waste Management Association*, 71, 1265-1276. 10.1080/10962247.2021.1975995. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85116417049&doi=10.1080%2f10962247.2021.1975995&partnerID=40&md5=1b1ff8929cd888727235ca9c80d86845>

- Stevenson, E.D., Kleinman, M.T., Bai, X.L., Barlaz, M., Abraczkinskas, M., Guidry, V.T., Watson, J.G., Chow, J.C., (2021). 2021 Critical review discussion: Critical review on PFOA, kidney cancer, and testicular cancer. *Journal of the Air & Waste Management Association*, 71, 1265-1276. 10.1080/10962247.2021.1975995.
- Vega, E., Lopez-Veneroni, D., Ramirez, O., Chow, J.C., Watson, J.G., (2021). Particle-bound PAHs and chemical composition, sources, and health risk of PM<sub>2.5</sub> in a highly industrialized corridor in Central Mexico. *Aerosol and Air Quality Research*, in revision.
- Verma, M., Pervez, S., Chow, J.C., Majumdar, D., Watson, J.G., Pervez, Y.F., Deb, M.K., Shrivastava, K., Jain, V.K., Khan, N.A., Mandal, P., Chakrabarty, R.K., (2021). Assessing the magnitude of PM<sub>2.5</sub> polycyclic aromatic hydrocarbon emissions from residential solid fuel combustion and associated health hazards in South Asia. *Atmospheric Pollution Research*, 101142. 10.1016/j.apr.2021.101142.
- Wang, X.L., Chen, L.-W.A., Ho, K.F., Chan, C.S., Zhang, Z.Z., Lee, S.C., Chow, J.C., Watson, J.G., (2021). Comparison of vehicle emissions by EMFAC-HK model and tunnel measurement in Hong Kong. *Atmospheric Environment*, 256, 118452. 10.1016/j.atmosenv.2021.118452.
- Watson, J.G., Cao, J.J., Wang, X.L., Chow, J.C., (2021). PM<sub>2.5</sub> pollution in China's Guanzhong Basin and the USA's San Joaquin Valley mega-regions. *Faraday Discussions*, 226, 255-289. 10.1039/D0FD00094A.
- Wei, C., Bandowe, B.A.M., Han, Y.M., Cao, J.J., Watson, J.G., Chow, J.C., Wilcke, W., (2021). Polycyclic aromatic compounds (PAHs, oxygenated PAHs, nitrated PAHs, and azaarenes) in air from four climate zones of China: Occurrence, gas/particle partitioning, and health risks. *Science of the Total Environment*, 786, 147234. 10.1016/j.scitotenv.2021.147234.
- Altshuler, S.L., Zhang, Q., Kleinman, M.T., Garcia-Menendez, F., Moore, C.T., Hough, M.L., Stevenson, E.D., Chow, J.C., Jaffe, D.A., Watson, J.G., (2020). Critical Review Discussion: Wildfire and prescribed burning impacts on air quality in the United States. *Journal of the Air & Waste Management Association*, 70, 961-970. [https://www.researchgate.net/publication/343896647\\_Critical\\_Review\\_Discussion\\_Wildfire\\_and\\_prescribed\\_burning\\_impacts\\_on\\_air\\_quality\\_in\\_the\\_United\\_States](https://www.researchgate.net/publication/343896647_Critical_Review_Discussion_Wildfire_and_prescribed_burning_impacts_on_air_quality_in_the_United_States)
- Cao, J.J., Wang, Q.Y., Li, L., Zhang, Y., Tian, J., Chen, L.-W.A., Ho, S.H.H., Wang, X.L., Chow, J.C., Watson, J.G., (2020). Evaluation of the oxidation flow reactor for particulate matter emission limit certification. *Atmospheric Environment*, 224, 117086. 10.1016/j.atmosenv.2019.117086. <http://www.sciencedirect.com/science/article/pii/S1352231019307253>
- Frey, H.C., Adams, P.J., Adgate, J.L., Allen, G.A., Balmes, J., Boyle, K., Chow, J.C., Dockery, D.W., Felton, H.D., Gordon, T., Harkema, J.R., Kinney, P.L., Kleinman, M.T., McConnell, R., Poirot, R.L., Samat, J., Sheppard, L., Turpin, B., Wyzga, R., (2020). The need for a tighter particulate-matter air-quality standard. *New England Journal of Medicine*, 383, 680-683. 10.1056/NEJMs2011009. <https://pubmed.ncbi.nlm.nih.gov/32521130/>
- Fujitani, Y., Sato, K., Tanabe, K., Takahashi, K., Hoshi, J., Wang, X.L., Chow, J.C., Watson, J.G., (2020). Volatility distribution of organic compounds in sewage incineration emissions. *Environmental Science & Technology*, 54, 14235-14245. 10.1021/acs.est.0c04534. <https://doi.org/10.1021/acs.est.0c04534>
- June, N.A., Wang, X., Chen, L.-W.A., Chow, J.C., Watson, J.G., Wang, X.L., Henderson, B.H., Zheng, Y.Q., Mao, J.Q., (2020). Spatial and temporal variability of brown carbon in the United States: Implications for direct radiative effects. *Geophysical Research Letters*, 47, 10.1029/2020GL090332. <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2020GL090332>
- Niu, X.Y., Chuang, H.C., Wang, X.L., Ho, S.S.H., Li, L.J., Qu, L.L., Chow, J.C., Watson, J.G., Sun, J., Lee, S.C., Cao, J.J., Ho, K.F., (2020). Cytotoxicity of PM<sub>2.5</sub> vehicular emissions in the Shing Mun Tunnel, Hong Kong. *Environmental Pollution*, 263, 114386. 10.1016/j.envpol.2020.114386. <http://www.sciencedirect.com/science/article/pii/S0269749119370253>
- Wang, X.L., Hoekman, S.K., Han, Y., Chow, J.C., Watson, J.G., Wu, X.M., Wu, Y., Schuetzle, D., Schuetzle, R., (2020). Potential emission reductions by converting agricultural residue biomass to synthetic fuels for vehicles and domestic cooking in China. *Particuology*, 49, 40-47. 10.1016/j.partic.2019.04.008.
- Wang, X.L., Zhou, H., Arnott, W.P., Meyer, M.E., Taylor, S., Firouzkhahi, H., Moosmuller, H., Chow, J.C., Watson, J.G., (2020). Evaluation of gas and particle sensors for detecting spacecraft-relevant smoke. *Fire Safety Journal*, 113, 1-12. 10.1016/j.firesaf.2020.102977.
- Zhang, Z.Z., Gao, Y., Yuan, Q., Tan, Y., Li, H.W., Cui, L., Huang, Y., Cheng, Y., Xiu, G.L., Lai, S.C., Chow, J.C., Watson, J.G., Lee, S.C., (2020). Effects of indoor activities and outdoor penetration on PM<sub>2.5</sub> and associated organic/elemental carbon at residential homes in four Chinese cities during winter. *Science of the Total Environment*, 739, 139684. 10.1016/j.scitotenv.2020.139684. <http://www.sciencedirect.com/science/article/pii/S0048969720332046>
- Altshuler, S.L., Ahad, J.M.E., Chow, J.C., Duane, C., Dube, M., Legge, A.H., Percy, K.E., Stevenson, E.D., Watson, J.G., (2019). Critical review discussion: Advances in science and applications in air pollution monitoring: A case

- study on oil sands monitoring targeting ecosystem protection. *Journal of the Air & Waste Management Association*, 69, 1133-1141. 10.1080/10962247.2019.1659192.
- Chan, T.W., Huang, L., Banwait, K., Zhang, W., Ernst, D., Wang, X.L., Watson, J.G., Chow, J.C., Green, M., Czimczik, C.I., Santos, G.M., Sharma, S., Jones, K., (2019). Inter-comparison of elemental and organic carbon mass measurements from three North American national long-term monitoring networks at a co-located site. *Atmospheric Measurement Techniques*, 12, 4543-4560. 10.5194/amt-12-4543-2019.
- Chen, X.C., Chow, J.C., Ward, T.J., Cao, J.J., Lee, S.C., Watson, J.G., Lau, N.C., Yim, S.H.L., Ho, K.F., (2019). Estimation of personal exposure to fine particles (PM<sub>2.5</sub>) of ambient origin for healthy adults in Hong Kong. *Science of the Total Environment*, 654, 514-524. 10.1016/j.scitotenv.2018.11.088.
- Chen, L.-W.A., Zhang, M., Liu, T., Fortier, K., Chow, J.C., Kolberg, R., Cao, J.J., Lin, G., Patel, T.Y., Cruz, P., Buttner, M.P., Watson, J.G., (2019). Evaluation of epifluorescence methods for quantifying bioaerosols in fine and coarse particulate air pollution. *Atmospheric Environment*, 213, 620-628.
- Chow, J.C., Wang, X.L., Green, M.C., Watson, J.G., (2019). Obtaining more information from existing filter samples in PM speciation networks. *EM*, 23, 15-19. [https://www.researchgate.net/publication/332878240\\_Obtaining\\_More\\_Information\\_from\\_Existing\\_Filter\\_Samples\\_in\\_PM\\_Speciation\\_Networks](https://www.researchgate.net/publication/332878240_Obtaining_More_Information_from_Existing_Filter_Samples_in_PM_Speciation_Networks)
- Chow, J.C., Cao, J.J., Chen, L.-W.A., Wang, X.L., Wang, Q.Y., Tian, J., Ho, S.S.H., Watts, A.C., Carlson, T.N., Kohl, S.D., Watson, J.G., (2019). Changes in PM<sub>2.5</sub> peat combustion source profiles with atmospheric aging in an oxidation flow reactor. *Atmospheric Measurement Techniques*, 12, 5475-5501. 10.5194/amt-2019-198. <https://www.atmos-meas-tech.net/12/5475/2019/amt-12-5475-2019.pdf>
- Chow, J.C., Watson, J.G., Solomon, P.A., Tisch, J., Chen, A., (2019). In memoriam: Thomas Maynard Merrifield (1950-2019). *EM*, 23, 52. [https://www.researchgate.net/publication/332878240\\_Obtaining\\_More\\_Information\\_from\\_Existing\\_Filter\\_Samples\\_in\\_PM\\_Speciation\\_Networks](https://www.researchgate.net/publication/332878240_Obtaining_More_Information_from_Existing_Filter_Samples_in_PM_Speciation_Networks)
- Hand, J.L., Prenni, A.J., Schichtel, B.A., Malm, W.C., Chow, J.C., (2019). Trends in remote PM<sub>2.5</sub> residual mass across the United States: Implications for aerosol mass reconstruction in the IMPROVE network. *Atmospheric Environment*, 203, 141-152. 10.1016/j.atmosenv.2019.01.049.
- Li, H.W., Wang, D.F., Cui, L., Gao, Y., Huo, J.T., Wang, X.N., Zhang, Z.Z., Tan, Y., Huang, Y., Cao, J.J., Chow, J.C., Lee, S.C., Fu, Q.Y., (2019). Characteristics of atmospheric PM<sub>2.5</sub> composition during the implementation of stringent pollution control measures in Shanghai for the 2016 G20 summit. *Science of the Total Environment*, 648, 1121-1129. 10.1016/j.scitotenv.2018.08.219.
- Liu, T., Chen, L.-W.A., Zhang, M., Watson, J.G., Chow, J.C., Cao, J.J., Chen, H.Y., Wang, W., Zhang, J.Q., Zhan, C.L., Liu, H.X., Zhen, J.R., Chen, N.W., Yao, R.Z., Xiao, W.S., (2019). Bioaerosol concentrations and size distributions during the autumn and winter seasons in an industrial city of central China *Aerosol and Air Quality Research*, 19, 1095-1104. <http://www.aaqr.org/article/detail/AAQR-18-11-OA-0422>
- Pervez, S., Verma, M., Tiwari, S., Chakrabarty, R.K., Watson, J.G., Chow, J.C., Panicker, A.S., Deb, M.K., Siddiqui, M.N., Pervez, Y.F., (2019). Household solid fuel burning emission characterization and activity levels in India. *Science of the Total Environment*, 664, 493-504. 10.1016/j.scitotenv.2018.11.019. <http://www.sciencedirect.com/science/article/pii/S0048969718343663>
- Sarkar, S., Rivas-Santiago, C.E., Ibrionke, O.A., Carranza, C., Meng, Q.Y., Osornio Vargas, A.R., Zhang, J.F., Torres, M., Chow, J.C., Watson, J.G., Ohman-Strickland, P., Schwander, S., (2019). Season and size of urban PM differentially affects cytotoxicity and human immune responses to *Mycobacterium tuberculosis* *Plos One*, 14, 1-20. 10.1371/journal.pone.0219122. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0219122>
- Wang, X.L., Zhou, H., Arnott, W.P., Meyer, M.E., Taylor, S., Firouzkouhi, H., Moosmuller, H., Chow, J.C., Watson, J.G., (2019). Characterization of smoke for spacecraft safety. *Journal of Aerosol Science*, 136, 36-47. 10.1016/j.jaerosci.2019.06.004.
- Watson, J.G., Altshuler, S.L., Chow, J.C., (2019). Critical review discussion supplement: Oil sands research bibliography. *Journal of the Air & Waste Management Association*, 69, S1-S37.
- Watson, J.G., Cao, J.J., Chen, L.-W.A., Wang, Q.Y., Tian, J., Wang, X.L., Gronstal, S.B., Ho, S.S.H., Watts, A.C., Chow, J.C., (2019). Gaseous, PM<sub>2.5</sub> mass, and speciated emission factors from laboratory chamber peat combustion. *Atmos. Chem. Phys.*, 19, 14173-14193. 10.5194/acp-19-14173-2019. <https://www.atmos-chem-phys.net/19/14173/2019/>
- Zhao, Z.Z., Cao, J.J., Chow, J.C., Watson, J.G., Chen, L.-W.A., Wang, X.L., Wang, Q.Y., Tian, J., Shen, Z.X., Zhu, C.S., Liu, S.X., Tao, J., Ye, Z.L., Zhang, T., Zhou, J.M., Tian, R.X., (2019). Multi-wavelength light absorption of black and brown carbon at a high-altitude site on the Southeastern margin of the Tibetan Plateau, China.

- Atmospheric Environment, 212, 54-64. <https://doi.org/10.1016/j.atmosenv.2019.05.035>.  
<http://www.sciencedirect.com/science/article/pii/S1352231019303346>
- Altshuler, S.L., Ayala, A., Collet, S., Chow, J.C., Frey, H.C., Shaikh, R., Stevenson, E.D., Walsh, M.P., Watson, J.G., (2018). Trends in on-road transportation, energy, and emissions: Critical review discussion. *Journal of the Air & Waste Management Association*, 68, 1015-1024. 10.1080/10962247.2018.1512734.
- Altshuler, S.L., Ayala, A., Collet, S., Chow, J.C., Frey, H.C., Shaikh, R., Stevenson, E.D., Walsh, M.P., Watson, J.G., (2018). Trends in on-road transportation, energy, and emissions. *Journal of the Air & Waste Management Association*, 68, 1015-1024. 10.1080/10962247.2018.1512734.
- Bano, S., Pervez, S., Chow, J.C., Matawle, J.L., Watson, J.G., Sahu, R.K., Srivastava, A., Tiwari, S., Pervez, Y.F., Deb, M.K., (2018). Coarse particle (PM<sub>10-2.5</sub>) source profiles for emissions from domestic cooking and industrial process in Central India. *Science of the Total Environment*, 627, 1137-1145. 10.1016/j.scitotenv.2018.01.289.
- Chen, X.C., Ward, T.J., Cao, J.J., Lee, S.C., Chow, J.C., Lau, G.N.C., Yim, S.H.L., Ho, K.F., (2018). Determinants of personal exposure to fine particulate matter (PM<sub>2.5</sub>) adult subjects in Hong Kong. *Science of the Total Environment*, 628-629, 1165-1177. 10.1016/j.scitotenv.2018.02.049.
- Chow, J.C., Riggio, G.M., Wang, X.L., Chen, L.-W.A., Watson, J.G., (2018). Measuring the organic carbon to organic matter multiplier with thermal/optical carbon mass spectrometer analyses. *Aerosol Science and Engineering*, 2, 165-172.
- Chow, J.C., Watson, J.G., Green, M.C., Wang, X.L., Chen, L.-W.A., Trimble, D.L., Cropper, P.M., Kohl, S.D., Gronstal, S.B., (2018). Separation of brown carbon from black carbon for IMPROVE and CSN PM<sub>2.5</sub> samples. *Journal of the Air & Waste Management Association*, 68, 494-510.
- Cui, L., Wang, X.L., Ho, K.F., Gao, Y., Liu, C., Ho, S.S.H., Li, H.W., Lee, S.C., Wang, X.M., Jiang, B.Q., Huang, Y., Chow, J.C., Watson, J.G., Chen, L.-W.A., (2018). Decrease of VOC emissions from vehicular emissions' in Hong Kong from 2003 to 2015: Results from a tunnel, study. *Atmospheric Environment*, 177, 64-74. 10.1016/j.atmosenv.2018.01.020.
- Das, K.K., Bancroft, L., Wang, X.L., Chow, J.C., Xing, B.S., Yang, Y., (2018). Digestion coupled with programmed thermal analysis for quantification of multiwall carbon nanotubes in plant tissues. *Environmental Science & Technology Letters*, 5, 442-447. 10.1021/acs.estlett.8b00287.
- Gaga, E.O., Ari, A., Akyol, N.H., Üzmez, Ö.Ö., Kara, M., Chow, J.C., Watson, J.G., Özel, E., Döğeroğlu, T., Odabasi, M., (2018). Determination of real-world emission factors of trace metals, EC, OC, BTEX, and semivolatile organic compounds (PAHs, PCBs and PCNs) in a rural tunnel in Bilecik, Turkey. *Science of the Total Environment*, 643, 1285-1296. 10.1016/j.scitotenv.2018.06.227.
- Harner, T., Rauert, C., Muir, D., Schuster, J., Hsu, Y.M., Zhang, L.M., Marson, G., Watson, J.G., Ahad, J., Cho, S., Jariyasopit, N., Kirk, J.L., Korosi, J.B., Landis, M., Martin, J., Zhang, Y.F., Fernie, K.J., Wentworth, G.R., Wnorowski, A., Dabek, E., Charland, J.P., Pauli, B., Wania, F., Galarneau, E., Cheng, I., Makar, P., Whaley, C., Chow, J.C., Wang, X.L., (2018). Air synthesis review on polycyclic aromatic compounds in the Athabasca oil sands region. *Environmental Reviews*, 26, 430-468. 10.1139/er-2018-0039.  
<http://www.nrcresearchpress.com/doi/pdf/10.1139/er-2018-0039>
- Ho, S.S.H., Wang, L.Q., Chow, J.C., Watson, J.G., Xue, Y., Huang, Y., Qu, L., Li, B., Dai, W.T., Li, L.J., Cao, J.J., (2018). Optimization and evaluation of multi-bed adsorbent tube method in collection of volatile organic compounds. *Atmospheric Research*, 202, 187-195.
- Li, L.J., Ho, S.S.H., Han, Y.M., Chow, J.C., Watson, J.G., Wang, L.Q., Qu, L.L., Cao, J.J., (2018). Quantification of nitrated-polycyclic aromatic hydrocarbons in atmospheric aerosol samples with in-injection port thermal desorption-gas chromatography/negative chemical ionization mass spectrometry method. *Atmospheric Environment*, 192, 84-93. 10.1016/j.atmosenv.2018.08.049.
- Li, L.J., Ho, S.S.H., Chow, J.C., Watson, J.G., Qu, L.L., Wang, L.Q., Cao, J.J., (2018). Quantification of oxygenated polycyclic aromatic hydrocarbons in ambient aerosol samples using in-injection port thermal desorption-gas chromatography/mass spectrometry: Method exploration and validation. *International Journal of Mass Spectrometry*, 433, 25-30. 10.1016/j.ijms.2018.08.005.
- Olson, C., Jiskra, M., Biester, H., Chow, J.C., Obrist, D., (2018). Mercury in active-layer tundra soils of Alaska: Concentrations, pools, origins, and spatial distribution. *Global Biogeochemical Cycles*, 32, 1058-1073. 10.1029/2017gb005840.
- Pervez, S., Bano, S., Watson, J.G., Chow, J.C., Matawle, J., Shrivastava, A., Tiwari, S., Pervez, Y.F., (2018). Source profiles for PM<sub>10-2.5</sub> resuspended dust and vehicle exhaust emissions in central India. *Aerosol and Air Quality Research*, 18, 1660-1672. 10.4209/aaqr.2017.08.0259.

- Riggio, G.M., Chow, J.C., Cropper, P.M., Wang, X.L., Yatavelli, R.L.N., Yang, X.F., Watson, J.G., (2018). Feasibility of coupling a thermal/optical carbon analyzer to a quadrupole mass spectrometer for enhanced PM<sub>2.5</sub> speciation. *Journal of the Air & Waste Management Association*, 68, 463-476.
- Sahu, R.K., Pervez, S., Chow, J.C., Watson, J.G., Tiwari, S., Panicker, A.S., Chakrabarty, R.K., Pervez, Y.F., (2018). Temporal and spatial variations of PM<sub>2.5</sub> organic and elemental carbon in Central India. *Environmental Geochemistry and Health*, 40, 2205-2222. 10.1007/s10653-018-0093-0.
- Wang, X.L., Ho, K.F., Chow, J.C., Kohl, S.D., Chan, C.S., Cui, L., Lee, S.C., Chen, L.-W.A., Ho, S.S.H., Cheng, Y., Watson, J.G., (2018). Hong Kong vehicle emission changes from 2003 to 2015 in the Shing Mun Tunnel. *Aerosol Science and Technology*, 52, 1085-1098. 10.1080/02786826.2018.1456650.
- Zavala, M., Molina, L.T., Maiz, P., Monsivais, I., Chow, J.C., Watson, J.G., Munguia, J.L., Cardenas, B., Fortner, E.C., Herndon, S.C., Roscioli, J.R., Kolb, C.E., Knighton, W.B., (2018). Black carbon, organic carbon, and co-pollutants emissions and energy efficiency from artisanal brick production in Mexico. *Atmospheric Chemistry and Physics*, 18, 6023-6037. <https://www.atmos-chem-phys.net/18/6023/2018/>
- Chow, J.C., Watson, J.G., (2017). Enhanced ion chromatographic speciation of water-soluble PM<sub>2.5</sub> to improve aerosol source apportionment. *Aerosol Science and Engineering*, 1, 7-24. doi:10.1007/s41810-017-0002-4. <http://link.springer.com/article/10.1007/s41810-017-0002-4>
- Cropper, P.M., Overson, D.K., Cary, R.A., Eatough, D.J., Chow, J.C., Hansen, J.C., (2017). Development of the GC-MS organic aerosol monitor (GC-MS OAM) for in-field detection of particulate organic compounds. *Atmospheric Environment*, 169, 258-266. 10.1016/j.atmosenv.2017.09.019.
- Hidy, G.M., Mueller, P.K., Altshuler, S.L., Chow, J.C., Watson, J.G., (2017). Critical review: Air quality measurements— From rubber bands to tapping the rainbow. *Journal of the Air & Waste Management Association*, 67, 637-668. <https://www.tandfonline.com/doi/full/10.1080/10962247.2017.1308890>
- Hidy, G.M., Chow, J.C., Watson, J.G., (2017). Critical review summary: Air quality measurements— From rubber bands to tapping the rainbow. *EM*, 21,
- Ho, S.S.H., Chow, J.C., Yu, J.Z., Watson, J.G., Cao, J.J., Huang, Y., (2017). Application of thermal desorption mass spectrometry for the analysis of environmental pollutants, Nollet, L.M.L., Lambropoulou, D. (Eds.), *Chromatographic Analysis of the Environment: Mass Spectrometry Based Approaches*, 4th Edition, CRC Press, Boca Raton, FL, pp. 77-106.
- Ho, S.S.H., Chow, J.C., Watson, J.G., Wang, L.Q., Qu, L.L., Dai, W.T., Huang, Y., Cao, J.J., (2017). Influences of relative humidities and temperatures on the collection of C<sub>2</sub>-C<sub>5</sub> aliphatic hydrocarbons with multi-bed (Tenax TA, Carboxograph 1TD, Carboxen 1003) sorbent tube method. *Atmospheric Environment*, 151, 45-51.
- Kleinman, M.T., Head, S.J., Morris, R.E., Stevenson, E.D., Altshuler, S.L., Chow, J.C., Watson, J.G., Hidy, G.M., Mueller, P.K., (2017). Air quality measurements: From rubber bands to tapping the rainbow: Critical review discussion. *Journal of the Air & Waste Management Association*, 67, 1159-1168.
- Li, L.J., Ho, S.S.H., Chow, J.C., Watson, J.G., Lee, S.C., Cui, L., Gao, Y., Dai, W.T., Ho, K.F., Cao, J.J., (2017). Characterization and health risk assessment of PM<sub>2.5</sub> bound organics inside and outside of Chinese smoking lounges. *Chemosphere*, 186, 438-445.
- Liao, H.T., Yau, Y.C., Huang, C.S., Chen, N., Chow, J.C., Watson, J.G., Chou, C.C.-K., Wu, C.F., (2017). Source apportionment of urban air pollutants using constrained receptor models with a priori profile information. *Environmental Pollution*, 227, 323-333.
- Ni, H.Y., Tian, J., Wang, X.L., Wang, Q.Y., Han, Y.M., Cao, J.J., Long, X., Chen, L.-W.A., Chow, J.C., Watson, J.G., Huang, R.J., Dusek, U., (2017). PM<sub>2.5</sub> emissions and source profiles from open burning of crop residues. *Atmospheric Environment*, 169, 229-237.
- Pandey, A., Patel, S., Pervez, S., Tiwari, S., Yadama, G., Chow, J.C., Watson, J.G., Biswas, P., Chakrabarty, R.K., (2017). Aerosol emission factors from traditional biomass cookstoves in India: Insights from field measurements. *Atmospheric Chemistry and Physics*, 17, 13721--13729. 10.5194/acp-2017-291. <https://www.atmos-chem-phys.net/17/13721/2017/>
- Tai, A.T.-C., Chen, L.-W.A., Wang, X.L., Chow, J.C., Watson, J.G., (2017). Atmospheric deposition of particles at a sensitive alpine lake: Size-segregated daily and annual fluxes from passive sampling techniques. *Science of the Total Environment*, 579, 1736-1744.
- Tian, J., Ni, H.Y., Cao, J.J., Han, Y.M., Wang, Q.Y., Wang, X.L., Chen, L.-W.A., Chow, J.C., Watson, J.G., Wei, C., Sun, J., Zhang, T., Huang, R.J., (2017). Characteristics of carbonaceous particles from residential coal combustion and agricultural biomass burning in China. *Atmospheric Pollution Research*, 8, 521-527.
- Watson, J.G., Tropp, R.J., Kohl, S.D., Wang, X.L., Chow, J.C., (2017). Filter processing and gravimetric analysis for suspended particulate matter samples. *Aerosol Science and Engineering*, 1, 193-205.

- Watson, J.G., Chow, J.C., Mueller, P.K., Altshuler, S.L., Hidy, G.M., (2017). A historical perspective on air quality measurements from the career of Dr. Peter K. Mueller. *Journal of the Air & Waste Management Association*, 67, S1-S10.
- Yatawelli, R.L.N., Chen, L.-W.A., Knue, J., Samburova, V., Gyawali, M., Watts, A.C., Chakrabarty, R.K., Moosmuller, H., Hodzic, A., Wang, X.L., Zielinska, B., Chow, J.C., Watson, J.G., (2017). Emissions and partitioning of intermediate-volatility and semi-volatile polar organic compounds (I/SV-POCs) during laboratory combustion of boreal and sub-tropical peat. *Aerosol Science and Engineering*, 1, 25-32.
- Dewangan, S., Pervez, S., Chakrabarty, R.K., Watson, J.G., Chow, J.C., Pervez, Y., Tiwari, S., Rai, J., (2016). Study of carbonaceous fractions associated with indoor PM<sub>2.5</sub>/PM<sub>10</sub> during Asian cultural and ritual burning practices. *Building and Environment*, 106, 229-236. <http://www.sciencedirect.com/science/article/pii/S036013231630213X>
- Gao, Y., Lee, S.C., Huang, Y., Chow, J.C., Watson, J.G., (2016). Chemical characterization and source apportionment of size-resolved particles in Hong Kong suburban area. *Atmospheric Research*, 170, 112-122.
- Han, Y.M., Chen, L.-W.A., Huang, R.J., Chow, J.C., Watson, J.G., Ni, H.Y., Liu, S.X., Fung, K.K., Shen, Z.X., Wei, C., Wang, Q.Y., Tian, J., Zhao, Z.Z., Prevot, A.S.H., Cao, J.J., (2016). Carbonaceous aerosols in megacity Xi'an, China: Implications of thermal/optical protocols comparison. *Atmospheric Environment*, 132, 58-68.
- Ho, C.C., Chan, C.C., Chio, C.P., Lai, Y.C., Chang-Chien, G.P., Chow, J.C., Watson, J.G., Chen, L.-W.A., Chen, P.C., Wu, C.F., (2016). Source apportionment of mass concentration and inhalation risk with long-term ambient PCDD/Fs measurements in an urban area. *Journal of Hazardous Materials*, 317, 180-187. <http://www.sciencedirect.com/science/article/pii/S0304389416304976>
- Hsu, Y.M., Wang, X.L., Chow, J.C., Watson, J.G., Percy, K.E., (2016). Collocated comparisons of continuous and filter-based PM<sub>2.5</sub> measurements at Fort McMurray, Alberta, Canada. *Journal of the Air & Waste Management Association*, 66, 329-339.
- Minoura, H., Chow, J.C., Watson, J.G., Fu, J.S., Dong, X.Y., Yang, C.E., (2016). Vertical circulation of atmospheric pollutants during a southern California ozone episode. *Aerosol and Air Quality Research*, 16, 2396-2404. [http://aaqr.org/JustAcceptedManuscripts/AAQR-15-09-OA-0554\\_accepted.pdf](http://aaqr.org/JustAcceptedManuscripts/AAQR-15-09-OA-0554_accepted.pdf)
- Pervez, S., Chakrabarty, R.K., Dewangan, S., Watson, J.G., Chow, J.C., Matawle, J.L., (2016). Chemical speciation of aerosols and air quality degradation during the festival of lights (Diwali). *Atmospheric Pollution Research*, 7, 92-99. <http://www.sciencedirect.com/science/article/pii/S1309104215000380>
- Wang, X.L., Grose, M.A., Avenido, A., Stolzenburg, M.R., Caldow, R., Osmondson, B.L., Chow, J.C., Watson, J.G., (2016). Improvement of Engine Exhaust Particle Sizer (EEPS) size distribution measurement: I. Algorithm and Applications to Compact Aerosols. *Journal of Aerosol Science*, 92, 95-108.
- Wang, X.L., Grose, M.A., Caldow, R., Osmondson, B.L., Swanson, J.J., Chow, J.C., Watson, J.G., Kittelson, D.B., Li, Y., Xue, J., Jung, H.J., Hu, S.H., (2016). Improvement of Engine Exhaust Particle Sizer (EEPS) size distribution measurement: II. Engine exhaust aerosols. *Journal of Aerosol Science*, 92, 83-94.
- Wang, X.L., Chow, J.C., Kohl, S.D., Percy, K.E., Legge, A.H., Watson, J.G., (2016). Real-world emission factors for Caterpillar 797B heavy haulers during mining operations. *Particuology*, 28, 22-30. <http://dx.doi.org/10.1016/j.partic.2015.07.001>. <http://www.sciencedirect.com/science/article/pii/S1674200115001583>
- Watson, J.G., Chow, J.C., Engling, G., Chen, L.-W.A., Wang, X.L., (2016). Source apportionment: Principles and methods, Harrison, R.M. (Ed.) *Airborne Particulate Matter: Sources, Atmospheric Processes and Health*, Royal Society of Chemistry, London, UK, pp. 72-125. [https://www.researchgate.net/publication/308372849\\_Source\\_Apportionment\\_Principles\\_and\\_Methods](https://www.researchgate.net/publication/308372849_Source_Apportionment_Principles_and_Methods)
- Xu, H.M., Cao, J.J., Chow, J.C., Huang, R.J., Shen, Z.X., Chen, L.-W.A., Ho, K.F., Watson, J.G., (2016). Inter-annual variability of wintertime PM<sub>2.5</sub> chemical composition in Xi'an, China: Evidence of changing source emissions. *Science of the Total Environment*, 545-546, 546-555. <http://www.sciencedirect.com/science/article/pii/S0048969715312237>
- Chen, L.-W.A., Chow, J.C., Wang, X.L., Robles, J.A., Sumlin, B.J., Lowenthal, D.H., Zimmermann, R., Watson, J.G., (2015). Multi-wavelength optical measurement to enhance thermal/optical analysis for carbonaceous aerosol. *Atmospheric Measurement Techniques*, 8, 451-461. <http://www.atmos-meas-tech.net/8/451/2015/amt-8-451-2015.html>
- Chen, L.-W.A., Robles, J.A., Chow, J.C., Hoekman, S.K., (2015). Renewable hydrogen production from bio-oil in an aerosol pyrolysis system. *Procedia Engineering*, 102, 1867-1876.
- Cheng, Y., Lee, S.C., Gu, Z.L., Ho, K.F., Zhang, Y.W., Huang, Y., Chow, J.C., Watson, J.G., Cao, J.J., Zhang, R.J., (2015). PM<sub>2.5</sub> and PM<sub>10-2.5</sub> chemical composition and source apportionment near a Hong Kong roadway. *Particuology*, 18, 96-104. [https://www.researchgate.net/publication/259523926\\_PM2.5\\_and\\_PM10-2.5\\_chemical\\_composition\\_and\\_source\\_apportionment\\_near\\_a\\_Hong\\_Kong\\_roadway](https://www.researchgate.net/publication/259523926_PM2.5_and_PM10-2.5_chemical_composition_and_source_apportionment_near_a_Hong_Kong_roadway)

- Cheng, Z., Jiang, J.K., Chen, C.H., Gao, J., Wang, S.X., Watson, J.G., Wang, H.L., Deng, J.G., Wang, B.Y., Zhou, L.Z., Chow, J.C., Pitchford, M.L., Hao, J.M., (2015). Estimation of aerosol mass scattering efficiencies under high mass loading: case study for the megacity of Shanghai, China. *Environmental Science & Technology*, 49, 831-838. <http://pubs.acs.org/doi/pdf/10.1021/es504567q>
- Chow, J.C., Yang, X.F., Wang, X.L., Kohl, S.D., Watson, J.G., (2015). Characterization of ambient PM<sub>10</sub> bioaerosols in a California agricultural town. *Aerosol and Air Quality Research*, 15, 1433-1447. <http://www.aaqr.org/article/detail/AAQR-14-12-OA-0313>
- Chow, J.C., Wang, X.L., Sumlin, B.J., Gronstal, S.B., Chen, L.-W.A., Trimble, D.L., Kohl, S.D., Mayorga, S.R., Riggio, G.M., Hurbain, P.R., Johnson, M., Zimmermann, R., Watson, J.G., (2015). Optical calibration and equivalence of a multiwavelength thermal/optical carbon analyzer. *Aerosol and Air Quality Research*, 15, 1145-1159. doi:10.4209/aaqr.2015.02.0106. [http://aaqr.org/VOL15\\_No4\\_August2015/1\\_AAQR-15-02-OA-0106\\_1145-1159.pdf](http://aaqr.org/VOL15_No4_August2015/1_AAQR-15-02-OA-0106_1145-1159.pdf)
- Chow, J.C., Lowenthal, D.H., Chen, L.-W.A., Wang, X.L., Watson, J.G., (2015). Mass reconstruction methods for PM<sub>2.5</sub>: A review. *Air Qual. Atmos. Health*, 8, 243-263. <http://link.springer.com/article/10.1007%2Fs11869-015-0338-3#page-1>
- Diab, J., Streibel, T., Cavalli, F., Lee, S.C., Saathoff, H., Mamakos, T., Chow, J.C., Chen, L.-W.A., Watson, J.G., Sippula, O., Zimmermann, R., (2015). Hyphenation of an EC/OC thermal-optical carbon analyzer to photo ionization time-of-flight mass spectrometry: A new off-line aerosol mass spectrometric approach for characterization of primary and secondary particulate matter. *Atmospheric Measurement Techniques*, 8, 3337-3353. <http://www.atmos-meas-tech.net/8/3337/2015/amt-8-3337-2015.pdf>
- Green, M.C., Chow, J.C., Watson, J.G., Dick, K., Inouye, D., (2015). Effects of snow cover and atmospheric stability on winter PM<sub>2.5</sub> concentrations in western US valleys. *Journal of Applied Meteorology and Climatology*, 54, 1191-1201. dx.doi.org/10.1175/JAMC-D-14-0191.1. <http://journals.ametsoc.org/doi/pdf/10.1175/JAMC-D-14-0191.1>
- Liao, H.T., Chou, C.C.-K., Chow, J.C., Watson, J.G., Hopke, P.K., Wu, C.F., (2015). Source and risk apportionment of selected VOCs and PM<sub>2.5</sub> species using partially constrained receptor models with multiple time resolution data. *Environmental Pollution*, 205, 121-130.
- Ni, H.Y., Han, Y.M., Cao, J.J., Chen, L.-W.A., Tian, J., Wang, X.L., Chow, J.C., Watson, J.G., Wang, Q.Y., Wang, P., Li, H., Huang, R.J., (2015). Emission characteristics of carbonaceous particles and trace gases from open burning of crop residue in China. *Atmospheric Environment*, 123, 399-406.
- Pant, P., Shukla, A., Kohl, S.D., Chow, J.C., Watson, J.G., Harrison, R.M., (2015). Characterization of ambient PM<sub>2.5</sub> at a pollution hotspot in New Delhi, India and inference of sources. *Atmospheric Environment*, 109, 178-189. <https://www.sciencedirect.com/science/article/pii/S1352231015002034>
- Pervez, S., Chakrabarty, R.K., Dewangan, S., Watson, J.G., Chow, J.C., Matawle, J.L., Pervez, Y., (2015). Cultural and ritual burning emission factors and activity levels in India. *Aerosol and Air Quality Research*, 15, 72-80. [http://aaqr.org/VOL15\\_No1\\_February2015/7\\_AAQR-14-01-OA-0022\\_72-80.pdf](http://aaqr.org/VOL15_No1_February2015/7_AAQR-14-01-OA-0022_72-80.pdf)
- Rivas-Santiago, C.E., Sarkar, S., Cantarella, P., Osornio-Vargas, A., Quintana-Belmares, R., Meng, Q.Y., Kirn, T.J., Strickland, P.O., Chow, J.C., Watson, J.G., Torres, M., Schwander, S., (2015). Air pollution particulate matter alters antimycobacterial respiratory epithelial innate immunity. *Infection and Immunity*, 83, 2507-2517.
- Tian, J., Chow, J.C., Cao, J.J., Han, Y.M., Ni, H.Y., Chen, L.-W.A., Wang, X.L., Huang, R.J., Moosmüller, H., Watson, J.G., (2015). A biomass combustion chamber: Design, evaluation, and a case study of wheat straw combustion emission tests. *Aerosol and Air Quality Research*, 15, 2104-2114. [http://aaqr.org/VOL15\\_No5\\_October2015/33\\_AAQR-15-03-OA-0167\\_2104-2114.pdf](http://aaqr.org/VOL15_No5_October2015/33_AAQR-15-03-OA-0167_2104-2114.pdf)
- Wang, X.L., Chow, J.C., Kohl, S.D., Percy, K.E., Legge, A.H., Watson, J.G., (2015). Characterization of PM<sub>2.5</sub> and PM<sub>10</sub> fugitive dust source profiles in the Athabasca Oil Sands Region. *Journal of the Air & Waste Management Association*, 65, 1421-1433. <http://www.tandfonline.com/doi/full/10.1080/10962247.2015.1100693>
- Wang, X.L., Chow, J.C., Kohl, S.D., Yatavelli, R.L.N., Percy, K.E., Legge, A.H., Watson, J.G., (2015). Wind erosion potential for fugitive dust sources in the Athabasca Oil Sands Region. *Aeolian Research*, 18, 121-134.
- Watson, J.G., Chow, J.C., (2015). Receptor models and measurements for identifying and quantifying air pollution sources, Murphy, B.L., Morrison, R.D. (Eds.), *Introduction to Environmental Forensics*, 3rd Edition, 3 ed. Elsevier, Amsterdam, The Netherlands, pp. 677-706. [https://www.researchgate.net/publication/269394107\\_Receptor\\_Models\\_and\\_Measurements\\_for\\_Identifying\\_and\\_Quantifying\\_Air\\_Pollution\\_Sources](https://www.researchgate.net/publication/269394107_Receptor_Models_and_Measurements_for_Identifying_and_Quantifying_Air_Pollution_Sources)
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Chen, L.-W.A., Shaw, S., Edgerton, E.S., Blanchard, C.L., (2015). PM<sub>2.5</sub> source apportionment with organic markers in the Southeastern Aerosol Research and Characterization (SEARCH) Study. *Journal of the Air & Waste Management Association*, 65, 1104-1118. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2015.1063551>

- Zhu, C.S., Cao, J.J., Ho, K.F., Chen, L.-W.A., Huang, R.J., Wang, Y.C., Li, H., Shen, Z.X., Chow, J.C., Watson, J.G., Su, X.L., Wang, Q.Y., Xiao, S., (2015). The optical properties of urban aerosol in northern China: A case study at Xi'an. *Atmospheric Research*, 160, 59-67. <http://www.sciencedirect.com/science/article/pii/S0169809515000903>
- Blanchard, C.L., Chow, J.C., Edgerton, E.S., Watson, J.G., Hidy, G.M., Shaw, S., (2014). Organic aerosols in the southeastern United States: Speciated particulate carbon measurements from the SEARCH network, 2006 to 2010. *Atmospheric Environment*, 95, 327-333.
- Chakrabarty, R.K., Pervez, S., Chow, J.C., Dewangan, S., Robles, J.A., Tian, G.X., Watson, J.G., (2014). Funeral pyres in south Asia: Large-scale brown carbon emissions and associated warming. *Environmental Science & Technology Letters*, 1, 44-48. <http://pubs.acs.org/doi/pdf/10.1021/ez4000669>
- Cheng, Z., Wang, S.X., Fu, X., Watson, J.G., Jiang, J.K., Fu, Q.Y., Chen, C.H., Xu, B.Y., Yu, J.S., Chow, J.C., Hao, J.M., (2014). Impact of biomass burning on haze pollution in the Yangtze River Delta, China: A case study of summer in 2011. *Atmospheric Chemistry and Physics*, 14, 4573-4585. <http://www.atmos-chem-phys.net/14/4573/2014/acp-14-4573-2014.html>
- Eklund, A.G., Hidy, G.M., Watson, J.G., Chow, J.C., (2014). Public health and components of particulate matter: The changing assessment of black carbon-Critical Review Introduction. *Journal of the Air & Waste Management Association*, 64, 617-619. doi: 10.1080/10962247.2013.799984. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2014.913954>
- Eklund, A.G., Chow, J.C., Greenbaum, D.S., Hidy, G.M., Kleinman, M.T., Watson, J.G., Wyzga, R.E., (2014). Public health and components of particulate matter: The changing assessment of black carbon-Critical review discussion. *Journal of the Air & Waste Management Association*, 64, 1221-1231. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2014.913954>
- Gargava, P., Chow, J.C., Watson, J.G., Lowenthal, D.H., (2014). Speciated PM10 emission inventory for Delhi, India. *Aerosol and Air Quality Research*, 14, 1515-1526. [http://www.aaqr.org/files/article/720/18\\_AAQR-13-02-OA-0047\\_1515-1526.pdf](http://www.aaqr.org/files/article/720/18_AAQR-13-02-OA-0047_1515-1526.pdf)
- Hao, J.M., Loh, C., Fung, J., Lau, A.K.H., Zheng, A.H., Louie, P.K.K., Chow, J.C., Watson, J.G., (2014). Conference highlights of "The 4<sup>th</sup> International Workshop on Regional Air Quality Management in Rapidly Developing Economic Regions," Hong Kong, China, 14-17 January 2014. *EM*, 20, 40-42.
- Ho, S.S.H., Chow, J.C., Watson, J.G., Ip, S.H.S., Ho, K.F., Dai, W.T., Cao, J.J., (2014). Biases in ketone measurements using DNPH-coated solid sorbent cartridges. *Analytical Methods*, 6, 967-974. [https://www.researchgate.net/publication/260141141\\_Biases\\_in\\_ketone\\_measurements\\_using\\_DNPHcoated\\_solid\\_sorbent\\_cartridges](https://www.researchgate.net/publication/260141141_Biases_in_ketone_measurements_using_DNPHcoated_solid_sorbent_cartridges)
- Schwander, S., Okello, C.D., Freers, J., Chow, J.C., Watson, J.G., M., C., Q.Y., M., (2014). Particulate matter air pollution in Mpererwe District, Kampala, Uganda - A pilot study. *Journal of Environmental and Public Health*, 2014, 1-7. [dx.doi.org/10.1155/2014/763934](http://dx.doi.org/10.1155/2014/763934). <http://www.hindawi.com/journals/jep/2014/763934/>
- Tang, D.L., Li, T.Y., Chow, J.C., Kulkarni, S.U., Watson, J.G., Ho, S.S.H., Quan, Z.Y., Qu, L.R., Perera, F., (2014). Air pollution effects on fetal and child development: A cohort comparison in China. *Environ. Poll*, 185, 90-96. [https://www.researchgate.net/publication/258635235\\_Air\\_pollution\\_effects\\_on\\_fetal\\_and\\_child\\_development\\_A\\_cohort\\_comparison\\_in\\_China](https://www.researchgate.net/publication/258635235_Air_pollution_effects_on_fetal_and_child_development_A_cohort_comparison_in_China)
- Watson, J.G., Chow, J.C., Kohl, S.D., Yatavelli, R.L.N., Wang, X.L., (2014). Windblown fugitive dust characterization in the oil sands region. *WBEA@Work*, November, 7-13. <http://www.wbea.org/library/wbeawork-newsletter>
- Zhang, T., Cao, J.J., Chow, J.C., Shen, Z.X., Ho, K.F., Ho, S.S.H., Liu, S.X., Han, Y.M., Watson, J.G., Wang, G.H., Huang, R.J., (2014). Characterization and seasonal variations of levoglucosan in fine particulate matter in Xi'an, China. *Journal of the Air & Waste Management Association*, 64, 1317-1327. doi: 10.1080/10962247.2014.944959. <http://dx.doi.org/10.1080/10962247.2014.944959>
- Bell, S.W., Hansell, R.A., Chow, J.C., Tsay, S.C., Wang, S.H., Ji, Q., Li, C., Watson, J.G., Khlystov, A.Y., (2013). Constraining aerosol optical models using ground-based, collocated particle size and mass measurements in variable air mass regimes during the 7-SEAS/Dongsha experiment. *Atmospheric Environment*, 78, 163-173. [https://www.researchgate.net/publication/235341396\\_Constraining\\_aerosol\\_optical\\_models\\_using\\_ground-based\\_collocated\\_particle\\_size\\_and\\_mass\\_measurements\\_in\\_variable\\_air\\_mass\\_regimes\\_during\\_the\\_7-SEASDongsha\\_experiment](https://www.researchgate.net/publication/235341396_Constraining_aerosol_optical_models_using_ground-based_collocated_particle_size_and_mass_measurements_in_variable_air_mass_regimes_during_the_7-SEASDongsha_experiment)
- Cao, J.J., Chow, J.C., (2013). Recent advances for aerosol and environment study in Asia. *Particology*, 11, 3-4.
- Cao, J.J., Chow, J.C., Lee, S.C., Watson, J.G., (2013). Evolution of PM<sub>2.5</sub> measurements and standards in the U.S. and future perspectives for China. *Aerosol and Air Quality Research*, 13, 1197-1211. [http://aaqr.org/files/article/877/5\\_AAQR-12-11-OA-0302\\_1197-1211.pdf](http://aaqr.org/files/article/877/5_AAQR-12-11-OA-0302_1197-1211.pdf)

- Chow, J.C., Watson, J.G., (2013). Chemical analyses of particle filter deposits, Ruzer, L., Harley, N.H. (Eds.), *Aerosols Handbook: Measurement, Dosimetry, and Health Effects*, 2 ed. CRC Press/Taylor & Francis, New York, NY, pp. 179-204.  
[https://www.researchgate.net/publication/235341535\\_Chemical\\_Analyses\\_of\\_Particle\\_Filter\\_Deposits](https://www.researchgate.net/publication/235341535_Chemical_Analyses_of_Particle_Filter_Deposits)
- Cortez-Lugo, M., Escamilla-Nunez, C., Barraza-Villarreal, A., Texcalc-Sangrador, J.L., Chow, J.C., Watson, J.G., Hernandez-Cadena, L., Romieu, I., (2013). Association between light absorption measurements of PM<sub>2.5</sub> and distance from heavy traffic roads in the Mexico City metropolitan area. *Salud publica de Mexico*, 55, 155-161.  
[http://bvs.insp.mx/rsp/\\_files/File/2013/vol%2055%20No%202%20Marzo%20Abril/1light.pdf](http://bvs.insp.mx/rsp/_files/File/2013/vol%2055%20No%202%20Marzo%20Abril/1light.pdf)
- Eklund, A.G., Hidy, G.M., Watson, J.G., Chow, J.C., (2013). Stratospheric ozone, global warming, and the principle of unintended consequences— An ongoing science and policy success story: 2013 Critical review introduction. *Journal of the Air & Waste Management Association*, 63, 605-606. doi: 10.1080/10962247.2013.799984.  
<http://www.tandfonline.com/doi/pdf/10.1080/10962247.2013.799984>
- Eklund, A.G., Altshuler, S.L., Altshuler, P.C., Chow, J.C., Hidy, G.M., Lloyd, A.C., Prather, M.J., Watson, J.G., Zalzal, P., Andersen, S.O., Halberstadt, M.L., Borgford-Parnell, N., (2013). Stratospheric ozone, global warming, and the principle of unintended consequences-An ongoing science and policy story: Critical review discussion. *Journal of the Air & Waste Management Association*, 63, 1235-1244.  
<http://www.tandfonline.com/doi/pdf/10.1080/10962247.2013.847317>
- Green, M.C., Chow, J.C., Chang, M.-C.O., Chen, L.-W.A., Kuhns, H.D., Etyemezian, V.R., Watson, J.G., (2013). Source apportionment of atmospheric particulate carbon in Las Vegas, Nevada, USA. *Particuology*, 11, 110-118.  
[https://www.researchgate.net/publication/235341593\\_Source\\_apportionment\\_of\\_atmospheric\\_particulate\\_carbon\\_in\\_Las\\_Vegas\\_Nevada\\_USA](https://www.researchgate.net/publication/235341593_Source_apportionment_of_atmospheric_particulate_carbon_in_Las_Vegas_Nevada_USA)
- Malamakal, T., Chen, L.-W.A., Wang, X.L., Green, M.C., Gronstal, S., Chow, J.C., Watson, J.G., (2013). Prescribed burn smoke impact in the Lake Tahoe Basin: Model simulation and field verification. *International Journal of Environment and Pollution*, 52, 225-243.  
[https://www.researchgate.net/publication/260391315\\_Prescribed\\_burn\\_smoke\\_impact\\_in\\_the\\_Lake\\_Tahoe\\_Basin\\_Model\\_simulation\\_and\\_field\\_verification](https://www.researchgate.net/publication/260391315_Prescribed_burn_smoke_impact_in_the_Lake_Tahoe_Basin_Model_simulation_and_field_verification)
- McDonald, J.D., Chow, J.C., Peccia, J., Liu, Y.S., Chand, R., Hidy, G.M., Mauderly, J.L., (2013). Influence of collection region and site type on the composition of paved road dust. *Air Quality, Atmosphere & Health*, 6, 615-628.  
[https://www.researchgate.net/publication/257762872\\_Influence\\_of\\_collection\\_region\\_and\\_site\\_type\\_on\\_the\\_composition\\_of\\_paved\\_road\\_dust](https://www.researchgate.net/publication/257762872_Influence_of_collection_region_and_site_type_on_the_composition_of_paved_road_dust)
- Qadir, R.M., Abbaszade, G., Schnelle-Kreis, J., Chow, J.C., Zimmermann, R., (2013). Concentrations and source contributions of particulate organic matter before and after implementation of a low emission zone in Munich, Germany. *Environ. Poll*, 175, 158-167.
- Watson, J.G., Chow, J.C., (2013). Source apportionment, El-Shaarwi, A.H., Piegorsch, W.W. (Eds.), *Encyclopedia of Environmetrics*, John Wiley & Sons, Ltd., Chichester, UK, pp. 1-8.  
<http://onlinelibrary.wiley.com/doi/10.1002/9780470057339.vas034.pub2/abstract>
- Watson, J.G., Chow, J.C., Tropp, R.J., Wang, X.L., Kohl, S.D., Chen, L.-W.A., (2013). Standards and traceability for air quality measurements: Flow rates and gaseous pollutants. *Mapan-Journal of Metrology Society of India*, 28, 167-179.  
[https://www.researchgate.net/publication/256409568\\_Standards\\_and\\_traceability\\_for\\_air\\_quality\\_measurements\\_Flow\\_rates\\_and\\_gaseous\\_pollutants?ev=prf\\_pub](https://www.researchgate.net/publication/256409568_Standards_and_traceability_for_air_quality_measurements_Flow_rates_and_gaseous_pollutants?ev=prf_pub)
- Xu, H.M., Tao, J., Ho, S.S.H., Ho, K.F., Cao, J.J., Li, N., Chow, J.C., Wang, G.H., Han, Y.M., Zhang, R.J., Watson, J.G., Zhang, J.Q., (2013). Characteristics of fine particulate non-polar organic compounds in Guangzhou during the 16th Asian Games: Effectiveness of air pollution controls. *Atmospheric Environment*, 76, 94-101.  
[j.atmosenv.2012.12.037](http://j.atmosenv.2012.12.037)
- Yang, X.F., Robles, J.A., Wang, X.L., Chen, L.-W.A., Watson, J.G., Chow, J.C., (2013). CHNS analysis of aerosols on a modified thermal/optical carbon analyzer: System setup and calibration protocol, *Proceedings, 106th Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA, pp. 1-9.
- Cao, J.J., Shen, Z.X., Chow, J.C., Lee, S.C., Watson, J.G., Tie, X.X., Ho, K.F., Wang, G.H., Han, Y.M., (2012). Winter and summer PM<sub>2.5</sub> chemical compositions in 14 Chinese cities. *Journal of the Air & Waste Management Association*, 62, 1214-1226. DOI: 10.1080/10962247.2012.701193.  
<http://www.tandfonline.com/doi/pdf/10.1080/10962247.2012.701193>
- Cao, J.J., Wang, Q.Y., Chow, J.C., Watson, J.G., Tie, X.X., Shen, Z.X., An, Z.S., (2012). Impacts of aerosol compositions on visibility impairment in Xi'an, China. *Atmospheric Environment*, 59, 559-566.

- [https://www.researchgate.net/publication/263854060\\_Impacts\\_of\\_aerosol\\_compositions\\_on\\_visibility\\_impairment\\_in\\_Xian\\_China](https://www.researchgate.net/publication/263854060_Impacts_of_aerosol_compositions_on_visibility_impairment_in_Xian_China)
- Cao, J.J., Huang, H., Lee, S.C., Chow, J.C., Zou, C.W., Ho, K.F., Watson, J.G., (2012). Indoor/outdoor relationships for organic and elemental carbon in PM<sub>2.5</sub> at residential homes in Guangzhou, China. *Aerosol and Air Quality Research*, 12, 902-910. [http://aaqr.org/VOL12\\_No5\\_October2012/18\\_AAQR-12-02-OA-0026\\_902-910.pdf](http://aaqr.org/VOL12_No5_October2012/18_AAQR-12-02-OA-0026_902-910.pdf)
- Chen, L.-W.A., Chow, J.C., Watson, J.G., Schichtel, B.A., (2012). Consistency of long-term elemental carbon trends from thermal and optical measurements in the IMPROVE network. *Atmospheric Measurement Techniques*, 5, 2329-2338. <http://www.atmos-meas-tech.net/5/2329/2012/amt-5-2329-2012.pdf>
- Chen, L.-W.A., Tropp, R.J., Li, W.-W., Zhu, D.Z., Chow, J.C., Watson, J.G., Zielinska, B., (2012). Aerosol and air toxics exposure in El Paso, Texas: A pilot study. *Aerosol and Air Quality Research*, 12, 169-189. [http://aaqr.org/VOL12\\_No2\\_April2012/3\\_AAQR-11-10-OA-0169\\_169-179.pdf](http://aaqr.org/VOL12_No2_April2012/3_AAQR-11-10-OA-0169_169-179.pdf)
- Chen, L.-W.A., Watson, J.G., Chow, J.C., Green, M.C., Inouye, D., Dick, K., (2012). Wintertime particulate pollution episodes in an urban valley of the western U.S.: A case study. *Atmospheric Chemistry and Physics*, 12, 10051-10064. <http://www.atmos-chem-phys.net/12/10051/2012/acp-12-10051-2012.pdf>
- Chen, L.-W.A., Watson, J.G., Chow, J.C., DuBois, D.W., Herschberger, L., (2012). Chemical mass balance source apportionment for combined PM<sub>2.5</sub> measurements from U.S. non-urban and urban long-term networks (vol 44, pg 4908, 2010). *Atmospheric Environment*, 51, 335-335.
- Chow, J.C., Cao, J.J., Lee, S.C., Wang, X.L., Watson, J.G., (2012). A brief history of PM<sub>2.5</sub> and its adverse effects (in Chinese). *Journal of Earth Environment*, 3, 1019-1029. doi:10.7515/JEE201205001. <http://dqhjxb.paperopen.com/Upload/PaperUpload/c7436a2c-4ca3-4487-8580-67e1169973bb.pdf>
- Fujita, E.M., Campbell, D.E., Zielinska, B., Chow, J.C., Lindhjem, C.E., DenBleyker, A., Bishop, G.A., Schuchmann, B.G., Stedman, D.H., Lawson, D.R., (2012). Comparison of the MOVES2010a, MOBILE6.2 and EMFAC2007 mobile source emissions models with on-road traffic tunnel and remote sensing measurements. *Journal of the Air & Waste Management Association*, 62, 1134-1149. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2012.699016>
- Gyawali, M., Arnott, W.P., Zaveri, R.A., Song, C., Moosmüller, H., Liu, L., Mischchenko, M.L., Chen, L.-W.A., Green, M.C., Watson, J.G., Chow, J.C., (2012). Photoacoustic optical properties at UV, VIS, and near IR wavelengths for laboratory generated and winter time ambient urban aerosols. *Atmospheric Chemistry and Physics*, 12, 2587-2601. <http://www.atmos-chem-phys.net/12/2587/2012/acp-12-2587-2012.pdf>
- Hidy, G.M., Chow, J.C., England, G.C., Legge, A.H., Lloyd, A.C., Watson, J.G., (2012). Energy supplies and future engines for land, sea, and air: Critical review discussion. *Journal of the Air & Waste Management Association*, 62, 1233-1248. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2012.737277>
- McDonald, J.D., White, R.K., Holmes, T., Mauderly, J.L., Zielinska, B., Chow, J.C., (2012). Simulated downwind coal combustion emissions for laboratory inhalation exposure atmospheres. *Inhalation Toxicology*, 24, 310-319.
- Orasche, J., Seidel, T., Hartmann, H., Schnelle-Kreis, J., Chow, J.C., Ruppert, H., Zimmermann, R., (2012). Comparison of emissions from wood combustion. Part 1: Emission factors and characteristics from different small-scale residential heating appliances considering particulate matter and polycyclic aromatic hydrocarbon (PAH)-related toxicological potential of particle-bound organic species. *Energy & Fuels*, 26, 6695-6704.
- Pervez, S., Dubey, N., Watson, J.G., Chow, J.C., Pervez, Y., (2012). Impact of different household fuel use on source apportionment results of house-indoor RPM in central India. *Aerosol and Air Quality Research*, 12, 49-60. [http://aaqr.org/VOL12\\_No1\\_February2012/6\\_AAQR-11-08-OA-0124\\_49-60.pdf](http://aaqr.org/VOL12_No1_February2012/6_AAQR-11-08-OA-0124_49-60.pdf)
- Proemse, B., Mayer, B., Chow, J.C., Watson, J.G., (2012). Isotopic characterization of nitrate, ammonium and sulfate emitted from the Athabasca oil sand operations, Alberta, Canada. *Atmospheric Environment*, 60, 555-563. [https://www.researchgate.net/publication/235341671\\_Isotopic\\_characterization\\_of\\_nitrate\\_ammonium\\_and\\_sulfate\\_emitted\\_from\\_the\\_Athabasca\\_oil\\_sand\\_operations\\_Alberta\\_Canada](https://www.researchgate.net/publication/235341671_Isotopic_characterization_of_nitrate_ammonium_and_sulfate_emitted_from_the_Athabasca_oil_sand_operations_Alberta_Canada)
- Tuncel, S.G., Tuncel, G., Chow, J.C., Watson, J.G., Gullu, G., Koksall, M.A., (2012). Conference highlights: The second international conference on air pollution and control (CAPAC-II). *EM*, 18, 40-42.
- Wang, X.L., Watson, J.G., Chow, J.C., Gronstal, S., Kohl, S.D., (2012). An efficient multipollutant system for measuring real-world emissions from stationary and mobile sources. *Aerosol and Air Quality Research*, 12, 145-160. [http://aaqr.org/files/article/953/1\\_AAQR-11-11-OA-0187\\_145-160.pdf](http://aaqr.org/files/article/953/1_AAQR-11-11-OA-0187_145-160.pdf)
- Wang, X.L., Watson, J.G., Chow, J.C., Kohl, S.D., Chen, L.-W.A., Sodeman, D.A., Legge, A.H., Percy, K.E., (2012). Measurement of real-world stack emissions with a dilution sampling system, Percy, K.E. (Ed.) *Alberta Oil Sands: Energy, Industry, and the Environment*, Elsevier Press, Amsterdam, The Netherlands, pp. 171-192. [https://www.researchgate.net/publication/235341714\\_Measurement\\_of\\_Real-World\\_Stack\\_Emissions\\_with\\_a\\_Dilution\\_Sampling\\_System](https://www.researchgate.net/publication/235341714_Measurement_of_Real-World_Stack_Emissions_with_a_Dilution_Sampling_System)

- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., Chen, L.-W.A., Etyemezian, V.R., (2012). Overview of real-world emission characterization methods, Percy, K.E. (Ed.) *Alberta Oil Sands: Energy, Industry, and the Environment*, Elsevier Press, Amsterdam, The Netherlands, pp. 145-170. <https://www.researchgate.net/publication/235341867> Overview of Real-World Emission Characterization Methods
- Watson, J.G., Chow, J.C., (2012). Revised conceptual model for causes of excessive wintertime PM<sub>2.5</sub> in central California, Reynolds, A.M. (Ed.) *Synthesis of CCOS and CRPAQS study findings*, San Joaquin Valley Unified Air Pollution Control District, Fresno, CA, pp. 8.1-8.57. <https://www.researchgate.net/publication/316170523> Synthesis of CCOS and CRPAQS study findings
- Xu, H.M., Cao, J.J., Ho, K.F., Ding, H., Han, Y.M., Wang, G.H., Chow, J.C., Watson, J.G., Kohl, S.D., Qiang, J., Li, W.T., (2012). Lead concentrations in fine particulate matter after the phasing out of leaded gasoline in Xi'an, China. *Atmospheric Environment*, 46, 217-224. doi: 10.1016/j.atmosenv.2011.09.078. <https://www.researchgate.net/publication/235341871> Lead concentrations in fine particulate matter after the phasing out of leaded gasoline in Xi'an China
- Zhou, J.M., Cao, J.J., Zhang, R.J., Chow, J.C., Watson, J.G., (2012). Carbonaceous and ionic components of atmospheric fine particles in Beijing and their impact on atmospheric visibility. *Aerosol and Air Quality Research*, 12, 492-502. [http://aaqr.org/VOL12\\_No4\\_August2012/4\\_AAQR-11-11-OA-0218\\_492-502.pdf](http://aaqr.org/VOL12_No4_August2012/4_AAQR-11-11-OA-0218_492-502.pdf)
- Cao, J.J., Chow, J.C., Tao, J., Lee, S.C., Watson, J.G., Ho, K.F., Wang, G.H., Zhu, C.S., Han, Y.M., (2011). Stable carbon isotopes in aerosols from Chinese cities: Influence of fossil fuels. *Atmospheric Environment*, 45, 1359-1363.
- Cao, J.J., Li, H., Chow, J.C., Watson, J.G., Lee, S.C., Rong, B., Dong, J.G., Ho, K.F., (2011). Chemical composition of indoor and outdoor atmospheric particles at Emperor Qin's terra-cotta museum, Xi'an, China. *Aerosol and Air Quality Research*, 11, 70-79. [http://aaqr.org/VOL11\\_No1\\_February2011/8\\_AAQR-10-10-OA-0088\\_70-79.pdf](http://aaqr.org/VOL11_No1_February2011/8_AAQR-10-10-OA-0088_70-79.pdf)
- Cao, J.J., Watson, J.G., Chow, J.C., (2011). A special issue of JAWMA on papers from the "Leapfrogging Opportunities for Air Quality Improvement Conference". *Journal of the Air & Waste Management Association*, 61, 1091-1092. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2011.617668>
- Chen, L.-W.A., Watson, J.G., Chow, J.C., DuBois, D.W., Herschberger, L., (2011). PM<sub>2.5</sub> source apportionment: Reconciling receptor models for U.S. non-urban and urban long-term networks. *Journal of the Air & Waste Management Association*, 61, 1204-1217. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2011.619082>
- Cheng, Y., Zou, S.C., Lee, S.C., Chow, J.C., Ho, K.F., Watson, J.G., Han, Y.M., Zhang, R.J., F., Z., Yau, P.S., Huang, Y., Bai, Y., Wu, W.J., (2011). Characteristics and source apportionment of PM<sub>1</sub> emissions at a roadside station. *Journal of Hazardous Materials*, 195, 82-91.
- Chow, J.C., Watson, J.G., Robles, J., Wang, X.L., Chen, L.-W.A., Trimble, D.L., Kohl, S.D., Tropp, R.J., Fung, K.K., (2011). Quality assurance and quality control for thermal/optical analysis of aerosol samples for organic and elemental carbon. *Analytical and Bioanalytical Chemistry*, 401, 3141-3152. DOI 10.1007/s00216-011-5103-3. <https://www.researchgate.net/publication/51178259> Quality assurance and quality control for thermaloptical analysis of aerosol samples for organic and elemental carbon
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Lowenthal, D.H., Motallebi, N., (2011). PM<sub>2.5</sub> source profiles for black and organic carbon emission inventories. *Atmospheric Environment*, 45, 5407-5414. <https://www.researchgate.net/publication/232410705> PM<sub>2.5</sub> source profiles for black and organic carbon emission inventories
- Chow, J.C., Watson, J.G., (2011). Air quality management of multiple pollutants and multiple effects. *Air Quality and Climate Change Journal*, 45, 26-32. <https://www.researchgate.net/publication/234903062> Air quality management of multiple pollutants and multiple effects
- Grabowsky, J., Streibel, T., Sklorz, M., Chow, J.C., Mamakos, A., Zimmermann, R., (2011). Hyphenation of a carbon analyzer to photo-ionization mass spectrometry to unravel the organic composition of particulate matter on a molecular level. *Analytical and Bioanalytical Chemistry*, 401, 3153-3164.
- Han, Y.M., Cao, J.J., Yan, B.Z., Kenna, T.C., Jin, Z.D., Cheng, Y., Chow, J.C., An, Z.S., (2011). Comparison of elemental carbon in lake sediments measured by three different methods and 150-year pollution history in eastern China. *Environmental Science & Technology*, 45, 5287-5293.
- Hidy, G.M., Chow, J.C., Baer, M., Diaz-Robles, L., Friedl, L., Mueller, P.K., Overcamp, T., Watson, J.G., (2011). Environmental issues and management strategies for waste electronic and electrical equipment: Introduction. *Journal of the Air & Waste Management Association*, 61, 586-586. <http://www.tandfonline.com/doi/pdf/10.1080/10962247.2012.683366>

- Ho, S.S.H., Chow, J.C., Watson, J.G., Ng, L.P.T., Kwok, Y., Ho, K.F., Cao, J.J., (2011). Precautions for in-injection port thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) applied to aerosol filter samples. *Atmospheric Environment*, 45, 1491-1496.
- Hu, T.F., Cao, J.J., Ho, K.F., An, Z.S., Lee, S., Chow, J.C., Watson, J.G., Li, H., (2011). Winter and summer characteristics of airborne particles Inside Emperor Qin's Terra-Cotta Museum, China: A study by scanning electron microscopy-energy dispersive x-ray spectrometry. *Journal of the Air & Waste Management Association*, 61, 914-922. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2011.596740>
- Murphy, D.M., Chow, J.C., Leibensperger, E.M., Malm, W.C., Pitchford, M.L., Schichtel, B.A., Watson, J.G., White, W.H., (2011). Decreases in elemental carbon and fine particle mass in the United States. *Atmospheric Chemistry and Physics*, 11, 4679-4686. <http://www.atmos-chem-phys.net/11/4679/2011/acp-11-4679-2011.pdf>
- Sahu, M., Hu, S., Ryan, P.H., LeMasters, G., Grinshpun, S.A., Chow, J.C., Biswas, P., (2011). Chemical compositions and source identification of PM<sub>2.5</sub> aerosols for estimation of a diesel source surrogate. *Science of the Total Environment*, 409, 2642-2651. <http://www.sciencedirect.com/science/article/pii/S1614716211000000>
- Shaw, D., Hidy, G.M., Cao, J.J., Chen, J.P., Chow, J.C., Chou, C.K., Chu, S.Y., Feng, X., Jacob, D.J., Liao, H., Tao, S., Wang, Y., Watson, J.G., Zhu, T., (2011). Conference highlights: Climate and Air Quality: An East Asia-Pacific Rim Conference. *EM*, 17, 25-27.
- Soto-Garcia, L.L., Andreae, M.O., Andreae, T.W., Artaxo, P., Maenhaut, W., Kirchstetter, T.W., Novakov, T., Chow, J.C., Mayol-Bracero, O.L., (2011). Evaluation of the carbon content of aerosols from the burning of biomass in the Brazilian Amazon using thermal, optical and thermal-optical analysis methods. *Atmospheric Chemistry and Physics*, 11, 4425-4444.
- Wang, X.L., Robbins, C., Hoekman, S.K., Chow, J.C., Watson, J.G., Schuetzle, D., (2011). Dilution sampling and analysis of particulate matter in biomass-derived syngas. *Frontiers of Environmental Science and Engineering in China*, 5, 320-330.
- Watson, J.G., Chow, J.C., (2011). Ambient aerosol sampling, Kulkarni, P., Baron, P.A., Willeke, K. (Eds.), *Aerosol Measurement: Principles, Techniques and Applications*, Third Edition, Wiley, Hoboken, NJ, USA, pp. 591-614. [https://www.researchgate.net/publication/229760686\\_Ambient\\_Aerosol\\_Sampling](https://www.researchgate.net/publication/229760686_Ambient_Aerosol_Sampling)
- Watson, J.G., Chow, J.C., Sodeman, D.A., Lowenthal, D.H., Chang, M.-C.O., Park, K., Wang, X.L., (2011). Comparison of four scanning mobility particle sizers at the Fresno supersite. *Particuology*, 9, 204-209. [https://www.researchgate.net/publication/229256011\\_Comparison\\_of\\_four\\_scanning\\_mobility\\_particle\\_sizers\\_at\\_the\\_Fresno\\_Supersite](https://www.researchgate.net/publication/229256011_Comparison_of_four_scanning_mobility_particle_sizers_at_the_Fresno_Supersite)
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Lowenthal, D.H., Fujita, E.M., Kuhns, H.D., Sodeman, D.A., Campbell, D.E., Moosmüller, H., Zhu, D.Z., (2011). Particulate emission factors for mobile fossil fuel and biomass combustion sources. *Science of the Total Environment*, 409, 2384-2396. [https://www.researchgate.net/publication/50987044\\_Science\\_of\\_the\\_Total\\_Environment](https://www.researchgate.net/publication/50987044_Science_of_the_Total_Environment)
- Watson, J.G., Chow, J.C., Chen, L., Wang, X.L., Merrifield, T.M., Fine, P.M., Barker, K., (2011). Measurement system evaluation for upwind/downwind sampling of fugitive dust emissions. *Aerosol and Air Quality Research*, 11, 331-350. doi: 10.4209/aaqr.2011.03.0028. [http://aaqr.org/VOL11/No4/August2011/1\\_AAQR-11-03-OA-0028\\_331-350.pdf](http://aaqr.org/VOL11/No4/August2011/1_AAQR-11-03-OA-0028_331-350.pdf)
- Wu, F., Chow, J.C., An, Z.S., Watson, J.G., Cao, J.J., (2011). Size-differentiated chemical characteristics of Asian Pale dust: Records from aeolian deposition on the Chinese loess plateau. *Journal of the Air & Waste Management Association*, 61, 180-189. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.61.2.180>
- Baldwin, T.A., Lundgren, D.A., Bivins, D.G., Watson, J.G., Chow, J.C., Wang, X., Gronstal, S.B., (2010). Extraction and dilution methods for PM<sub>2.5</sub> sampling in wet and dry stacks, Chow, J.C., Watson, J.G., Cao, J.J. (Eds.), *Proceedings, Leapfrogging Opportunities for Air Quality Improvement*, Air & Waste Management Association, Pittsburgh, PA, pp. 454-454. <http://www.dri.edu/leapfrog>
- Chen, L.-W.A., Verburg, P., Shackelford, A., Zhu, D., Susfalk, R., Chow, J.C., Watson, J.G., (2010). Moisture effects on carbon and nitrogen emission from burning of wildland biomass. *Atmospheric Chemistry and Physics*, 10, 6617-6625. <http://www.atmos-chem-phys.net/10/6617/2010/acp-10-6617-2010.pdf>
- Chen, L.-W.A., Watson, J.G., Chow, J.C., DuBois, D.W., Herschberger, L., (2010). Chemical mass balance source apportionment for combined PM<sub>2.5</sub> measurements from U.S. non-urban and urban long-term networks. *Atmospheric Environment*, 44, 4908-4918.
- Cheng, Y., Lee, S.C., Ho, K.F., Chow, J.C., Watson, J.G., Louie, P.K.K., Cao, J.J., Hai, X., (2010). Chemically-specified on-road PM<sub>2.5</sub> motor vehicle emission factors in Hong Kong. *Science of the Total Environment*, 408, 1621-1627.

- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., Motallebi, N., (2010). Black and organic carbon emission inventories: Review and application to California. *Journal of the Air & Waste Management Association*, 60, 497-507. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.60.4.497>
- Chow, J.C., Watson, J.G., Green, M.C., Frank, N.H., (2010). Filter light attenuation as a surrogate for elemental carbon. *Journal of the Air & Waste Management Association*, 60, 1365-1375. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.60.11.1365>
- Chow, J.C., Wang, X.L., Kohl, S.D., Gronstal, S.B., Watson, J.G., (2010). Heavy-duty diesel emissions in the Athabasca Oil Sands Region, Tropp, R.J., Legge, A.H. (Eds.), *Proceedings, 103rd Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA, pp. 1-5.
- Chow, J.C., (2010). Multipollutant air quality management: Critical review introduction. *Journal of the Air & Waste Management Association*, 60, 642-644. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.60.6.642>
- Chow, J.C., Bachmann, J.D., Kinsman, J.D., Legge, A.H., Watson, J.G., Hidy, G.M., Pennell, W.R., (2010). Multipollutant air quality management: Critical review discussion. *Journal of the Air & Waste Management Association*, 60, 1151-1164. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.60.10.1154>
- Chow, J.C., Watson, J.G., Cao, J.J., (2010). Highlights from "Leapfrogging Opportunities for Air Quality Improvement". *EM*, 16, 38-43. [https://www.researchgate.net/publication/235341531\\_Highlights\\_from\\_Leapfrogging\\_Opportunities\\_for\\_Air\\_Quality\\_Improvement](https://www.researchgate.net/publication/235341531_Highlights_from_Leapfrogging_Opportunities_for_Air_Quality_Improvement)
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Rice, J., Frank, N.H., (2010). Quantification of PM<sub>2.5</sub> organic carbon sampling artifacts in US networks. *Atmospheric Chemistry and Physics*, 10, 5223-5239. <http://www.atmos-chem-phys.net/10/5223/2010/acp-10-5223-2010.pdf>
- Tumulva, L., Park, J.Y., Kim, J.S., Miller, A.L., Chow, J.C., Watson, J.G., Park, K., (2010). Morphological and elemental classification of freshly emitted soot particles and atmospheric ultrafine particles using the TEM/EDS. *Aerosol Science and Technology*, 44, 202-215. <http://www.tandfonline.com/doi/pdf/10.1080/02786829308959588>
- Vega, E., Eidels, S., Ruiz, H., Lopez-Veneroni, D., Sosa, G., Gonzalez, E., Gasca, J., Mora, V., Reyes, E., Sanchez-Reyna, G., Villasenor, R., Chow, J.C., Watson, J.G., Edgerton, S.A., (2010). Particulate air pollution in Mexico City: A detailed view. *Aerosol and Air Quality Research*, 10, 193-211. [http://aaqr.org/VOL11\\_No4\\_August2011/1\\_AAQR-11-03-OA-0028\\_331-350.pdf](http://aaqr.org/VOL11_No4_August2011/1_AAQR-11-03-OA-0028_331-350.pdf)
- Wang, X.L., Kohl, S.D., Chow, J.C., Watson, J.G., Gronstal, S., (2010). On-board emission measurement from the world's largest heavy haulers, Chow, J.C., Watson, J.G., Cao, J.J. (Eds.), *Proceedings, Leapfrogging Opportunities for Air Quality Improvement*, Air & Waste Management Association, Pittsburgh, PA, pp. 476-476. <http://www.dri.edu/conference-proceedings>
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., (2010). Emission characterization plans for the Athabasca Oil Sands Region, Tropp, R.J., Legge, A.H. (Eds.), *Proceedings, 103rd Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA, pp. 1-6.
- Cao, J.J., Zhu, C.S., Chow, J.C., Watson, J.G., Han, Y.M., Wang, G.H., Shen, Z.X., An, Z.S., (2009). Black carbon relationships with emissions and meteorology in Xi'an, China. *Atmospheric Research*, 94, 194-202.
- Cao, J.J., Shen, Z.X., Chow, J.C., Qi, G.W., Watson, J.G., (2009). Seasonal variations and sources of mass and chemical composition for PM<sub>10</sub> aerosol in Hangzhou, China. *Particuology*, 7, 161-168.
- Cao, J.J., Zhang, T., Chow, J.C., Watson, J.G., Wu, F., Li, H., (2009). Characterization of atmospheric ammonia over Xi'an, China. *Aerosol and Air Quality Research*, 9, 277-289. [http://aaqr.org/VOL9\\_No2\\_June2009/9\\_AAQR-08-10-OA-0043\\_277-289.pdf](http://aaqr.org/VOL9_No2_June2009/9_AAQR-08-10-OA-0043_277-289.pdf)
- Cheng, Y., Lee, S.C., Cao, J.J., Ho, K.F., Chow, J.C., Watson, J.G., Ao, C.H., (2009). Elemental composition of airborne aerosols at a traffic site and a suburban site in Hong Kong. *International Journal of Environment and Pollution*, 36, 166-179.
- Chow, J.C., Watson, J.G., Doraiswamy, P., Chen, L.-W.A., Sodeman, D.A., Lowenthal, D.H., Park, K., Arnott, W.P., Motallebi, N., (2009). Aerosol light absorption, black carbon, and elemental carbon at the Fresno Supersite, California. *Atmospheric Research*, 93, 874-887. [https://www.researchgate.net/publication/223280619\\_Aerosol\\_light\\_absorption\\_black\\_carbon\\_and\\_elemental\\_carbon\\_at\\_the\\_Fresno\\_Supersite\\_California](https://www.researchgate.net/publication/223280619_Aerosol_light_absorption_black_carbon_and_elemental_carbon_at_the_Fresno_Supersite_California)
- Han, Y.M., Cao, J.J., Posmentier, E.S., Chow, J.C., Watson, J.G., Fung, K.K., Jin, Z.D., Liu, S.X., An, Z.S., (2009). The effect of acidification on the determination of elemental carbon, char-, and soot-elemental carbon in soils and sediments. *Chemosphere*, 75, 92-99.
- Han, Y.M., Cao, J.J., Chow, J.C., Watson, J.G., An, Z.S., Liu, S.X., (2009). Elemental carbon in urban soils and road dusts in Xi'an, China and its implication for air pollution. *Atmospheric Environment*, 43, 2464-2470.

- Hidy, G.M., Biswas, P., Chow, J.C., Diaz-Roble, L., Eatough, D.J., Ellis, H., Mueller, P.K., Overcamp, T., Watson, J.G., Wu, C.Y., (2009). Remote sensing of particulate pollution from space: Have we reached the promised land? Critical review introduction. *Journal of the Air & Waste Management Association*, 59, 642-644.
- Hidy, G.M., Brook, J.R., Chow, J.C., Green, M.C., Husar, R.B., Lee, C., Scheffe, R.D., Swanson, A., Watson, J.G., (2009). Remote sensing of particulate pollution from space: Have we reached the promised land?: Critical review discussion. *Journal of the Air & Waste Management Association*, 59, 1130-1139. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.59.10.1130>
- Ho, K.F., Ho, S.S.H., Lee, S.C., Cheng, Y., Chow, J.C., Watson, J.G., Louie, P.K.K., Tian, L., (2009). Emissions of gas- and particle-phase polycyclic aromatic hydrocarbons (PAHs) in the Shing Mun Tunnel, Hong Kong. *Atmospheric Environment*, 43, 6343-6351.
- Hu, T.F., Lee, S.C., Cao, J.J., Chow, J.C., Watson, J.G., K.F., H., Ho, W.K., B., R., An, Z.S., (2009). Characterization of winter airborne particles at Emperor Qin's terra-cotta museum, China. *Science of the Total Environment*, 407, 5319-5327.
- Hu, T.F., Lee, S.C., Cao, J.J., Ho, W.K., Ho, K.F., Chow, J.C., Watson, J.G., Rong, B., An, Z.S., (2009). Atmospheric deterioration of Qin brick in an environmental chamber at Emperor Qin's Terracotta Museum, China. *Journal of Archaeological Science*, 36, 2578-2583.
- McMeeking, G.R., Kreidenweis, S.M., Baker, S., Carrico, C.M., Chow, J.C., Collett, J.L., Jr., Hao, W.M., Holden, A.S., Kirchstetter, T.W., Malm, W.C., Moosmüller, H., Sullivan, A.P., Wold, C.E., (2009). Emissions of trace gases and aerosols during the open combustion of biomass in the laboratory. *Journal of Geophysical Research-Atmospheres*, 114,
- Minoura, H., Takahashi, K., Chow, J.C., Watson, J.G., (2009). Atmosphere environment improvement in Tokyo by vehicle exhaust purification. *WIT Transactions on Ecology and the Environment*, 123, 129-139. <http://www.witpress.com/elibrary/wit-transactions-on-ecology-and-the-environment/123/20421>
- Vega, E., Lowenthal, D.H., Ruiz, H., Reyes, E., Watson, J.G., Chow, J.C., Viana, M., Querol, X., Alastuey, A., (2009). Fine particle receptor modeling in the atmosphere of Mexico City. *Journal of the Air & Waste Management Association*, 59, 1417-1428. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.59.12.1417>
- Wang, G.H., Kawamura, K., Xie, M.J., Hu, S.Y., Cao, J.J., An, Z.S., Watson, J.G., Chow, J.C., (2009). Organic molecular compositions and size distributions of Chinese summer and autumn aerosols from Nanjing: Characteristic haze event caused by wheat straw burning. *Environmental Science & Technology*, 43, 6493-6499.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Frank, N.H., (2009). Methods to assess carbonaceous aerosol sampling artifacts for IMPROVE and other long-term networks. *Journal of the Air & Waste Management Association*, 59, 898-911. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.59.8.898>
- Zhu, D.Z., Nussbaum, N.J., Kuhns, H.D., Chang, M.-C.O., Sodeman, D., Uppapalli, S., Moosmüller, H., Chow, J.C., Watson, J.G., (2009). In-Plume Emission Test Stand 2: Emission factors for 10-to 100-kW US military generators. *Journal of the Air & Waste Management Association*, 59, 1446-1457. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.59.12.1446>
- Cao, J.J., Chow, J.C., Watson, J.G., Wu, F., Han, Y.M., Jin, Z.D., Shen, Z.X., An, Z.S., (2008). Size-differentiated source profiles for fugitive dust in the Chinese Loess Plateau. *Atmospheric Environment*, 42, 2261-2275.
- Cao, J.J., Zhu, C.S., Chow, J.C., Liu, W.G., Han, Y.M., Watson, J.G., (2008). Stable carbon and oxygen isotopic composition of carbonate in fugitive dust in the Chinese Loess Plateau. *Atmospheric Environment*, 42, 9118-9122.
- Chow, J.C., Doraiswamy, P., Watson, J.G., Chen, L.-W.A., Ho, S.S.H., Sodeman, D.A., (2008). Advances in integrated and continuous measurements for particle mass and chemical composition. *Journal of the Air & Waste Management Association*, 58, 141-163. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.58.2.141>
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Magliano, K.L., (2008). Size-resolved aerosol chemical concentrations at rural and urban sites in Central California, USA. *Atmospheric Research*, 90, 243-252. doi: 10.1016/j.atmosres.2008.03.017. [https://www.researchgate.net/publication/223157253\\_Size-resolved\\_aerosol\\_chemical\\_concentrations\\_at\\_rural\\_and\\_urban\\_sites\\_in\\_Central\\_California\\_USA](https://www.researchgate.net/publication/223157253_Size-resolved_aerosol_chemical_concentrations_at_rural_and_urban_sites_in_Central_California_USA)
- Chow, J.C., Watson, J.G., (2008). New directions: Beyond compliance air quality measurements. *Atmospheric Environment*, 42, 5166-5168. doi:10.1016/j.atmosenv.2008.05.004.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Park, K., Doraiswamy, P., Bowers, K., Bode, R., (2008). Continuous and filter-based measurements of PM<sub>2.5</sub> nitrate and sulfate at the Fresno Supersite. *Environ. Mon. Assess*, 144, 179-189. [https://www.researchgate.net/publication/225147417\\_Continuous\\_and\\_filter-based\\_measurements\\_of\\_PM2.5\\_nitrate\\_and\\_sulfate\\_at\\_the\\_Fresno\\_Supersite](https://www.researchgate.net/publication/225147417_Continuous_and_filter-based_measurements_of_PM2.5_nitrate_and_sulfate_at_the_Fresno_Supersite)
- Cortez-Lugo, M., Moreno-Macias, H., Holguin-Molino, F., Chow, J.C., Watson, J.G., Gutierrez-Avedoy, V., Mandujano, F., Hernandez-Avila, M., Romieu, I., (2008). Relationship between indoor, outdoor, and personal fine

- particle concentrations for individuals with COPD and predictors of indoor-outdoor ratio in Mexico City. *Journal of Exposure Science & Environmental Epidemiology*, 18, 109-115.
- Diaz-Robles, L.A., Ortega, J.C., Fu, J.S., Reed, G.D., Chow, J.C., Watson, J.G., Moncada-Herrera, J.A., (2008). A hybrid ARIMA and artificial neural networks model to forecast particulate matter in urban areas: The case of Temuco, Chile. *Atmospheric Environment*, 42, 8331-8340.
- Han, Y.M., Han, Z.W., Cao, J.J., Chow, J.C., Watson, J.G., An, Z.S., Liu, S.X., Zhang, R.J., (2008). Distribution and origin of carbonaceous aerosol over a rural high-mountain lake area, Northern China and its transport significance. *Atmospheric Environment*, 42, 2405-2414.
- Ho, S.S.H., Yu, J.Z., Chow, J.C., Zielinska, B., Watson, J.G., Sit, E.H.L., Schauer, J.J., (2008). Evaluation of an injection port thermal desorption-gas chromatography/mass spectrometry method for analysis of non-polar organic compounds in ambient aerosol samples. *Journal of Chromatography A*, 1200, 217-227. doi:10.1016/j.chroma.2008.05.056.
- Li, X.X., Cao, J.J., Chow, J.C., Han, Y.M., Lee, S.C., Watson, J.G., (2008). Chemical characteristics of carbonaceous aerosols during dust storms over Xi'an in China. *Advances in Atmospheric Sciences*, 25, 847-855.
- Lin, C.H., Wu, Y.L., Lai, C.H., Watson, J.G., Chow, J.C., (2008). Air quality measurements from the southern particulate matter supersite in Taiwan. *Aerosol and Air Quality Research*, 8, 233-264. [http://aaqr.org/VOL8\\_No3\\_September2008/1\\_AAQR-08-04-OA-0012\\_233-264.pdf](http://aaqr.org/VOL8_No3_September2008/1_AAQR-08-04-OA-0012_233-264.pdf)
- Mauderly, J.L., Chow, J.C., (2008). Health effects of organic aerosols. *Inhalation Toxicology*, 20, 257-288. DOI: 10.1080/08958370701866008.
- McDonald, J.D., Barr, E.B., White, R.K., Kracko, D., Chow, J.C., Zielinska, B., Grosjean, E., (2008). Generation and characterization of gasoline engine exhaust inhalation exposure atmospheres. *Inhalation Toxicology*, 20, 1157-1168.
- Schichtel, B.A., Malm, W.C., Bench, G., Fallon, S., McDade, C.E., Chow, J.C., Watson, J.G., (2008). Fossil and contemporary fine particulate carbon fractions at 12 rural and urban sites in the United States. *Journal of Geophysical Research-Atmospheres*, 113, 1-20. doi: 10.1029/2007JD008605. [https://www.researchgate.net/publication/228799415\\_Fossil\\_and\\_contemporary\\_fine\\_particulate\\_carbon\\_fractions\\_at\\_12\\_rural\\_and\\_urban\\_sites\\_in\\_the\\_United\\_States](https://www.researchgate.net/publication/228799415_Fossil_and_contemporary_fine_particulate_carbon_fractions_at_12_rural_and_urban_sites_in_the_United_States)
- Sheya, S.A., Glowacki, C., Chang, M.-C.O., Chow, J.C., Watson, J.G., (2008). Hot filter/impinger and dilution sampling for fine particulate matter characterization from ferrous metal casting processes. *Journal of the Air & Waste Management Association*, 58, 553-561. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.58.4.553>
- Watson, J.G., Chen, L.-W.A., Chow, J.C., Lowenthal, D.H., Doraiswamy, P., (2008). Source apportionment: Findings from the U.S. Supersite Program. *Journal of the Air & Waste Management Association*, 58, 265-288. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.58.2.265>
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Magliano, K.L., (2008). Estimating aerosol light scattering at the Fresno Supersite. *Atmospheric Environment*, 42, 1186-1196.
- Cao, J.J., Lee, S.C., Chow, J.C., Watson, J.G., Ho, K.F., Zhang, R.J., Jin, Z.D., Shen, Z.X., Chen, G.C., Kang, Y.M., Zou, S.C., Zhang, L.Z., Qi, S.H., Dai, M.H., Cheng, Y., Hu, K., (2007). Spatial and seasonal distributions of carbonaceous aerosols over China. *Journal of Geophysical Research-Atmospheres*, 112, 1-9. doi:10.1029/2006JD008205.
- Chen, L.-W.A., Watson, J.G., Chow, J.C., Magliano, K.L., (2007). Quantifying PM<sub>2.5</sub> source contributions for the San Joaquin Valley with multivariate receptor models. *Environmental Science & Technology*, 41, 2818-2826. [https://www.researchgate.net/publication/6301852\\_Quantifying\\_PM\\_2.5\\_Source\\_Contributions\\_for\\_the\\_San\\_Joaquin\\_Valley\\_with\\_Multivariate\\_Receptor\\_Models](https://www.researchgate.net/publication/6301852_Quantifying_PM_2.5_Source_Contributions_for_the_San_Joaquin_Valley_with_Multivariate_Receptor_Models)
- Chen, L.-W.A., Moosmüller, H., Arnott, W.P., Chow, J.C., Watson, J.G., Susott, R.A., Babbitt, R.E., Wold, C.E., Lincoln, E.N., Hao, W.M., (2007). Emissions from laboratory combustion of wildland fuels: Emission factors and source profiles. *Environmental Science & Technology*, 41, 4317-4325.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., Zielinska, B., Mazzoleni, L.R., Magliano, K.L., (2007). Evaluation of organic markers for chemical mass balance source apportionment at the Fresno supersite. *Atmospheric Chemistry and Physics*, 7, 1741-1754. <http://www.atmos-chem-phys.net/7/1741/2007/acp-7-1741-2007.pdf>
- Chow, J.C., Watson, J.G., (2007). Survey of measurement and composition of ultrafine particles. *Aerosol and Air Quality Research*, 7, 121-173. [http://aaqr.org/VOL7\\_No2\\_June2007/1\\_AAQR-07-05-OA-0029\\_121-173.pdf](http://aaqr.org/VOL7_No2_June2007/1_AAQR-07-05-OA-0029_121-173.pdf)
- Chow, J.C., (2007). 2007 Critical review introduction - Will the circle be unbroken: A history of the U.S. National Ambient Air Quality Standards. *Journal of the Air & Waste Management Association*, 57, 650-651. <http://pubs.awma.org/gsearch/journal/2007/6/10.3155-1047-3289.57.6.650.pdf>

- Chow, J.C., Yu, J.Z., Watson, J.G., Ho, S.S.H., Bohannon, T.L., Hays, M.D., Fung, K.K., (2007). The application of thermal methods for determining chemical composition of carbonaceous aerosols: A review. *Journal of Environmental Science and Health-Part A*, 42, 1521-1541.
- Chow, J.C., Watson, J.G., Feldman, H.J., Nolan, J., Wallerstein, B.R., Hidy, G.M., Liroy, P.J., McKee, H.C., Mobley, J.D., Bauges, K., Bachmann, J.D., (2007). Will the circle be unbroken: A history of the U.S. National Ambient Air Quality Standards: Critical review discussion. *Journal of the Air & Waste Management Association*, 57, 1151-1163. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.57.10.1151>
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Chang, M.-C.O., Robinson, N.F., Trimble, D.L., Kohl, S.D., (2007). The IMPROVE\_A temperature protocol for thermal/optical carbon analysis: Maintaining consistency with a long-term database. *Journal of the Air & Waste Management Association*, 57, 1014-1023. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.57.9.1014>
- Chow, J.C., Watson, J.G., Doraiswamy, P., Chen, L.-W.A., Tropp, R.J., (2007). Rilevamento, Modellistica, Aspetti Normativi ed Effetti Sulla Salute del Particolato Atmosferico (In Italian), Cernuschi, S., Giugliano, M., Grosso, M., Lonati, G. (Eds.), *Il Particolato Fine in Atmosfera*, First ed. CIPA SRL, Milan, pp. 139-156. [https://www.researchgate.net/publication/235341878\\_Rilevamento\\_Modellistica\\_Aspetti\\_Normativi\\_ed\\_Effetti\\_Sulla\\_Salute\\_del\\_Particolato\\_Atmosferico\\_\(In\\_Italian\)](https://www.researchgate.net/publication/235341878_Rilevamento_Modellistica_Aspetti_Normativi_ed_Effetti_Sulla_Salute_del_Particolato_Atmosferico_(In_Italian))
- England, G.C., Watson, J.G., Chow, J.C., Zielinska, B., Chang, M.-C.O., Loos, K.R., Hidy, G.M., (2007). Dilution-based emissions sampling from stationary sources: Part 1. Compact sampler, methodology and performance. *Journal of the Air & Waste Management Association*, 57, 65-78. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2007.10465291>
- England, G.C., Watson, J.G., Chow, J.C., Zielinska, B., Chang, M.-C.O., Loos, K.R., Hidy, G.M., (2007). Dilution-based emissions sampling from stationary sources: Part 2. Gas-fired combustors compared with other fuel-fired systems. *Journal of the Air & Waste Management Association*, 57, 79-93. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2007.10465304>
- Fujita, E.M., Zielinska, B., Campbell, D.E., Arnott, W.P., Sagebiel, J.C., Mazzoleni, L.R., Chow, J.C., Gabele, P.A., Crews, W., Snow, R., Clark, N.N., Wayne, W.S., Lawson, D.R., (2007). Variations in speciated emissions from spark-ignition and compression-ignition motor vehicles in California's south coast air basin. *Journal of the Air & Waste Management Association*, 57, 705-720. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.57.6.705>
- Fujita, E.M., Campbell, D.E., Arnott, W.P., Chow, J.C., Zielinska, B., (2007). Evaluations of the chemical mass balance method for determining contributions of gasoline and diesel exhaust to ambient carbonaceous aerosols. *Journal of the Air & Waste Management Association*, 57, 721-740. <http://www.tandfonline.com/doi/pdf/10.3155/1047-3289.57.6.721>
- Han, Y.M., Cao, J.J., An, Z., Chow, J.C., Watson, J.G., Jin, Z.D., Fung, K.K., Liu, S., (2007). Evaluation of the thermal/optical reflectance method for quantification of elemental carbon in sediments. *Chemosphere*, 69, 526-533.
- Han, Y.M., Cao, J.J., Chow, J.C., Watson, J.G., An, Z., Jin, Z.D., Fung, K.K., Liu, S., (2007). Evaluation of the thermal/optical reflectance method for discrimination between char- and soot-EC. *Chemosphere*, 69, 569-574.
- Ho, K.F., Cao, J.J., Lee, S.C., Kawamura, K., Zhang, R.J., Chow, J.C., Watson, J.G., (2007). Dicarboxylic acids, ketocarboxylic acids, and dicarbonyls in the urban atmosphere of China. *Journal of Geophysical Research-Atmospheres*, D22, S27-21-S27-12. doi:10.1029/2006J008011.
- Stevens, R.K., Chow, J.C., Watson, J.G., (2007). In memory of A&WMA member Charles W. Lewis 1938-2007. *Journal of the Air & Waste Management Association*, 57, 267-267.
- Watson, J.G., Chow, J.C., (2007). Receptor models for source apportionment of suspended particles, Murphy, B., Morrison, R. (Eds.), *Introduction to Environmental Forensics*, 2nd Edition, 2 ed. Academic Press, New York, NY, pp. 279-316.
- Cao, J.J., Lee, S.C., Ho, K.F., Fung, K., Chow, J.C., Watson, J.G., (2006). Characterization of roadside fine particulate carbon and its eight fractions in Hong Kong. *Aerosol and Air Quality Research*, 6, 106-122. [http://aaqr.org/VOL6\\_No2\\_June2006/1\\_AAQR-06-06-OA-0001\\_106-122.pdf](http://aaqr.org/VOL6_No2_June2006/1_AAQR-06-06-OA-0001_106-122.pdf)
- Chen, L.-W.A., Moosmüller, H., Arnott, W.P., Chow, J.C., Watson, J.G., Susott, R.A., Babbitt, R.E., Wold, C., Lincoln, E., Hao, W.M., (2006). Particle emissions from laboratory combustion of wildland fuels: In situ optical and mass measurements. *Geophysical Research Letters*, 33, 1-4. doi:10.1029/2005GL024838.
- Chen, L.-W.A., Moosmüller, H., Arnott, W.P., Chow, J.C., Watson, J.G., Susott, R.A., Babbitt, R.E., Wold, C.E., Lincoln, E.N., Hao, W.M., (2006). Emission factors for carbon monoxide, elemental carbon, and light absorption from laboratory combustion of wildland fuels, *Proceedings, 7th International Aerosol Conference*, St. Paul, Minnesota, American Association for Aerosol Research, St Paul, MN.

- Cheng, Y., Lee, S.C., Ho, K.F., Wang, Y.Q., Cao, J.J., Chow, J.C., Watson, J.G., (2006). Black carbon measurement in a coastal area of South China. *Journal of Geophysical Research-Atmospheres*, 111, D12310. doi:10.1029/JD006663.
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Ho, S.S.H., Koracin, D., Zielinska, B., Tang, D., Perera, F., Cao, J.J., Lee, S.C., (2006). Exposure to PM<sub>2.5</sub> and PAHs from the Tong Liang, China, epidemiological study. *J. Env. Sci. Health Part A*, A41, 517-542.
- Chow, J.C., Chen, L.-W.A., Watson, J.G., Lowenthal, D.H., Magliano, K.L., Turkiewicz, K., Lehrman, D.E., (2006). PM<sub>2.5</sub> chemical composition and spatiotemporal variability during the California Regional PM<sub>10</sub>/PM<sub>2.5</sub> Air Quality Study (CRPAQS). *Journal of Geophysical Research-Atmospheres*, 111, 1-17. doi:10.1029/2005JD006457. [https://www.researchgate.net/publication/235341516\\_PM2.5\\_chemical\\_composition\\_and\\_spatiotemporal\\_variability\\_during\\_the\\_California\\_Regional\\_PM10PM2.5\\_Air\\_Quality\\_Study\\_\(CRPAQS\)](https://www.researchgate.net/publication/235341516_PM2.5_chemical_composition_and_spatiotemporal_variability_during_the_California_Regional_PM10PM2.5_Air_Quality_Study_(CRPAQS))
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., Tropp, R.J., Park, K., Magliano, K.L., (2006). PM<sub>2.5</sub> and PM<sub>10</sub> mass measurements in California's San Joaquin Valley. *Aerosol Science and Technology*, 40, 796-810. <http://www.tandfonline.com/doi/pdf/10.1080/02786820600623711>
- Chow, J.C., Watson, J.G., Park, K., Lowenthal, D.H., Robinson, N.F., Magliano, K.L., (2006). Comparison of particle light scattering and PM<sub>2.5</sub> mass in central California. *Journal of the Air & Waste Management Association*, 56, 398-410. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464515>
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., Magliano, K.L., (2006). Particulate carbon measurements in California's San Joaquin Valley. *Chemosphere*, 62, 337-348. [https://www.researchgate.net/publication/7754214\\_Particiulate\\_carbon\\_measurements\\_in\\_California\\_\\_s\\_San\\_Joaquin\\_Valley](https://www.researchgate.net/publication/7754214_Particiulate_carbon_measurements_in_California__s_San_Joaquin_Valley)
- Chow, J.C., Solomon, P.A., (2006). Introduction - A special issue of the *Journal of the Air & Waste Management Association* on the Particulate Matter Supersites Program and Related Studies. *Journal of the Air & Waste Management Association*, 56, 369-369.
- Chow, J.C., (2006). Introduction to the A&WMA 2006 Critical Review - Health effects of fine particulate air pollution: Lines that connect. *Journal of the Air & Waste Management Association*, 56, 707-708. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464484>
- Chow, J.C., Watson, J.G., Mauderly, J.L., Costa, D.L., Wyzga, R.E., Vedal, S., Hidy, G.M., Altshuler, S.L., Marrack, D., Heuss, J.M., Wolff, G.T., Pope, C.A., Dockery, D.W., (2006). Health effects of fine particulate air pollution: Lines that connect: Critical review discussion. *Journal of the Air & Waste Management Association*, 56, 1368-1380. doi:10.1080/10473289.2006.10464545. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464545>
- Chow, J.C., Watson, J.G., (2006). Overview of ultrafine particles and human health. *WIT Transactions on Ecology and the Environment*, 99, 619-632. doi:10.2495/RAV060621. <http://library.witpress.com/pages/PaperInfo.asp?PaperID=17217>
- Chow, J.C., Watson, J.G., Doraiswamy, P., Chen, L.-W.A., Tropp, R.J., (2006). PM measurements, modeling regulatory status, and health effects, Giugliano, M., Cernuschi, S. (Eds.), *Il Particolato Fine in Atmosfera: 60th Corso di aggiornamento in Ingegneria Sanitaria-Ambientale*, Politecnico di Milano, Milan, Italy, pp. 8-1-8-17.
- Chow, J.C., (2006). Preface. *Particuology*, 4, 259-260.
- Etyemezian, V.R., Tesfaye, M., Yimer, A., Ali, M., Chow, J.C., Mesfin, D., Nega, T., Nikolich, G., Watson, J.G., Wondmagegn, M., (2006). Results from a pilot-scale air quality study in Addis Ababa, Ethiopia (vol 39, pg 7849, 2005). *Atmospheric Environment*, 40, 7455-7455.
- Grover, B.D., Eatough, N.L., Eatough, D.J., Chow, J.C., Watson, J.G., Ambs, J.L., Meyer, M.B., Hopke, P.K., Al-Horr, R., Later, D.W., Wilson, W.E., (2006). Measurements of both non-volatile and semi-volatile fractions of fine particulate matter in Fresno, CA. *Aerosol Science and Technology*, 40, 811-826. <http://www.tandfonline.com/doi/pdf/10.1080/02786820600615071>
- Hansen, D.A., Edgerton, E., Hartsell, B., Jansen, J., Burge, H., Koutrakis, P., Rogers, C., Suh, H., Chow, J.C., Zielinska, B., McMurry, P.H., Mulholland, J., Russell, A., Rasmussen, R., (2006). Air quality measurements for the aerosol research and inhalation epidemiology study. *Journal of the Air & Waste Management Association*, 56, 1445-1458. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464549>
- Ho, K.F., Lee, S.C., Cao, J.J., Chow, J.C., Watson, J.G., Chan, C.K., (2006). Seasonal variations and mass closure analysis of particulate matter in Hong Kong. *Science of the Total Environment*, 355, 276-287.
- Ho, K.F., Lee, S.C., Cao, J.J., Kawamura, K., Watanabe, Y.C., Chow, J.C., (2006). Dicarboxylic acids, ketocarboxylic acids and dicarbonyls in the urban roadside area of Hong Kong. *Atmospheric Environment*, 40, 3030-3040.

- Ho, K.F., Lee, S.C., Cao, J.J., Li, Y.S., Chow, J.C., Watson, J.G., Fung, K., (2006). Variability of organic and elemental carbon, water soluble organic carbon, and isotopes in Hong Kong. *Atmospheric Chemistry and Physics*, 6, 4569-4576. <http://www.atmos-chem-phys.net/6/4569/2006/acp-6-4569-2006.pdf>
- Hu, T.F., Li, X., Dong, J., Rong, B., Shen, Z., Cao, J.J., Lee, S.C., Chow, J.C., Watson, J.G., (2006). Morphology and elemental composition of dustfall particles inside Emperor Qin's terra-cotta warriors and horses museum. *Particuology*, 4, 346-351. [https://www.researchgate.net/publication/223366379\\_Morphology\\_and\\_elemental\\_composition\\_of\\_dustfall\\_particles\\_inside\\_emperor\\_qin's\\_terra-cotta\\_warriors\\_and\\_horses\\_museum](https://www.researchgate.net/publication/223366379_Morphology_and_elemental_composition_of_dustfall_particles_inside_emperor_qin's_terra-cotta_warriors_and_horses_museum)
- Labban, R., Veranth, J.M., Watson, J.G., Chow, J.C., (2006). Feasibility of soil dust source apportionment by the pyrolysis-gas chromatography/mass spectrometry method. *Journal of the Air & Waste Management Association*, 56, 1230-1242. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464587>
- Lee, S.C., Cheng, Y., Ho, K.F., Cao, J.J., Louie, P.K.K., Chow, J.C., Watson, J.G., (2006). PM<sub>1.0</sub> and PM<sub>2.5</sub> characteristics in the roadside environment of Hong Kong. *Aerosol Science and Technology*, 40, 157-165. <http://www.tandfonline.com/doi/pdf/10.1080/02786820500494544>
- McDonald, J.D., White, R.K., Barr, E.B., Zielinska, B., Chow, J.C., Grosjean, E., (2006). Generation and characterization of hardwood smoke inhalation exposure atmospheres. *Aerosol Science and Technology*, 40, 573-584.
- Minoura, H., Takahashi, K., Chow, J.C., Watson, J.G., (2006). Multi-year trend in fine and coarse particle mass, carbon, and ions in downtown Tokyo, Japan. *Atmospheric Environment*, 40, 2478-2487.
- Park, K., Chow, J.C., Watson, J.G., Trimble, D.L., Doraiswamy, P., Arnott, W.P., Stroud, K.R., Bowers, K., Bode, R., Petzold, A., Hansen, A.D.A., (2006). Comparison of continuous and filter-based carbon measurements at the Fresno Supersite. *Journal of the Air & Waste Management Association*, 56, 474-491. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464521>
- Ramani, K.V., Prasad, D., Veeranna, P., Gertler, A.W., Chow, J.C., Green, C., Guttikunda, S.K., Shah, M., Sibold, K., (2006). Source apportionment of air pollutants in Hyderabad City, India, Proceedings, Better Air Quality, Yogyakarta, Indonesia, Clean Air Asia, Manila, Phillipines.
- Rinehart, L.R., Fujita, E.M., Chow, J.C., Magliano, K.L., Zielinska, B., (2006). Spatial distribution of PM<sub>2.5</sub> associated organic compounds in central California. *Atmospheric Environment*, 40, 290-303.
- Veranth, J.M., Moss, T.A., Chow, J.C., Labban, R., Nichols, W.K., Walton, J.C., Watson, J.G., Yost, G.S., (2006). Correlation of in vitro cytokine responses with the chemical composition of particulate matter. *Environ. Health Perspect*, 114, 341-349. doi:10.1289/ehp.8360. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1392226/pdf/ehp0114-000341.pdf>
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Kreisberg, N., Hering, S.V., Stolzenburg, M.R., (2006). Variations of nanoparticle concentrations at the Fresno supersite. *Science of the Total Environment*, 358, 178-187. [https://www.researchgate.net/publication/7754217\\_Variations\\_of\\_nanoparticle\\_concentrations\\_at\\_the\\_Fresno\\_Supersite](https://www.researchgate.net/publication/7754217_Variations_of_nanoparticle_concentrations_at_the_Fresno_Supersite)
- Watson, J.G., Chow, J.C., Park, K., Lowenthal, D.H., (2006). Nanoparticle and ultrafine particle events at the Fresno Supersite. *Journal of the Air & Waste Management Association*, 56, 417-430. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2006.10464526>
- Watson, J.G., Chow, J.C., (2006). Visibility and air pollution. *WIT Transactions on Ecology and the Environment*, 99, 645-649. doi:10.2495/RAV060621. <http://library.witpress.com/pages/PaperInfo.asp?PaperID=17219>
- Arnott, W.P., Zielinska, B., Rogers, C.F., Sagebiel, J.C., Park, K., Chow, J.C., Moosmüller, H., Watson, J.G., Kelly, K., Wagner, D., Sarofim, A., Lighty, J.S., Palmer, G., (2005). Evaluation of 1047 nm photoacoustic instruments and photoelectric aerosol sensors in source-sampling of black carbon aerosol and particle bound PAH's from gasoline and diesel powered vehicles. *Environmental Science & Technology*, 39, 5398-5406. [https://www.researchgate.net/publication/7677069\\_Evaluation\\_of\\_1047-nm\\_Photoacoustic\\_Instruments\\_and\\_Photoelectric\\_Aerosol\\_Sensors\\_in\\_Source-Sampling\\_of\\_Black\\_Carbon\\_Aerosol\\_and\\_Particle-Bound\\_PAHs\\_from\\_Gasoline\\_and\\_Diesel\\_Powered\\_Vehicles](https://www.researchgate.net/publication/7677069_Evaluation_of_1047-nm_Photoacoustic_Instruments_and_Photoelectric_Aerosol_Sensors_in_Source-Sampling_of_Black_Carbon_Aerosol_and_Particle-Bound_PAHs_from_Gasoline_and_Diesel_Powered_Vehicles)
- Cao, J.J., Lee, S.C., Zhang, X.Y., Chow, J.C., An, Z.S., Ho, K.F., Watson, J.G., Fung, K.K., Wang, Y.Q., Shen, Z.X., (2005). Characterization of airborne carbonate over a site near Asian dust source regions during spring 2002 and its climatic and environmental significance. *Journal of Geophysical Research-Atmospheres*, 110, 1-8. doi:10.1029/2004JD005244. [https://www.researchgate.net/publication/235341411\\_Characterization\\_of\\_airborne\\_carbonate\\_over\\_a\\_site\\_near\\_Asian\\_dust\\_source\\_regions\\_during\\_spring\\_2002\\_and\\_its\\_climatic\\_and\\_environmental\\_significance](https://www.researchgate.net/publication/235341411_Characterization_of_airborne_carbonate_over_a_site_near_Asian_dust_source_regions_during_spring_2002_and_its_climatic_and_environmental_significance)

- Cao, J.J., Lee, S.C., Li, Y., Chow, J.C., Fung, K.K., (2005). Characterization and source apportionment of atmospheric organic and elemental carbon in 2003 autumn and winter over Xi'an, China. *Progress of Natural Science in China*, 15, 1460-1466.
- Cao, J.J., Lee, S.C., Chow, J.C., Cheng, Y., Ho, K.F., Fung, K.K., Liu, S.X., Watson, J.G., (2005). Indoor/outdoor relationships for PM<sub>2.5</sub> and associated carbonaceous pollutants at residential homes in Hong Kong - Case study. *Indoor Air*, 15, 197-204.
- Cao, J.J., Wu, F., Chow, J.C., Lee, S.C., Li, Y., Chen, S.W., An, Z.S., Fung, K.K., Watson, J.G., Zhu, C.S., Liu, S.X., (2005). Characterization and source apportionment of atmospheric organic and elemental carbon during fall and winter of 2003 in Xi'an, China. *Atmospheric Chemistry and Physics*, 5, 3127-3137. <http://www.atmos-chem-phys.net/5/3127/2005/acp-5-3127-2005.pdf>
- Cao, J.J., Rong, B., Lee, S.C., Chow, J.C., Ho, K.F., Liu, S.X., Zhu, C.S., (2005). Composition of indoor aerosols at the Emperor Qin's Terra-Cotta Museum, Xi'an, China, during summer 2004. *Particuology*, 3, 170-175. <http://www.jproeng.com/particuologyEnglish/manage/wenzhang/2005616.PDF>
- Chang, M.-C.O., Chow, J.C., Watson, J.G., Glowacki, C., Sheya, S.A., Prabhu, A., (2005). Characterization of fine particulate emissions from casting processes. *Aerosol Science and Technology*, 39, 947-959. <http://www.tandfonline.com/doi/pdf/10.1080/02786820600623711>
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Magliano, K.L., (2005). Loss of PM<sub>2.5</sub> nitrate from filter samples in central California. *Journal of the Air & Waste Management Association*, 55, 1158-1168. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2005.10464704>
- Chow, J.C., Watson, J.G., Louie, P.K.K., Chen, L.-W.A., Sin, D., (2005). Comparison of PM<sub>2.5</sub> carbon measurement methods in Hong Kong, China. *Environ. Poll*, 137, 334-344.
- Chow, J.C., (2005). Introduction to the A&WMA 2005 Critical Review: Nanoparticles and the environment. *Journal of the Air & Waste Management Association*, 55, 706-707. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2005.10464657>
- Chow, J.C., Watson, J.G., Savage, N., Solomon, J., Cheng, Y.S., McMurry, P.H., Corey, L.M., Bruce, G.M., Pleus, R.C., Biswas, P., Wu, C.Y., (2005). Nanoparticles and the environment: Critical review discussion. *Journal of the Air & Waste Management Association*, 55, 1411-1417. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2005.10464743>
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Paredes-Miranda, G., Chang, M.-C.O., Trimble, D.L., Fung, K.K., Zhang, J., Yu, J.Z., (2005). Interactive comment on "Refining temperature measures in thermal/optical carbon analysis". *Atmospheric Chemistry and Physics*. Discuss, 5, S1-S6.
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Paredes-Miranda, G., Chang, M.-C.O., Trimble, D.L., Fung, K.K., Zhang, H., Yu, J.Z., (2005). Refining temperature measures in thermal/optical carbon analysis. *Atmospheric Chemistry and Physics*, 5, 2961-2972. 1680-7324/acp/2005-5-2961. <http://www.atmos-chem-phys.net/5/2961/2005/acp-5-2961-2005.pdf>
- El-Zanan, H.S., Lowenthal, D.H., Zielinska, B., Chow, J.C., Kumar, N.K., (2005). Determination of the organic aerosol mass to organic carbon ratio in IMPROVE samples. *Chemosphere*, 60, 485-496.
- Etyemezian, V.R., Tesfaye, M., Yimer, A., Chow, J.C., Mesfin, D., Nega, T., Nikolich, G., Watson, J.G., Wondmagegn, M., (2005). Results from a pilot-scale air quality study in Addis Ababa, Ethiopia. *Atmospheric Environment*, 39, 7849-7860.
- Klouda, G.A., Filliben, J.J., Parish, H.J., Chow, J.C., Watson, J.G., Cary, R.A., (2005). Reference material 8785: Air particulate matter on filter media. *Aerosol Science and Technology*, 39, 173-183. doi:10.1080/027868290916453. <http://www.tandfonline.com/doi/pdf/10.1080/02786820600623711>
- Li, W.W., Orquiz, R., Currey, R.M., Valenzuela, V.H., Sarofim, A.F., Meuzelaar, H.L.C., Sheya, S.A., Kelly, K.E., Anderson, J.R., Chow, J.C., Watson, J.G., (2005). Experimental design, methods, and results of ambient particulate matter characterization in the Paso del Norte region, Currey, R.M., Kelly, K.E., Meuzelaar, H.L.C., Sarofim, A.F. (Eds.), *The U.S.-Mexican Border Environment: Integrated Approach to Defining Particulate Matter Issues in the Paso del Norte Region*, San Diego State University Press, San Diego, CA, pp. 79-112. <http://scerp.org/pubs/m12/Chapter%203.pdf>
- Louie, P.K.K., Watson, J.G., Chow, J.C., Chen, L.-W.A., Sin, D.W.M., Lau, A.K.H., (2005). Seasonal characteristics and regional transport of PM<sub>2.5</sub> in Hong Kong. *Atmospheric Environment*, 39, 1695-1710.
- Louie, P.K.K., Chow, J.C., Chen, L.-W.A., Watson, J.G., Leung, G., Sin, D., (2005). PM<sub>2.5</sub> chemical composition in Hong Kong: Urban and regional variations. *Science of the Total Environment*, 338, 267-281.
- Sin, D.W.M., Fung, W.H., Choi, Y.Y., Lam, C.H., Louie, P.K.K., Chow, J.C., Watson, J.G., (2005). Seasonal and spatial variation of solvent extractable organic compounds in fine suspended particulate matter in Hong Kong.

- Journal of the Air & Waste Management Association, 55, 291-301.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2005.10464621>
- Watson, J.G., Chow, J.C., (2005). Receptor models, Zannetti, P. (Ed.) Air Quality Modeling -Theories, Methodologies, Computational Techniques, and Available Databases and Software. Vol. II - Advanced Topics, Air and Waste Management Association and the EnviroComp Institute, Pittsburgh, PA, pp. 455-501.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., (2005). Summary of organic and elemental carbon/black carbon analysis methods and intercomparisons. Aerosol and Air Quality Research, 5, 65-102. 10.4209/aaqr.2005.06.0006  
[http://aaqr.org/VOL5\\_No1\\_June2005/6\\_AAQR-05-06-OA-0006\\_65-102.pdf](http://aaqr.org/VOL5_No1_June2005/6_AAQR-05-06-OA-0006_65-102.pdf)
- Cao, J.J., Lee, S.C., Ho, K.F., Zou, S.C., Fung, K.K., Li, Y., Watson, J.G., Chow, J.C., (2004). Spatial and seasonal variations of atmospheric organic carbon and elemental carbon in Pearl River Delta Region, China. Atmospheric Environment, 38, 4447-4456.
- Chang, M.-C.O., Chow, J.C., Watson, J.G., Hopke, P.K., Yi, S.M., England, G.C., (2004). Measurement of ultrafine particle size distributions from coal-, oil-, and gas-fired stationary combustion sources. Journal of the Air & Waste Management Association, 54, 1494-1505.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2004.10471010>
- Chen, L.-W.A., Chow, J.C., Watson, J.G., Moosmüller, H., Arnott, W.P., (2004). Modeling reflectance and transmittance of quartz-fiber filter samples containing elemental carbon particles: Implications for thermal/optical analysis. Journal of Aerosol Science, 35, 765-780. doi: 10.1016/j.jaerosci.2003.12.005.
- Chow, J.C., Watson, J.G., Kuhns, H.D., Etyemezian, V.R., Lowenthal, D.H., Crow, D.J., Kohl, S.D., Engelbrecht, J.P., Green, M.C., (2004). Source profiles for industrial, mobile, and area sources in the Big Bend Regional Aerosol Visibility and Observational (BRAVO) Study. Chemosphere, 54, 185-208.
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Arnott, W.P., Moosmüller, H., Fung, K.K., (2004). Equivalence of elemental carbon by Thermal/Optical Reflectance and Transmittance with different temperature protocols. Environmental Science & Technology, 38, 4414-4422.  
[https://www.researchgate.net/publication/8331878\\_Equivalence\\_of\\_Elemental\\_Carbon\\_by\\_ThermalOptical\\_Reflectance\\_and\\_Transmittance\\_with\\_Different\\_Temperature\\_Protocols](https://www.researchgate.net/publication/8331878_Equivalence_of_Elemental_Carbon_by_ThermalOptical_Reflectance_and_Transmittance_with_Different_Temperature_Protocols)
- Chow, J.C., (2004). Introduction to the A&WMA 2004 Critical Review: Megacities and atmospheric pollution. Journal of the Air & Waste Management Association, 54, 642-643.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2004.10470940>
- Chow, J.C., Watson, J.G., Shah, J.J., Kiang, C.S., Loh, C., Lev-On, M., Lents, J.M., Molina, M.J., Molina, L.T., (2004). Megacities and atmospheric pollution: Critical review discussion. Journal of the Air & Waste Management Association, 54, 1226-1235. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2004.10470995>
- Chow, J.C., Scheffe, R.D., Solomon, P.A., (2004). Introduction - A special issue of the Journal of the Air & Waste Management Association on particulate matter: Atmospheric sciences, exposure, and the fourth colloquium on PM and human health. Journal of the Air & Waste Management Association, 54, 1025-1025.
- Chow, J.C., Watson, J.G., (2004). Monitoring and assessing particulate matter, Urbanization, Energy, and Air Pollution in China - The Challenges Ahead, National Academies Press, Washington, DC, pp. 127-137.  
<http://www.nap.edu/catalog/11192.html>
- Fehsenfeld, F.C., Hastie, D., Chow, J.C., Solomon, P.A., (2004). Particle and gas measurements, McMurry, P.H., Shepherd, M.F., Vickery, J.S. (Eds.), Particulate Matter Science for Policy Makers, A NARSTO Assessment, Cambridge University Press, Cambridge, UK, pp. 159-189. <http://www.cambridge.org>
- Fung, K.K., Chow, J.C., Watson, J.G., (2004). Determining organic carbon adsorption on quartz fiber filters by sample splitting and thermal/optical analysis, Proceedings, 13th World Clean Air and Environmental Protection Congress and Exhibition, International Union of Air Pollution Prevention Associations, London, UK., pp. 313-311-313-316.
- Fung, K.K., Chow, J.C., Chen, L.-W.A., Chang, M.-C.O., Watson, J.G., (2004). Evaluation of pyrolysis correction by reflectance and transmittance in thermal/optical OC/EC analysis techniques, Proceedings, Symposium on Air Quality Methods and Technology, Air and Waste Management Association, Pittsburgh, PA, pp. 10.14-11-10.14-10.
- Ge, S., Xu, X., Chow, J.C., Watson, J.G., Sheng, Q., Liu, W., Bai, Z., Zhu, T., Zhang, J., (2004). Emissions of air pollutants from household stoves: Honeycomb coal versus coal cake. Environmental Science & Technology, 38, 4612-4618.
- Grover, B.D., Kleinman, M.T., Eatough, N.L., Eatough, D.J., Hopke, P.K., Chow, J.C., Watson, J.G., Meyer, M.B., J., A., Wilson, W.E., (2004). Measurement of total PM<sub>2.5</sub> mass (nonvolatile plus semi-volatile) with the FDMS TEOM monitor, Proceedings, 97th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.

- Labban, R., Veranth, J.M., Chow, J.C., Engelbrecht, J.P., Watson, J.G., (2004). Size and geographical variation in PM<sub>1</sub>, PM<sub>2.5</sub> and PM<sub>10</sub>: Source profiles from soils in the western United States. *Water Air and Soil Pollution*, 157, 13-31.  
<https://www.researchgate.net/publication/226813468> Size and Geographical Variation in PM<sub>1</sub> PM<sub>2.5</sub> and PM<sub>10</sub> Source Profiles from Soils in the Western United States
- McDonald, J.D., Barr, E.B., White, R.K., Chow, J.C., Schauer, J.J., Zielinska, B., Grosjean, E., (2004). Generation and characterization of four dilutions of diesel engine exhaust for a subchronic inhalation study. *Environmental Science & Technology*, 38, 2513-2522.
- Paredes-Miranda, G., Chow, J.C., Chen, L.-W.A., Chang, M.-C.O., Watson, J.G., Fung, K.K., (2004). Temperature calibration for thermal optical carbon analyzers, *Proceedings, Symposium on Air Quality Methods and Technology, Air & Waste Management Association, Pittsburgh, PA.*
- Pitchford, M.L., Schichtel, B.A., Gebhart, K.A., Chow, J.C., Malm, W.C., Tombach, I.H., Knipping, E.M., (2004). Causes of haze at Big Bend National Park - Results of the BRAVO study and more, Pitchford, M.L., Poirot, R. (Eds.), *Proceedings, Regional and Global Perspectives on Haze: Causes, Consequences and Controversies, Air and Waste Management Association, Pittsburgh, PA*, pp. 47-41-47-21.
- Tropp, R.J., Engelbrecht, J., Kohl, S.D., Dickerson, A., Lowenthal, D.H., Chow, J.C., Watson, J.G., DuBois, D.W., Countess, R.J., Countess, S.J., Michel, E.L., (2004). Assessment of PM<sub>2.5</sub> chemical speciation results for Texas, *Proceedings, Symposium on Air Quality Measurement Methods and Technology, Air & Waste Management Association, Pittsburgh, PA.*
- Vega, E., Reyes, E., Ruiz, H., Garcia, J., Sanchez, G., Martinez-Villa, G., Gonzalez, U., Chow, J.C., Watson, J.G., (2004). Analysis of PM<sub>2.5</sub> and PM<sub>10</sub> in the atmosphere of Mexico City during 2000-2002. *Journal of the Air & Waste Management Association*, 54, 786-798.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2004.10470952>
- Watson, J.G., Chow, J.C., (2004). Receptor models for air quality management. *EM*, 10, 27-36.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., (2004). Summary of methods and comparison studies for organic and elemental carbon: Implications for visibility and global warming, Pitchford, M.L., Poirot, R.L. (Eds.), *Proceedings, Regional and Global Perspectives on Haze: Causes, Consequences and Controversies Visibility Specialty Conference, Air and Waste Management Association, Pittsburgh, PA*, pp. 55-51-55-38.
- Ashbaugh, L.L., Carvacho, O.F., Brown, M.S., Chow, J.C., Watson, J.G., Magliano, K.L., (2003). Soil sample collection and analysis for the Fugitive Dust Characterization Study. *Atmospheric Environment*, 37, 1163-1173.  
 doi: 10.1016/S1352-2310(02)01022-1.  
<https://www.researchgate.net/publication/223465186> Soil sample collection and analysis for the Fugitive Dust Characterization Study
- Ashbaugh, L.L., Carvacho, O.F., Brown, M.S., Chow, J.C., Watson, J.G., Magliano, K.L., (2003). Corrigendum to 'Soil sample collection and analysis for the fugitive dust characterization study' *Atmos. Environ.* 37 (9-10). *Atmospheric Environment*, 37, 4177.
- Cao, J.J., Lee, S.C., Ho, K.F., Zhang, X.Y., Zou, S.C., Fung, K.K., Chow, J.C., Watson, J.G., (2003). Characteristics of carbonaceous aerosol in Pearl River Delta region, China during 2001 winter period. *Atmospheric Environment*, 37, 1451-1460. doi: 10.1016/S1352-2310(02)01002-6.
- Cao, J.J., Lee, S., Zheng, X., Ho, K., Zhang, X., Guo, H., Chow, J.C., Wang, H., (2003). Characterization of dust storms to Hong Kong in April 1998. *Water Air and Soil Pollution*, 3, 213-229. 5105678.  
<https://www.researchgate.net/publication/236148185> Characterization of Dust Storms to Hong Kong in April 1998
- Chen, L.-W.A., Doddridge, B.G., Chow, J.C., Dickerson, R.R., Ryan, W.F., Mueller, P.K., (2003). Analysis of summertime PM<sub>2.5</sub> and haze episode in the mid-Atlantic region. *Journal of the Air & Waste Management Association*, 53, 946-956. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2003.10466240>
- Chen, M., Li, D., Fu, Q., Wang, B., Chen, C., Chow, J.C., (2003). PM<sub>2.5</sub> pollution status and space-time distribution in Shanghai, Heij, B., Schneider, T., Chow, J.C. (Eds.), *Energy Use, Spatial Planning & Air Quality, National Institute for Public Health and the Environment (RIVM), Bilthoven, Netherlands*, pp. 9-12.
- Chow, J.C., Watson, J.G., Ashbaugh, L.L., Magliano, K.L., (2003). Similarities and differences in PM<sub>10</sub> chemical source profiles for geological dust from the San Joaquin Valley, California. *Atmospheric Environment*, 37, 1317-1340.  
 doi: 10.1016/S1352-2310(02)01021-X.  
<https://www.researchgate.net/publication/222577428> Similarities and differences in PM<sub>10</sub> chemical source profiles for geological dust from the San Joaquin Valley California
- Chow, J.C., (2003). Introduction to special topic: Weekend and weekday differences in ozone levels. *Journal of the Air & Waste Management Association*, 53, 771-771.

- Chow, J.C., Watson, J.G., Herzog, A., Benson, S.M., Hidy, G.M., Gunter, W.D., Penkala, S.J., White, C.M., (2003). Separation and capture of CO<sub>2</sub> from large stationary sources and sequestration in geological formations: Critical review discussion. *Journal of the Air & Waste Management Association*, 53, 1172-1182. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2003.10466207>
- Chow, J.C., Watson, J.G., (2003). Problems and solutions in PM monitoring and assessment, Heij, B., Schneider, T., Chow, J.C. (Eds.), *Energy and Environment Workshop: Energy Use, Spatial Planning and Air Quality*, National Institute for Public Health and the Environment, Bilthoven, the Netherlands, pp. 19-46.
- Chow, J.C., (2003). 2003 Critical review introduction: Separation and capture of CO<sub>2</sub> from large stationary sources and sequestration in geological formations. *Journal of the Air & Waste Management Association*, 53, 643-644. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2003.10466207>
- Chow, J.C., (2003). Message from the Editorial Review Board Chair: A New Era for the Journal. *Journal of the Air & Waste Management Association*, 53, 514-514.
- Etyemezian, V.R., Kuhns, H.D., Gillies, J.A., Chow, J.C., Hendrickson, K., McGown, M., Pitchford, M.L., (2003). Vehicle-based road dust emissions measurement (III): Effect of speed, traffic volume, location, and season on PM<sub>10</sub> road dust emissions in the Treasure Valley, ID. *Atmospheric Environment*, 37, 4583-4593. [https://www.researchgate.net/publication/257520762\\_Vehicle-based\\_road\\_dust\\_emission\\_measurement\\_%28III%29\\_Effect\\_of\\_speed\\_traffic\\_volume\\_location\\_and\\_season\\_on\\_PM10\\_road\\_dust\\_emissions\\_in\\_the\\_Treasure\\_Valley\\_ID](https://www.researchgate.net/publication/257520762_Vehicle-based_road_dust_emission_measurement_%28III%29_Effect_of_speed_traffic_volume_location_and_season_on_PM10_road_dust_emissions_in_the_Treasure_Valley_ID)
- Fehsenfeld, F.C., Hastie, D.R., Solomon, P.A., Chow, J.C., (2003). Chapter 5: Gas and particle measurements, Particulate Matter Science for Policy Makers, A NARSTO Assessment, Part 2, NARSTO, Pasco, WA, pp. 5-1-5-37. [www.cgenv.com/Narsto](http://www.cgenv.com/Narsto)
- Ho, K.F., Lee, S.C., Chan, C.K., Yu, J.C., Chow, J.C., Yao, X.H., (2003). Characterization of chemical species in PM<sub>2.5</sub> and PM<sub>10</sub> aerosols in Hong Kong. *Atmospheric Environment*, 37, 31-39.
- Ho, K.F., Lee, S.C., Chow, J.C., Watson, J.G., (2003). Characterization of PM<sub>10</sub> and PM<sub>2.5</sub> source profiles for fugitive dust in Hong Kong. *Atmospheric Environment*, 37, 1023-1032.
- Holguin, F., Tellez-Rojo, M.M., Hernandez, M., Cortez, M., Chow, J.C., Watson, J.G., Mannino, D., Romieu, I., (2003). Air pollution and heart rate variability among the elderly in Mexico City. *Epidemiology*, 14, 521-527.
- Kuhns, H.D., Bohdan, V., Chow, J.C., Etyemezian, V.R., Green, M.C., Herlocker, D., Kohl, S.D., McGown, M.R., Ramsdell, J., Stockwell, W.R., Toole, M., Watson, J.G., (2003). The Treasure Valley Secondary Aerosol Study I: Measurements and equilibrium modeling of inorganic secondary aerosols and precursors for southwestern Idaho. *Atmospheric Environment*, 37, 511-524.
- McDonald, J.D., Zielinska, B., Fujita, E.M., Sagebiel, J.C., Chow, J.C., Watson, J.G., (2003). Emissions from charbroiling and grilling of chicken and beef. *Journal of the Air & Waste Management Association*, 53, 185-194. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2003.10466141>
- Mugica, V., Ruiz, M.E., Watson, J.G., Chow, J.C., (2003). Volatile aromatic compounds in Mexico City atmosphere: levels and source apportionment. *Atmosfera*, 16, 15-27.
- Rinehart, L.R., Cunningham, A., Chow, J.C., Zielinska, B., (2003). Characterization of PM<sub>2.5</sub> associated organic compounds of emission sources collected during the California Regional PM<sub>10</sub>/PM<sub>2.5</sub> Air Quality Study, Proceedings, 96th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Stockwell, W.R., Kuhns, H.D., Etyemezian, V.R., Green, M.C., Chow, J.C., Watson, J.G., (2003). The Treasure Valley Secondary Aerosol Study II: Modeling of the formation of inorganic secondary aerosols and precursors for southwestern Idaho. *Atmospheric Environment*, 37, 525-534. doi:10.1016/S1352-2310.
- Vega, E., Reyes, E., Wellens, A., Sanchez, G., Chow, J.C., Watson, J.G., (2003). Comparison of continuous and filter based mass measurements in Mexico City. *Atmospheric Environment*, 37, 2783-2793. doi: 10.1016/S1352-2310(03)00216-4.
- Vega, E., Reyes, E., Mora, V., Sanchez, G., Chow, J.C., Watson, J.G., Ruiz, M.E., (2003). Análisis de partículas en el invierno de 1997 en la atmósfera de la Ciudad de México. *Revista del Instituto Mexicano de Ingenieros Químicos*, 44, 213-225.
- Watson, J.G., Chow, J.C., (2003). Visibility and air pollution, Heij, B., Schneider, T., Chow, J.C. (Eds.), *Energy and Environment Workshop: Energy Use, Spatial Planning and Air Quality*, National Institute for Public Health and the Environment, Bilthoven, the Netherlands, pp. 47-52.
- Chen, L.-W.A., Doddridge, B.G., Dickerson, R.R., Chow, J.C., Henry, R.C., (2002). Origins of fine aerosol mass in the Baltimore-Washington corridor: Implications from observation, factor analysis, and ensemble air parcel back trajectories. *Atmospheric Environment*, 36, 4541-4554.

- Chow, J.C., Watson, J.G., (2002). PM<sub>2.5</sub> carbonate concentrations at regionally representative Interagency Monitoring of Protected Visual Environment sites. *Journal of Geophysical Research*, 107, ICC 6-1-ICC 6-9. doi: 10.1029/2001JD000574.
- Chow, J.C., Watson, J.G., Edgerton, S.A., Vega, E., (2002). Chemical composition of PM<sub>10</sub> and PM<sub>2.5</sub> in Mexico City during winter 1997. *Science of the Total Environment*, 287, 177-201.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Richards, L.W., (2002). Comparability between PM<sub>2.5</sub> and light scattering measurements. *Environ. Mon. Assess*, 79, 29-45.
- Chow, J.C., Watson, J.G., (2002). Review of PM<sub>2.5</sub> and PM<sub>10</sub> apportionment for fossil fuel combustion and other sources by the chemical mass balance receptor model. *Energy & Fuels*, 16, 222-260. [http://pubs3.acs.org/acs/journals/doi/lookup?in\\_doi=10.1021/ef0101715](http://pubs3.acs.org/acs/journals/doi/lookup?in_doi=10.1021/ef0101715)
- Chow, J.C., Watson, J.G., Edgerton, S.A., Vega, E., Ortiz, E., (2002). Spatial differences in outdoor PM<sub>10</sub> mass and aerosol composition in Mexico City. *Journal of the Air & Waste Management Association*, 52, 423-434. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2002.10470791>
- Chow, J.C., Bachmann, J.D., Wierman, S.S.G., Mathai, C.V., Malm, W.C., White, W.H., Mueller, P.K., Kumar, N.K., Watson, J.G., (2002). Visibility: Science and regulation: Critical review discussion. *Journal of the Air & Waste Management Association*, 52, 973-999. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2002.10470844>
- Chow, J.C., (2002). 2002 Critical review introduction - Visibility: Science and regulation. *Journal of the Air & Waste Management Association*, 52, 626-627. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2002.10470812>
- Chow, J.C., Engelbrecht, J.P., Freeman, N.C.G., Hashim, J.H., Jantunen, M., Michaud, J.P., de Tejada, S.S., Watson, J.G., Wei, F.S., Wilson, W.E., Yasuno, M., Zhu, T., (2002). Chapter one: exposure measurements. *Chemosphere*, 49, 873-901.
- Chow, J.C., Engelbrecht, J.P., Watson, J.G., Wilson, W.E., Frank, N.H., Zhu, T., (2002). Designing monitoring networks to represent outdoor human exposure. *Chemosphere*, 49, 961-978. [https://www.researchgate.net/publication/10982533\\_Designing\\_monitoring\\_networks\\_to\\_represent\\_outdoor\\_human\\_exposure?ev=prf\\_pub](https://www.researchgate.net/publication/10982533_Designing_monitoring_networks_to_represent_outdoor_human_exposure?ev=prf_pub)
- Chow, J.C., Watson, J.G., (2002). Problems and solutions in PM monitoring and assessment, Proceedings, Energy and Environment Workshop on Energy Use, Spatial Planning, and Air Quality, Shanghai Environmental Monitoring Center, Shanghai, China.
- Currie, L.A., Benner, B.A., Jr., Cachier, H., Cary, R., Chow, J.C., Druffel, E.R.M., Eglinton, T.I., Gustafsson, Ö., Hartmann, P.C., Hedges, J.I., Kessler, J.D., Kirchstetter, T.W., Klinedinst, D.B., Klouda, G.A., Marolf, J.V., Masiello, C.A., Novakov, T., Pearson, A., Prentice, K.M., Puxbaum, H., Quinn, J.G., Reddy, C.M., Schmid, H., Slater, J.F., Watson, J.G., Wise, S.A., (2002). A critical evaluation of interlaboratory data on total, elemental, and isotopic carbon in the carbonaceous particle reference material, NIST SRM 1649a. *Journal of Research of the National Institute of Standards and Technology*, 107, 279-298.
- Edgerton, S.A., Chow, J.C., Watson, J.G., (2002). Preface-Tropospheric aerosols: Science and policy in an international community. *Science of the Total Environment*, 287, 165-166.
- Engelbrecht, J.P., Swanepoel, L., Chow, J.C., Watson, J.G., Egami, R.T., (2002). The comparison of source contributions from residential coal and low-smoke fuels, using CMB modeling, in South Africa. *Environmental Science & Policy*, 5, 157-167.
- Fraser, M.P., Yue, Z.W., Tropp, R.J., Kohl, S.D., Chow, J.C., (2002). Molecular composition of organic fine particulate matter in Houston, TX. *Atmospheric Environment*, 36, 5751-5758.
- Fung, K.K., Chow, J.C., Watson, J.G., (2002). Evaluation of OC/EC speciation by thermal manganese dioxide oxidation and the IMPROVE method. *Journal of the Air & Waste Management Association*, 52, 1333-1341. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2002.10470867>
- Mugica, V., Watson, J.G., Vega, E., Reyes, E., Ruiz, M.E., Chow, J.C., (2002). Receptor model source apportionment of nonmethane hydrocarbons in Mexico City. *The Scientific World*, 2, 844-860.
- Sharma, S., Brook, J.R., Cachier, H., Chow, J.C., Gaudenzi, A., Lu, G., (2002). Light absorption and thermal measurements of black carbon in different regions of Canada. *Journal of Geophysical Research-Atmospheres*, 107, 107-116.
- Vega, E., Reyes, E., Sanchez, G., Ortiz, E., Ruiz, M., Chow, J.C., Watson, J.G., Edgerton, S.A., (2002). Basic statistics of PM<sub>10</sub> and PM<sub>2.5</sub> in the atmosphere of Mexico City. *Science of the Total Environment*, 287, 167-176.
- Watson, J.G., Zhu, T., Chow, J.C., Engelbrecht, J.P., Fujita, E.M., Wilson, W.E., (2002). Receptor modeling application framework for particle source apportionment. *Chemosphere*, 49, 1093-1136. [https://www.researchgate.net/publication/10982540\\_Receptor\\_modeling\\_application\\_framework\\_for\\_particle\\_source\\_apportionment](https://www.researchgate.net/publication/10982540_Receptor_modeling_application_framework_for_particle_source_apportionment)
- Watson, J.G., Chow, J.C., (2002). Particulate pattern recognition, Murphy, B.L., Morrison, R. (Eds.), *Introduction to Environmental Forensics*, Academic Press, New York, NY, pp. 429-460.

- Watson, J.G., Chow, J.C., (2002). A wintertime PM<sub>2.5</sub> episode at the Fresno, CA, supersite. *Atmospheric Environment*, 36, 465-475.  
[https://www.researchgate.net/publication/223620104\\_A\\_wintertime\\_PM2.5\\_episode\\_at\\_the\\_Fresno\\_CA\\_supersite](https://www.researchgate.net/publication/223620104_A_wintertime_PM2.5_episode_at_the_Fresno_CA_supersite)
- Watson, J.G., Chow, J.C., (2002). Comparison and evaluation of in-situ and filter carbon measurements at the Fresno Supersite. *Journal of Geophysical Research-Atmospheres*, 107, ICC 3-1-ICC 3-15. doi: 10.1029/2001JD000573.  
[https://www.researchgate.net/publication/235918071\\_Comparison\\_and\\_evaluation\\_of\\_in-situ\\_and\\_filter\\_carbon\\_measurements\\_at\\_the\\_Fresno\\_Supersite](https://www.researchgate.net/publication/235918071_Comparison_and_evaluation_of_in-situ_and_filter_carbon_measurements_at_the_Fresno_Supersite)
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Robinson, N.F., Cahill, C.F., Blumenthal, D.L., (2002). Simulating changes in source profiles from coal-fired power stations: Use in chemical mass balance of PM<sub>2.5</sub> in the Mt. Zirkel Wilderness. *Energy & Fuels*, 16, 311-324.
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Stolzenburg, M.R., Kreisberg, N.M., Hering, S.V., (2002). Particle size relationships at the Fresno supersite. *Journal of the Air & Waste Management Association*, 52, 822-827.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2002.10470817>
- Wilson, W.E., Chow, J.C., Claiborn, C.S., Fusheng, W., Engelbrecht, J.P., Watson, J.G., (2002). Monitoring of particulate matter outdoors. *Chemosphere*, 49, 1009-1043.
- Chen, L.-W.A., Doddridge, B.G., Dickerson, R.R., Chow, J.C., Mueller, P.K., Quinn, J., Butler, W.A., (2001). Seasonal variations in elemental carbon aerosol, carbon monoxide, and sulfur dioxide: Implications for sources. *Geophysical Research Letters*, 28, 1711-1714.
- Cheng, Y.S., Zhou, Y., Chow, J.C., Watson, J.G., Frazier, C., (2001). Chemical composition of aerosols from kerosene heaters burning jet fuel. *Aerosol Science and Technology*, 35, 949-957.  
<http://www.tandfonline.com/doi/pdf/10.1080/027868201753306714>
- Chow, J.C., Watson, J.G., (2001). Zones of representation for PM<sub>10</sub> measurements along the U.S./Mexico border. *Science of the Total Environment*, 276, 49-68.
- Chow, J.C., (2001). Diesel engines: Environmental impact and control - A critical review introduction. *Journal of the Air & Waste Management Association*, 51, 807-808.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2001.10464318>
- Chow, J.C., Hoekman, S.K., Norbeck, J.M., Black, K.N., O'keefe, R.M., Kopinski, D.L., Walsh, M.P., Sucheki, J.L., Altshuler, S.L., MacClarence, B., Harley, R.A., Marrack, D., (2001). Diesel engines: Environmental impact and control: Critical review discussion. *Journal of the Air & Waste Management Association*, 51, 1258-1270.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2001.10464354>
- Chow, J.C., Watson, J.G., Crow, D., Lowenthal, D.H., Merrifield, T.M., (2001). Comparison of IMPROVE and NIOSH carbon measurements. *Aerosol Science and Technology*, 34, 23-34.  
<http://www.tandfonline.com/doi/pdf/10.1080/02786820600623711>
- Edgerton, S.A., Chow, J.C., Watson, J.G., Hales, J.M., (2001). Summary of the first NARSTO symposium on tropospheric aerosols. *EM*, 7, 12-14.
- Engelbrecht, J.P., Swanepoel, L., Chow, J.C., Watson, J.G., Egami, R.T., (2001). PM<sub>2.5</sub> and PM<sub>10</sub> concentrations from the Qalabotjha low-smoke fuels macro-scale experiment in South Africa. *Environ. Mon. Assess*, 69, 1-15.
- Engelbrecht, J.P., Swanepoel, L., Chow, J.C., Watson, J.G., Egami, R.T., (2001). Errata: PM<sub>2.5</sub> and PM<sub>10</sub> concentrations from the Qalabotjha low-smoke fuels macro-scale experiment in South Africa (vol 69, pg 1, 2001). *Environ. Mon. Assess*, 71, 207-210.
- Hansen, A.D.A., Lowenthal, D.H., Chow, J.C., Watson, J.G., (2001). Black carbon aerosol at McMurdo Station, Antarctica. *Journal of the Air & Waste Management Association*, 51, 593-600.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2001.10464283>
- Koloutsou-Vakakis, S., Carrico, C.M., Kus, P., Rood, M.J., Li, Z., Shrestha, R., Ogren, J.A., Chow, J.C., Watson, J.G., (2001). Aerosol properties at a midlatitude northern hemisphere continental site. *Journal of Geophysical Research-Atmospheres*, 106, 3019-3032.
- Lee, S.C., Ho, K.F., Chan, L.Y., Zielinska, B., Chow, J.C., (2001). Polycyclic aromatic hydrocarbons (PAHs) and carbonyl compounds in urban atmosphere of Hong Kong. *Atmospheric Environment*, 35, 5949-5960.
- Li, W.-W., Orquiz, R., Garcia, J.H., Espino, T.T., Pingitore, N.E., Gardea-Torresdey, J., Chow, J.C., Watson, J.G., (2001). Analysis of temporal and spatial dichotomous PM air samples in the El Paso-Cd. Juarez air quality basin. *Journal of the Air & Waste Management Association*, 51, 1551-1560.  
<http://www.tandfonline.com/doi/pdf/10.1080/10473289.2001.10464377>
- Mazzera, D.M., Lowenthal, D.H., Chow, J.C., Watson, J.G., (2001). Sources of PM<sub>10</sub> and sulfate aerosol at McMurdo Station, Antarctica. *Chemosphere*, 45, 347-356.

- Mazzera, D.M., Lowenthal, D.H., Chow, J.C., Watson, J.G., Grubisic, V., (2001). PM<sub>10</sub> measurements at McMurdo Station, Antarctica. *Atmospheric Environment*, 35, 1891-1902.
- McDonald, J.D., Costanzo, J., Barr, E.B., Mauderly, J.L., Schauer, J.J., Zielinska, B., Sagebiel, J.C., Chow, J.C., Grosjean, E., (2001). Characterization of laboratory exposure atmospheres for health effects studies, Proceedings, 94th Annual Meeting and Exhibition, Orlando, FL, Air & Waste Management Association, Pittsburgh, PA.
- Mugica, V., Vega, E., Sánchez, G., Reyes, E., Arriaga, J.L., Chow, J.C., Watson, J.G., Egami, R.T., (2001). Volatile organic compounds emissions from gasoline and diesel powered vehicle. *Atmosfera*, 14, 29-37.
- Mugica, V., Vega, E., Chow, J.C., Reyes, E., Sanchez, G., Arriaga, J.L., Egami, R.T., Watson, J.G., (2001). Speciated non-methane organic compounds emissions from food cooking in Mexico. *Atmospheric Environment*, 35, 1729-1734.
- Schmid, H.P., Laskus, L., Abraham, H.J., Baltensperger, U., Lavanchy, V.M.H., Bizjak, M., Burba, P., Cachier, H., Crow, D., Chow, J.C., Gnauk, T., Even, A., ten Brink, H.M., Giesen, K.P., Hitzengerger, R., Hueglin, C., Maenhaut, W., Pio, C.A., Puttock, J., Putaud, J.P., Toom-Sauntry, D., Puxbaum, H., (2001). Results of the "Carbon Conference" international aerosol carbon round robin test: Stage 1. *Atmospheric Environment*, 35, 2111-2121.
- Vega, E., Mugica, V., Reyes, E., Sanchez, G., Chow, J.C., Watson, J.G., (2001). Chemical composition of fugitive dust emitters in Mexico City. *Atmospheric Environment*, 35, 4033-4039. [https://www.researchgate.net/publication/222024388\\_Chemical\\_composition\\_of\\_fugitive\\_dust\\_emitters\\_in\\_Mexico\\_City](https://www.researchgate.net/publication/222024388_Chemical_composition_of_fugitive_dust_emitters_in_Mexico_City)
- Watson, J.G., Chow, J.C., Fujita, E.M., (2001). Review of volatile organic compound source apportionment by chemical mass balance. *Atmospheric Environment*, 35, 1567-1584. [https://www.researchgate.net/publication/222121828\\_Review\\_of\\_Volatile\\_Organic\\_Compound\\_Source\\_Apportionment\\_by\\_Chemical\\_Mass\\_Balance](https://www.researchgate.net/publication/222121828_Review_of_Volatile_Organic_Compound_Source_Apportionment_by_Chemical_Mass_Balance)
- Watson, J.G., Turpin, B.J., Chow, J.C., (2001). The measurement process: Precision, accuracy, and validity, Cohen, B.S., McCammon, C.S., Jr (Eds.), *Air Sampling Instruments for Evaluation of Atmospheric Contaminants*, Ninth Edition, 9th ed. American Conference of Governmental Industrial Hygienists, Cincinnati, OH, pp. 201-216. [https://www.researchgate.net/publication/235341825\\_The\\_measurement\\_process\\_Precision\\_accuracy\\_and\\_validity](https://www.researchgate.net/publication/235341825_The_measurement_process_Precision_accuracy_and_validity)
- Watson, J.G., Chow, J.C., (2001). Source characterization of major emission sources in the Imperial and Mexicali valleys along the U.S./Mexico border. *Science of the Total Environment*, 276, 33-47.
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Cahill, C.F., Blumenthal, D.L., Richards, L.W., Gonzales Jorge, H., (2001). Aerosol chemical and optical properties during the Mt. Zirkel Visibility Study. *Journal of Environmental Quality*, 30, 1118-1125.
- Watson, J.G., Chow, J.C., Houck, J.E., (2001). PM<sub>2.5</sub> chemical source profiles for vehicle exhaust, vegetative burning, geological material, and coal burning in northwestern Colorado during 1995. *Chemosphere*, 43, 1141-1151.
- Watson, J.G., Chow, J.C., (2001). Estimating middle-, neighborhood-, and urban-scale contributions to elemental carbon in Mexico City with a rapid response aethalometer. *Journal of the Air & Waste Management Association*, 51, 1522-1528. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2001.10464379>
- Watson, J.G., Chow, J.C., (2001). Ambient air sampling, Baron, P., Willeke, K. (Eds.), *Aerosol Measurement: Principles, Techniques, and Applications*, Second Edition, 2nd ed. John Wiley & Sons, New York, NY, pp. 821-844.
- Watson, J.G., Lee, S.D., Chow, J.C., (2001). Air quality in developing countries: Reflections from the 12th World Clean Air & Environment Congress. *EM*, 7, 29-31.
- Watson, J.G., Chow, J.C., Edgerton, S.A., (2001). Editorial: A special issue from the NARSTO Symposium on Tropospheric Aerosols. *Journal of the Air & Waste Management Association*, 51, 1506-1507. [http://pubs.awma.org/gsearch/journal/2001/11/NARSTO\\_intro.pdf](http://pubs.awma.org/gsearch/journal/2001/11/NARSTO_intro.pdf)
- Chow, J.C., Lowenthal, D.H., Watson, J.G., Kohl, S.D., Hinsvark, B.A., Hackett, E.I., McCormack, J.K., (2000). Light absorption by black sand dust. *Applied Optics*, 39, 4232-4236.
- Chow, J.C., Watson, J.G., Green, M.C., Lowenthal, D.H., Bates, B.A., Oslund, W., Torres, G., (2000). Cross-border transport and spatial variability of suspended particles in Mexicali and California's Imperial Valley. *Atmospheric Environment*, 34, 1833-1843.
- Chow, J.C., Watson, J.G., (2000). Applicability of PM<sub>2.5</sub> standards in the U.S. and other countries, Proceedings, 41st Annual Meeting of the Japan Society for Atmospheric Environment, Japan Society for Atmospheric Environment, Tokyo, Japan.
- Elliott, S., Simpson, I.J., Blake, D.R., Bossert, J.E., Chow, J.C., Colina, J.A., Dubey, M.K., Duce, R.A., Edgerton, S.A., Gaffney, J.S., (2000). Mexico City and the biogeochemistry of global urbanization. *Environmental Science & Technology*, 3, 145-156.

- Engelbrecht, J.P., Swanepoel, L., Zunckel, M., Chow, J.C., Watson, J.G., Egami, R.T., (2000). Modelling PM<sub>10</sub> aerosol data from the Qalabotjha low-smoke fuels macro-scale experiment in South Africa. *Ecological Modelling*, 127, 235-244.
- Hidy, G.M., Lachenmyer, C., Chow, J.C., Watson, J.G., (2000). Urban outdoor-indoor PM<sub>2.5</sub> concentrations and personal exposure in the deep south: Part II. Inorganic chemistry. *Aerosol Science and Technology*, 33, 357-375. <http://www.tandfonline.com/doi/pdf/10.1080/02786820050121558>
- Koracin, D., Podnar, D., Chow, J.C., Isakov, V., Dong, Y., Miller, A., McGown, M., (2000). PM<sub>10</sub> dispersion modeling for Treasure Valley, Idaho. *Journal of the Air & Waste Management Association*, 50, 1335-1344. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2000.10464174>
- Lowenthal, D.H., Chow, J.C., Mazzera, D.M., Watson, J.G., Mosher, B.W., (2000). Aerosol vanadium at McMurdo Station, Antarctica: Implications for Dye 3, Greenland. *Atmospheric Environment*, 34, 677-679.
- McDonald, J.D., Zielinska, B., Fujita, E.M., Sagebiel, J.C., Chow, J.C., Watson, J.G., (2000). Fine particle and gaseous emission rates from residential wood combustion. *Environmental Science & Technology*, 34, 2080-2091.
- Watson, J.G., Chow, J.C., Pace, T.G., (2000). Fugitive dust emissions, Davis, W.T. (Ed.) *Air Pollution Engineering Manual*, Second Edition, John Wiley & Sons, Inc., New York, pp. 117-135. [https://www.researchgate.net/publication/235341819\\_Fugitive\\_dust\\_emissions](https://www.researchgate.net/publication/235341819_Fugitive_dust_emissions)
- Watson, J.G., Chow, J.C., Bowen, J.L., Lowenthal, D.H., Hering, S.V., Ouchida, P., Oslund, W., (2000). Air quality measurements from the Fresno Supersite. *Journal of the Air & Waste Management Association*, 50, 1321-1334. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.2000.10464184>
- Wells, R.C., Kuhns, H.D., Etyemezian, V.R., Watson, J.G., Chow, J.C., Van Woy, J.F., (2000). Adapting HAP emission compliance tests for source apportionment: Example for a waste-to-energy plant, *Proceedings, 93rd Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA, pp. 1-13.
- Biswas, P., Berglund, R.L., Chow, J.C., Pehkonen, S., Price, J., Shi, J.C., Watson, J.G., (1999). Introduction to the Air & Waste Management Association's 29th Annual critical review. *Journal of the Air & Waste Management Association*, 49, 626-627.
- Chow, J.C., Watson, J.G., (1999). Ion chromatography in elemental analysis of airborne particles, Landsberger, S., Creatchman, M. (Eds.), *Elemental Analysis of Airborne Particles*, Vol. 1, Gordon and Breach Science, Amsterdam, pp. 97-137.
- Chow, J.C., Watson, J.G., Green, M.C., Lowenthal, D.H., DuBois, D.W., Kohl, S.D., Egami, R.T., Gillies, J.A., Rogers, C.F., Frazier, C.A., Cates, W., (1999). Middle- and neighborhood-scale variations of PM<sub>10</sub> source contributions in Las Vegas, Nevada. *Journal of the Air & Waste Management Association*, 49, 641-654. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1999.10463837>
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Hackney, R., Magliano, K.L., Lehrman, D.E., Smith, T.B., (1999). Temporal variations of PM<sub>2.5</sub>, PM<sub>10</sub>, and gaseous precursors during the 1995 Integrated Monitoring Study in central California. *Journal of the Air & Waste Management Association*, 49, PM16-PM24. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1999.10463909>
- Edgerton, S.A., Arriaga, J.L., Archuleta, J., Bian, X., Bossert, J.E., Chow, J.C., Coulter, R.L., Doran, J.C., Doskey, P.V., Elliot, S., Fast, J.D., Gaffney, J.S., Guzman, F., Hubbe, J.M., Lee, J.T., Malone, E.L., Marley, N.A., McNair, L.A., Neff, W.D., Ortiz, E., Petty, R., Ruiz, M.E., Shaw, W.J., Sosa, G., Vega, E., Watson, J.G., Whiteman, C.D., Zhong, S., (1999). Particulate air pollution in Mexico City: A collaborative research project. *Journal of the Air & Waste Management Association*, 49, 1221-1229. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1999.10463915>
- Gillies, J.A., Watson, J.G., Rogers, C.F., DuBois, D.W., Chow, J.C., Langston, R., Sweet, J., (1999). Long term efficiencies of dust suppressants to reduce PM<sub>10</sub> emissions from unpaved roads. *Journal of the Air & Waste Management Association*, 49, 3-16. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1999.10463779>
- Richards, L.W., Alcorn, S.H., McDade, C., Couture, T., Lowenthal, D.H., Chow, J.C., Watson, J.G., (1999). Optical properties of the San Joaquin Valley aerosol collected during the 1995 Integrated Monitoring Study. *Atmospheric Environment*, 33, 4787-4795.
- Watson, J.G., Chow, J.C., Frazier, C.A., Hinsvark, B.A., Green, M.C., (1999). Ambient air quality at Barton Flats and other California forests, Miller, P., McBride, J. (Eds.), *Oxidant Air Pollution Impacts in the Montane Forests of Southern California. A Case Study of the San Bernardino Mountains*, Springer-Verlag, New York, pp. 81-105.
- Watson, J.G., Chow, J.C., Frazier, C.A., (1999). X-ray fluorescence analysis of ambient air samples, Landsberger, S., Creatchman, M. (Eds.), *Elemental Analysis of Airborne Particles*, Vol. 1, Gordon and Breach Science, Amsterdam, The Netherlands, pp. 67-96.

- Adgate, J.L., Willis, R.D., Buckley, T.J., Chow, J.C., Watson, J.G., Rhoads, G.G., Liou, P.J., (1998). Chemical mass balance source apportionment of lead in house dust. *Environmental Science & Technology*, 32, 108-114. [https://www.researchgate.net/publication/231290531\\_Chemical\\_Mass\\_Balance\\_Source\\_Apportionment\\_of\\_Lead\\_in\\_House\\_Dust](https://www.researchgate.net/publication/231290531_Chemical_Mass_Balance_Source_Apportionment_of_Lead_in_House_Dust)
- Biswas, P., Berglund, R.L., Chow, J.C., Pehkonen, S., Price, J., Shi, J.C., Watson, J.G., (1998). Introduction to the Air & Waste Management Association's 28th annual critical review. *Journal of the Air & Waste Management Association*, 48, 482-482.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Egami, R.T., Solomon, P.A., Thuillier, R.H., Magliano, K.L., Ranzieri, A.J., (1998). Spatial and temporal variations of particulate precursor gases and photochemical reaction products during SJVAQS/AUSPEX ozone episodes. *Atmospheric Environment*, 32, 2835-2844.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Hackney, R., Magliano, K.L., Lehrman, D.E., Smith, T.B., (1998). Temporal variations of PM<sub>2.5</sub>, PM<sub>10</sub>, and gaseous precursors during the 1995 Integrated Monitoring Study in Central California, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 59-77.
- Chow, J.C., (1998). Introduction to PM<sub>2.5</sub>: A fine particle standard, *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, pp. xviii-xix.
- Chow, J.C., Watson, J.G., (1998). Applicability of PM<sub>2.5</sub> particulate standards to developed and developing countries, *Proceedings, 11th World Clean Air and Environment Congress*.
- Chow, J.C., Watson, J.G., DuBois, D.W., Green, M.C., Lowenthal, D.H., Kohl, S.D., Egami, R.T., Gillies, J.A., Rogers, C.F., Frazier, C.A., Cates, W., (1998). Middle- and neighborhood-scale variations of PM<sub>10</sub> source contributions in Las Vegas, Nevada, Vostal, J.J. (Ed.) *Proceedings, Health Effects of Particulate Matter in Ambient Air*, Air and Waste Management Association, Pittsburgh, PA, pp. 443-460.
- Doran, J.C., Abbott, J.L., Archuleta, J., Bian, X., Chow, J.C., Coulter, R.L., de Wekker, S.F.J., Edgerton, S.A., Fernandez, A., Fast, J.D., Hubbe, J.M., King, C.W., Langley, D., Leach, J.M., Lee, J.T., Martin, T.J., Martinez, D., Martinez, J.L., Mercado, G., Mora, V., Mulhearn, M., Pena, J.L., Petty, R., Porch, W.M., Russell, C., Salas, R., Shannon, J.D., Shaw, W.J., Sosa, G., Watson, J.G., Templeman, B., White, R., Whiteman, C.D., Wolfe, D., (1998). The IMADA-AVER boundary layer experiment in the Mexico City area. *Bulletin of the American Meteorological Society*, 79, 2497-2508.
- DuBois, D.W., Watson, J.G., Chow, J.C., Egami, R.T., Wade, T., Minor, T.B., Jacquart, J., Cates, W., (1998). Practical use of a GIS based emissions inventory as an input to the ISCST3 dispersion model, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 515-524.
- Egami, R.T., Freeman, D.L., Watson, J.G., Chow, J.C., Schmidt, S., Smith, R., (1998). Fugitive dust sources from small rural communities in the southwest United States, *Proceedings, 11th World Clean Air & Environment Conference*, International Union of Air Pollution Prevention and Environmental Protection Associations, Burgess Hill, UK.
- Eldred, R.A., Feeney, P.J., Wakabayashi, P.K., Chow, J.C., Hardison, E., (1998). Methodology for chemical speciation measurements in the IMPROVE network, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 352-364.
- Etyemezian, V.R., Davidson, C.I., Finger, S., Striegel, M.F., Barabas, N., Chow, J.C., (1998). Vertical gradients of pollutant concentrations and deposition fluxes on a tall limestone building. *JAIC*, 37, 187-210.
- Fujita, E.M., McDonald, J.D., Hayes, T.L., Zielinska, B., Sagebiel, J.C., Chow, J.C., Watson, J.G., (1998). Northern Front Range Air Quality Study: Apportionment of carbonaceous particles, *Proceedings, 91st Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Fujita, E.M., Hayes, T., McDonald, J., Sagebiel, J., Zielinska, B., Chow, J.C., Watson, J.G., (1998). Source apportionment of ambient PM<sub>2.5</sub> carbon in the Northern Front Range of Colorado, *Proceedings, 8th CRC On-Road Vehicle Emissions Workshop*.
- Leipold, W.H., Chow, J.C., (1998). Preliminary results from a study of the impact of a nearby copper smelter on ambient levels of PM<sub>2.5</sub>, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 177-190.
- McDonald, J.D., Zielinska, B., Fujita, E.M., Chow, J.C., Watson, J.G., Sagebiel, J.C., (1998). The development of chemical emission profiles for residential wood combustion and meat cooking for use in the apportionment of atmospheric carbonaceous aerosol, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 645-660.

- Miller, P.R., Bytnerowicz, A., Fenn, M.E., Poth, M., Temple, P., Schilling, S., Jones, D., Johnson, D., Chow, J.C., Watson, J.G., (1998). Multidisciplinary study of ozone, acidic deposition and climate effects on a mixed conifer forest in California, USA. *Chemosphere*, 36, 1001-1006.
- Moosmüller, H., Arnott, W.P., Rogers, C.F., Chow, J.C., Frazier, C.A., Sherman, L.E., Dietrich, D.L., (1998). Photoacoustic and filter measurements related to aerosol light absorption during the Northern Front Range Air Quality Study (Colorado 1996/1997). *Journal of Geophysical Research*, 103, 28149-28157.
- Moosmüller, H., Gillies, J.A., Rogers, C.F., DuBois, D.W., Chow, J.C., Watson, J.G., Langston, R., (1998). Particulate emission rates for unpaved shoulders along a paved road. *Journal of the Air & Waste Management Association*, 48, 398-407. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1998.10463694>
- Richards, L.W., Blumenthal, D.L., Dye, T.S., Watson, J.G., Chow, J.C., Dietrich, D.L., Cobb, D., Cismoski, D.S., (1998). Fine particle formation in plumes in a pristine area, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 275-282.
- Rogers, C.F., Chow, J.C., Watson, J.G., Cahill, C.F., Diaz, S., Koman, P.D., Sleva, S., Tropp, R.J., (1998). Mineral dust contributions to fine particle mass, Chow, J.C., Koutrakis, P. (Eds.), *Proceedings, PM<sub>2.5</sub>: A Fine Particle Standard*, Air & Waste Management Association, Pittsburgh, PA, pp. 168-176.
- Watson, J.G., Chow, J.C., Shah, J.J., (1998). Assessment methods for effective air pollution control strategies, *Proceedings, Workshop on Integrated Approach to Vehicular Pollution Control in Delhi*, World Bank.
- Watson, J.G., Chow, J.C., Wells, R.C., Van Woy, J.F., (1998). Ambient monitoring and receptor modeling near a waste-to-energy facility in a complex urban area: Analysis of existing air quality, *Proceedings, 91st Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Chow, J.C., DuBois, D.W., Green, M.C., Frank, N.H., Pitchford, M.L., (1998). Network design principles for population-oriented monitoring of suspended particles, Vostal, J.J. (Ed.) *Proceedings, Health Effects of Particulate Matter in Ambient Air*, Air and Waste Management Association, Pittsburgh, PA, pp. 461-472.
- Watson, J.G., Chow, J.C., (1998). Source contributions to trace elements with the chemical mass balance model, *Proceedings, Conference on Air Quality, Mercury, Trace Elements, and Particulate Matter*, Air and Waste Management Association, Pittsburgh, PA, pp. 1-13.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Richards, L.W., Solomon, P.A., Magliano, K.L., (1997). Size-resolved particle and light extinction measurements during IMS95, Tombach, I.H. (Ed.) *Proceedings, Visual Air Quality: Aerosols and Global Radiation Balance*, Air and Waste Management Association, Pittsburgh, PA, pp. 80-85.
- Gillies, J.A., Watson, J.G., Rogers, C.F., Chow, J.C., Langston, R., (1997). PM<sub>10</sub> emissions and dust suppressant efficiencies on an unpaved road, Merced, CA, *Proceedings, 90th Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Lowenthal, D.H., Chow, J.C., Mazzer, D.M., (1997). PM<sub>10</sub> source apportionment at McMurdo Station, Antarctica. *Antarctic Journal*, 32, 165-167.
- Moosmüller, H., Gilles, J.A., Rogers, C.F., DuBois, D.W., Chow, J.C., Watson, J.G., Langston, R., (1997). Particulate emission rates for unpaved shoulders along a paved road, *Proceedings, 90th Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Sagebiel, J.C., Zielinska, B., Walsh, P.A., Chow, J.C., Cadle, S.H., Mulawa, P.A., Knapp, K.T., Zweidinger, R.B., Snow, R., (1997). PM<sub>10</sub> exhaust samples collected during IM-240 dynamometer tests of in-service vehicles in Nevada. *Environmental Science & Technology*, 31, 75-83.
- Turn, S.Q., Jenkins, B.M., Chow, J.C., Pritchett, L.C., Campbell, D.E., Cahill, T.A., Whalen, S.A., (1997). Elemental characterization of particulate matter emitted from biomass burning: Wind tunnel derived source profiles for herbaceous and wood fuels. *Journal of Geophysical Research*, 102, 3683-3699.
- Watson, J.G., Wyzga, R.E., Burnett, R.T., Vostal, J.J., Romieu, I., Chow, J.C., Holcombe, J.T., Lipfert, F.W., Marrack, D., Thompson, R.J., Vedal, S., (1997). Ambient particles and health - Lines that divide: 1997 critical review discussion. *Journal of the Air & Waste Management Association*, 47, 995-1008. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1997.10463950>
- Watson, J.G., Chow, J.C., Cahill, C.F., Blumenthal, D.L., Richards, L.W., Dietrich, D.L., Cobb, D., Morris, R.E., Emory, C., Dickson, R.J., (1997). Conclusions from the Mt. Zirkel Visibility Study, Tombach, I.H., Richards, L.W., Russell, P.B., Saxena, P. (Eds.), *Proceedings, Visual Air Quality: Aerosols and Global Radiation Balance*, Air and Waste Management Association, Pittsburgh, PA, pp. 98-104.
- Watson, J.G., Chow, J.C., DuBois, D.W., Green, M.C., Frank, N.H., Pitchford, M.L., (1997). Network design principles for population-oriented monitoring of suspended particles, Vostal, J.J. (Ed.) *Health Effects of Particulate Matter in Ambient Air*, Air and Waste Management Association, Pittsburgh, PA, pp. 461-472.
- Cahill, C.F., Watson, J.G., Chow, J.C., Blumenthal, D.L., Lindsey, L., Richards, L.W., Dietrich, D., Cobb, D., Ely, E., Dayney, S., Walker, J., Haddow, D., Dickson, R.J., Morrison, B., Houck, J.E., Neff, W.D., Andersen, S.R.,

- (1996). An overview of the Mt. Zirkel Wilderness Area Reasonable Attribution Study of Visibility Impairment, Proceedings, 89th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Countess, R.J., (1996). Sources and chemistry of PM<sub>10</sub> aerosol in Santa Barbara County, CA. *Atmospheric Environment*, 30, 1489-1499.
- Chow, J.C., Watson, J.G., Lu, Z., Lowenthal, D.H., Frazier, C.A., Solomon, P.A., Thuillier, R.H., Magliano, K.L., (1996). Descriptive analysis of PM<sub>2.5</sub> and PM<sub>10</sub> at regionally representative locations during SJVAQS/AUSPEX. *Atmospheric Environment*, 30, 2079-2112.
- Chow, J.C., Watson, J.G., Divita, F., Jr., (1996). Particulate matter with aerodynamic diameters smaller than 10 µm: Measurement methods and sampling strategies, Keith, L.H. (Ed.) *Principles of Environmental Sampling*, 2nd Ed., 2nd ed. American Chemical Society, Washington, DC, pp. 539-573.
- Lowenthal, D.H., Chow, J.C., Watson, J.G., Dipple, W.A., Mazzera, D.M., (1996). PM<sub>10</sub> source apportionment at McMurdo Station, Antarctica. *EM*, 2, 28-30.
- Rivera-Carpio, C.A., Corrigan, C.E., Novakov, T., Penner, J.E., Rogers, C.F., Chow, J.C., (1996). Derivation of contributions of sulfate and carbonaceous aerosols to cloud condensation nuclei from mass size distributions. *Journal of Geophysical Research*, 101, 19483-19493.
- Watson, J.G., Chow, J.C., Gillies, J.A., Rogers, C.F., (1996). Methods to determine the effectiveness of fugitive dust control measures, Proceedings, 89th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., (1995). Critical review: Measurement methods to determine compliance with ambient air quality standards for suspended particles. *Journal of the Air & Waste Management Association*, 45, 320-382. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1995.10467369>
- Chow, J.C., Fairley, D., Watson, J.G., de Mandel, R., Fujita, E.M., Lowenthal, D.H., Lu, Z., Frazier, C.A., Long, G., Cordova, J., (1995). Source apportionment of wintertime PM<sub>10</sub> at San Jose, CA. *J. Environ. Eng.*, 21, 378-387.
- Chow, J.C., (1995). Summary of the 1995 A&WMA critical review: Measurement methods to determine compliance with ambient air quality standards for suspended particles. *EM*, 1, 12-15.
- Fujita, E.M., Watson, J.G., Chow, J.C., Magliano, K.L., (1995). Receptor model and emissions inventory source apportionments of nonmethane organic gases in California's San Joaquin Valley and San Francisco Bay Area. *Atmospheric Environment*, 29, 3019-3035.
- Gertler, A.W., Wittorff, D.N., Zielinska, B., Chow, J.C., (1995). Determination of mobile source particulate emission factors in tunnels, Proceedings, *Particulate Matter: Health and Regulatory Issues*, Air and Waste Management Association, Pittsburgh, PA, pp. 608-622.
- Lowenthal, D.H., Rogers, C.F., Saxena, P., Watson, J.G., Chow, J.C., (1995). Sensitivity of estimated light extinction coefficients to model assumptions and measurement errors. *Atmospheric Environment*, 29, 751-766.
- Sagebiel, J.C., Zielinska, B., Walsh, P.A., Chow, J.C., Cadle, S.H., Mulawa, P., Knapp, K., Zweidinger, R., Snow, R., (1995). PM<sub>10</sub> dynamometer exhaust samples collected from in-service vehicles in Nevada, Proceedings, Fifth CRC On-Road Vehicle Emissions Workshop, Coordinating Research Council Alpharetta, GA.
- Watson, J.G., Thurston, G.D., Frank, N.H., Lodge, J.P., Wiener, R.W., McElroy, F.F., Kleinman, M.T., Mueller, P.K., Schmidt, A.C., Lipfert, F.W., Thompson, R.J., Dasgupta, P.K., Marrack, D., Michaels, R.A., Moore, T., Penkala, S., Tombach, I.H., Vestman, L., Hauser, T., Chow, J.C., (1995). Measurement methods to determine compliance with ambient air quality standards for suspended particles: Critical review discussion. *Journal of the Air & Waste Management Association*, 45, 666-684. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1995.10467395>
- Chow, J.C., Watson, J.G., Fujita, E.M., Lu, Z., Lawson, D.R., Ashbaugh, L.L., (1994). Temporal and spatial variations of PM<sub>2.5</sub> and PM<sub>10</sub> aerosol in the Southern California Air Quality Study. *Atmospheric Environment*, 28, 2061-2080.
- Chow, J.C., Fujita, E.M., Watson, J.G., Lu, Z., Lawson, D.R., Ashbaugh, L.L., (1994). Evaluation of filter-based aerosol measurements during the 1987 Southern California Air Quality Study. *Environ. Mon. Assess.*, 30, 49-80. [https://www.researchgate.net/publication/258430148\\_Evaluation\\_of\\_filter-based\\_aerosol\\_measurements\\_during\\_the\\_1987\\_Southern\\_California\\_Air\\_Quality\\_Study?iepl%5BgeneralViewId%5D=lb96znGhaAeZIOhTHv8NLgcrM1yOSEJKtiG3&iepl%5Bcontexts%5D%5B0%5D=searchReact&iepl%5BviewId%5D=4DeuT0vA6ym1reWBXGPTlk4NgwSce12WjIYv&iepl%5BsearchType%5D=publication&iepl%5Bdata%5D%5BcountLessEqual20%5D=1&iepl%5Bdata%5D%5BinteractedWithPosition1%5D=1&iepl%5Bdata%5D%5BwithoutEnrichment%5D=1&iepl%5Bposition%5D=1&iepl%5BrgKey%5D=PB%3A258430148&iepl%5BtargetEntityId%5D=PB%3A258430148&iepl%5BinteractionType%5D=publicationTitle](https://www.researchgate.net/publication/258430148_Evaluation_of_filter-based_aerosol_measurements_during_the_1987_Southern_California_Air_Quality_Study?iepl%5BgeneralViewId%5D=lb96znGhaAeZIOhTHv8NLgcrM1yOSEJKtiG3&iepl%5Bcontexts%5D%5B0%5D=searchReact&iepl%5BviewId%5D=4DeuT0vA6ym1reWBXGPTlk4NgwSce12WjIYv&iepl%5BsearchType%5D=publication&iepl%5Bdata%5D%5BcountLessEqual20%5D=1&iepl%5Bdata%5D%5BinteractedWithPosition1%5D=1&iepl%5Bdata%5D%5BwithoutEnrichment%5D=1&iepl%5Bposition%5D=1&iepl%5BrgKey%5D=PB%3A258430148&iepl%5BtargetEntityId%5D=PB%3A258430148&iepl%5BinteractionType%5D=publicationTitle)
- Chow, J.C., Watson, J.G., Houck, J.E., Pritchett, L.C., Rogers, C.F., Frazier, C.A., Egami, R.T., Ball, B.M., (1994). A laboratory resuspension chamber to measure fugitive dust size distributions and chemical compositions.

- Chow, J.C., Watson, J.G., Solomon, P.A., Thuillier, R.H., Magliano, K.L., Ziman, S.D., Blumenthal, D.L., Richards, L.W., (1994). Planning for SJVAQS/AUSPEX particulate matter and visibility sampling and analysis, Solomon, P.A. (Ed.) Planning and Managing Regional Air Quality, Modeling and Measurement Studies, CRC Press, Inc., Boca Raton, FL, pp. 171-216.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Solomon, P.A., Magliano, K.L., Ziman, S.D., Richards, L.W., (1994). PM<sub>10</sub> and PM<sub>2.5</sub> chemical characteristics and source apportionment in the San Joaquin Valley, Solomon, P.A. (Ed.) Planning and Managing Regional Air Quality, Modeling and Measurement Studies, CRC Press, Inc., Boca Raton, FL, pp. 687-698.
- Divita, F., Jr., Chow, J.C., Watson, J.G., Pritchett, L.C., Eldred, R.A., Cahill, T.A., Malm, W.C., (1994). Spatial and temporal trends of fine particle carbon determined during IMPROVE, Proceedings, Fifth International Conference on Carbonaceous Particles in the Atmosphere.
- Fujita, E.M., Watson, J.G., Chow, J.C., Lu, Z., (1994). Validation of the chemical mass balance receptor model applied to hydrocarbon source apportionment in the Southern California Air Quality Study. Environmental Science & Technology, 28, 1633-1649.
- Heisler, S.L., Tombach, I.H., Watson, J.G., Chow, J.C., Moore, T., (1994). Characteristics of the Tucson winter haze, Malm, W.C., Mueller, P.K. (Eds.), Proceedings, Aerosols and Atmospheric Optics: Radiative Balance and Visual Air Quality, Air & Waste Management Association, Pittsburgh, PA, pp. 966-974.
- Lowenthal, D.H., Zielinska, B., Chow, J.C., Watson, J.G., Gautam, M., Ferguson, D.H., Neuroth, G.R., Stevens, K.D., (1994). Characterization of heavy-duty diesel vehicle emissions. Atmospheric Environment, 28, 731-743.
- Lu, Z., Chow, J.C., Watson, J.G., Frazier, C.A., Pritchett, L.C., Dippel, W., Bates, B.A., Jones, W., Torres, G., Fisher, R., Lam, D., (1994). Temporal and spatial variations of PM<sub>10</sub> aerosol in the Imperial Valley/Mexicali Air Quality Study, Proceedings, 87th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Chow, J.C., Divita, F., Jr., (1994). Particulate sampling and analysis, Proceedings, 207th American Chemical Society Spring Meeting, Symposium on Environmental Sampling, American Chemical Society.
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Pritchett, L.C., Frazier, C.A., Neuroth, G.R., Robbins, R., (1994). Differences in the carbon composition of source profiles for diesel- and gasoline-powered vehicles. Atmospheric Environment, 28, 2493-2505.
- Watson, J.G., Chow, J.C., Fujita, E.M., Frazier, C.A., Lu, Z., Heisler, S.L., Moore, C.T., (1994). Aerosol data validation for the 1992-93 Tucson Urban Haze Study, Proceedings, 87th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Chow, J.C., Lu, Z., Fujita, E.M., Lowenthal, D.H., Lawson, D.R., (1994). Chemical mass balance source apportionment of PM<sub>10</sub> during the Southern California Air Quality Study. Aerosol Science and Technology, 21, 1-36. <http://www.tandfonline.com/doi/pdf/10.1080/02786829408959693>
- Watson, J.G., Chow, J.C., (1994). Clear sky visibility as a challenge for society. Annu. Rev. Energy Environ, 19, 241-266. [https://www.researchgate.net/publication/234149550\\_Clear\\_Sky\\_Visibility\\_as\\_a\\_Challenge\\_for\\_Society](https://www.researchgate.net/publication/234149550_Clear_Sky_Visibility_as_a_Challenge_for_Society)
- Watson, J.G., Chow, J.C., Lurmann, F.W., Musarra, S., (1994). Ammonium nitrate, nitric acid, and ammonia equilibrium in wintertime Phoenix, Arizona. Journal of the Air & Waste Management Association, 44, 405-412. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1999.10463837>
- Watson, J.G., Chow, J.C., Fujita, E.M., Lu, Z., Heisler, S.L., Moore, T.A., (1994). Wintertime source contributions to light extinction in Tucson, AZ., Proceedings, Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality, Air & Waste Management Association, Pittsburgh, PA, pp. 1187-1197.
- Watson, J.G., Chow, J.C., Blumenthal, D.L., Lurmann, F.W., Hackney, R.J., Magliano, K.L., Pederson, J.R., Neff, W.D., Roth, P.M., Solomon, P.A., Thuillier, R.H., Ziman, S.D., (1994). Planning for data analysis, Solomon, P.A. (Ed.) Planning and Managing Regional Air Quality Modeling and Measurement Studies, CRC Press, Inc., Boca Raton, FL, pp. 335-349.
- Watson, J.G., Chow, J.C., (1994). Particle and gas measurements on filters, Markert, B. (Ed.) Environmental Sampling for Trace Analysis, VCH, New York, pp. 125-161.
- Wittorff, D.N., Gertler, A.W., Chow, J.C., Barnard, W.R., Jongedyk, H.A., (1994). The impact of diesel particulate emissions on ambient particulate loadings, Proceedings, 87th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.

- Wittorff, D.N., Gertler, A.W., Chow, J.C., Barnard, W.R., Jongedyk, H.A., (1994). The contribution of road sanding and salting material on ambient PM<sub>10</sub> concentrations, Proceedings, The Emission Inventory: Applications and Improvement, Air & Waste Management Association, Pittsburgh, PA, pp. 161-188.
- Wong, C.G., Bonakdar, M., Kleinman, M.T., Chow, J.C., Bhalla, D.K., (1994). Elevation of stress-inducible heat-shock protein-70 in the rat lung after exposure to ozone and particle-containing atmospheres. *Inhalation Toxicology*, 6, 501-514.
- Zelenka, M.P., Wilson, W.E., Chow, J.C., Lioy, P.J., (1994). A combined TFA/CMB receptor modeling approach and its application to air pollution sources in China. *Atmospheric Environment*, 28, 1425-1435.
- Chow, J.C., Watson, J.G., Bowen, J.L., Frazier, C.A., Gertler, A.W., Fung, K.K., Landis, D., Ashbaugh, L.L., (1993). A sampling system for reactive species in the western United States, Winegar, E.D., Keith, L.H. (Eds.), *Sampling and Analysis of Airborne Pollutants*, Lewis Publishers, Ann Arbor, MI, pp. 209-228. [https://www.researchgate.net/publication/235341468\\_A\\_sampling\\_system\\_for\\_reactive\\_species\\_in\\_the\\_western\\_United\\_States?\\_iepl%5BgeneralViewId%5D=MLILgNAWNnM38KFD3qJzaHytH94ZJnVfhdNk&\\_iepl%5Bcontexts%5D%5B0%5D=searchReact&\\_iepl%5BviewId%5D=6vTeT0eEQzOhw6Hig85iqiFwZIC3fS0AAdjW&\\_iepl%5BsearchType%5D=publication&\\_iepl%5Bdata%5D%5BcountLessEqual20%5D=1&\\_iepl%5Bdata%5D%5BinteractedWithPosition2%5D=1&\\_iepl%5Bdata%5D%5BwithoutEnrichment%5D=1&\\_iepl%5Bposition%5D=2&\\_iepl%5BrgKey%5D=PB%3A235341468&\\_iepl%5BtargetEntityId%5D=PB%3A235341468&\\_iepl%5BinteractionType%5D=publicationTitle](https://www.researchgate.net/publication/235341468_A_sampling_system_for_reactive_species_in_the_western_United_States?_iepl%5BgeneralViewId%5D=MLILgNAWNnM38KFD3qJzaHytH94ZJnVfhdNk&_iepl%5Bcontexts%5D%5B0%5D=searchReact&_iepl%5BviewId%5D=6vTeT0eEQzOhw6Hig85iqiFwZIC3fS0AAdjW&_iepl%5BsearchType%5D=publication&_iepl%5Bdata%5D%5BcountLessEqual20%5D=1&_iepl%5Bdata%5D%5BinteractedWithPosition2%5D=1&_iepl%5Bdata%5D%5BwithoutEnrichment%5D=1&_iepl%5Bposition%5D=2&_iepl%5BrgKey%5D=PB%3A235341468&_iepl%5BtargetEntityId%5D=PB%3A235341468&_iepl%5BinteractionType%5D=publicationTitle)
- Chow, J.C., Watson, J.G., Ono, D.M., Mathai, C.V., (1993). PM<sub>10</sub> standards and nontraditional particulate source controls: A summary of the A&WMA/EPA International Specialty Conference. *Journal of the Air & Waste Management Association*, 43, 74-84.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Solomon, P.A., Magliano, K.L., Ziman, S.D., Richards, L.W., (1993). PM<sub>10</sub> and PM<sub>2.5</sub> compositions in California's San Joaquin Valley. *Aerosol Science and Technology*, 18, 105-128. <http://www.tandfonline.com/doi/pdf/10.1080/02786829308959588>
- Chow, J.C., Watson, J.G., Pritchett, L.C., Pierson, W.R., Frazier, C.A., Purcell, R.G., (1993). The DRI Thermal/Optical Reflectance carbon analysis system: Description, evaluation and applications in U.S. air quality studies. *Atmospheric Environment*, 27A, 1185-1201.
- Gertler, A.W., Lowenthal, D.H., Chow, J.C., Watson, J.G., (1993). Receptor modeling of SCAQS volatile organic compounds, Fujita, E.M. (Ed.) Proceedings, Southern California Air Quality Study Data Analysis, Air & Waste Management Association, Pittsburgh, PA, pp. 103-105.
- Watson, J.G., Chow, J.C., (1993). Ambient air sampling, Willeke, K., Baron, P.A. (Eds.), *Aerosol Measurement: Principles, Techniques and Applications*, Van Nostrand, Reinhold, New York, NY, pp. 622-639.
- Annegarn, H.J., Kreen, M., Lipworth, A., Chow, J.C., Nelson, J., (1992). Source profiles from ambient streaker sampling and wind trajectory analysis, Chow, J.C., Ono, D.M. (Eds.), Proceedings, PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls, Air & Waste Management Association, Pittsburgh, PA, pp. 183-198.
- Chow, J.C., Ono, D.M., Mathai, C.V., Watson, J.G., (1992). Overview of the A&WMA/EPA International Specialty Conference on PM<sub>10</sub> Standards and Nontraditional Particulate Soil Controls, Proceedings, 85th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Solomon, P.A., Magliano, K.L., Ziman, S.D., Richards, L.W., (1992). PM<sub>10</sub> source apportionment in California's San Joaquin Valley. *Atmospheric Environment*, 26A, 3335-3354. [https://www.researchgate.net/publication/223634529\\_PM10\\_source\\_apportionment\\_in\\_California\\_San\\_Joaquin\\_Valley](https://www.researchgate.net/publication/223634529_PM10_source_apportionment_in_California_San_Joaquin_Valley)
- Chow, J.C., Liu, C.S., Cassmassi, J.C., Watson, J.G., Lu, Z., Pritchett, L.C., (1992). A neighborhood-scale study of PM<sub>10</sub> source contributions in Rubidoux, California. *Atmospheric Environment*, 26A, 693-706. [https://www.researchgate.net/publication/223840875\\_A\\_neighborhood-scale\\_study\\_of\\_PM10\\_source\\_contributions\\_in\\_Rubidoux\\_California](https://www.researchgate.net/publication/223840875_A_neighborhood-scale_study_of_PM10_source_contributions_in_Rubidoux_California)
- Chow, J.C., Ono, D.M., (1992). PM<sub>10</sub> standards and nontraditional particulate source controls: Overview of the technical program, Chow, J.C., Ono, D.M. (Eds.), Transactions, PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls, Air and Waste Management Association, Pittsburgh, PA, pp. xxvii-xxxv.
- Chow, J.C., Watson, J.G., (1992). Fugitive emissions add to air pollution. *Environ. Protect*, 3, 26-31. [https://www.researchgate.net/publication/235341464\\_Fugitive\\_emissions\\_add\\_to\\_air\\_pollution](https://www.researchgate.net/publication/235341464_Fugitive_emissions_add_to_air_pollution)
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Frazier, C.A., Hinsvark, B.A., Pritchett, L.C., Neuroth, G.R., (1992). Wintertime PM<sub>10</sub> and PM<sub>2.5</sub> mass and chemical compositions in Tucson, Arizona, Chow, J.C., Ono, D.M. (Eds.), Transactions, PM<sub>10</sub> Standards and Non-Traditional Particulate Source Controls, Air and Waste Management Association, Pittsburgh, PA, pp. 231-243.

- Dayal, P., Chow, J.C., Neuroth, G., Lowe, T.P., (1992). Characterization of toxic metal emissions by XRF analyses pursuant to Title III CAAA of 1990, Proceedings, Annual Meeting of the Air & Waste Management Association, Pittsburgh, PA.
- Houck, J.E., Rau, J.A., Body, S., Chow, J.C., (1992). Source apportionment - Pocatello, Idaho PM<sub>10</sub> nonattainment area, Chow, J.C., Ono, D.M. (Eds.), Transactions, PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls, Air and Waste Management Association, Pittsburgh, PA, pp. 219-230.
- Kitsa, V., Liroy, P.J., Chow, J.C., Watson, J.G., Shupack, S., Howell, T., (1992). Particle-size distribution of chromium: Total and hexavalent chromium in inspirable, thoracic, and respirable soil particles from contaminated sites in New Jersey. *Aerosol Science and Technology*, 17, 213-229. <http://www.tandfonline.com/doi/pdf/10.1080/02786829208959572>
- Lowenthal, D.H., Chow, J.C., Watson, J.G., Neuroth, G.R., Robbins, R.B., Shafritz, B.P., Countess, R.J., (1992). The effects of collinearity on the ability to determine aerosol contributions from diesel- and gasoline-powered vehicles using the chemical mass balance model. *Atmospheric Environment*, 26A, 2341-2351.
- Lowenthal, D.H., Borys, R.D., Chow, J.C., Rogers, F.A., Shaw, G.E., (1992). Evidence for long-range transport of aerosol from the Kuwaiti oil fires to Hawaii. *Journal of Geophysical Research*, 97, 14573-14580.
- Skidmore, L., Chow, J.C., Tucker, T.T., (1992). PM<sub>10</sub> air quality assessment for the Jefferson County, Ohio air quality control region, Chow, J.C., Ono, D.M. (Eds.), Transactions, PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls, pp. 1016-1031.
- Watson, J.G., Chow, J.C., (1992). Data bases for PM<sub>10</sub> and PM<sub>2.5</sub> chemical compositions and source profiles, Chow, J.C., Ono, D.M. (Eds.), Transactions, PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls, Air & Waste Management Association, Pittsburgh, PA, pp. 61-91.
- Watson, J.G., Chow, J.C., Lurmann, F.W., Musarra, S., (1992). Ammonium nitrate, nitric acid, and ammonia equilibrium, in wintertime Phoenix, AZ, Proceedings, 85th Annual Meeting of the Air & Waste Management Association, Air and Waste Management Association, Pittsburgh, PA.
- Ashbaugh, L.L., Chow, J.C., Watson, J.G., (1991). Atmospheric acidity data quality and measurement characteristics for California's acid deposition monitoring program, Proceedings, 84th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Pritchett, L.C., Watson, J.G., Frazier, C.A., Egami, R.T., (1991). A multiple port resuspension chamber for fugitive dust characterization, Proceedings, 84th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Egami, R.T., Frazier, C.A., Pritchett, L.C., (1991). Source apportionment of PM<sub>2.5</sub> in Phoenix, Arizona, Proceedings, 84th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Richards, L.W., Solomon, P.A., Magliano, K.L., Ziman, S.D., (1991). Source apportionment of PM<sub>10</sub> collected in the San Joaquin Valley: Planning for SJVAQS/AUSPEX, Proceedings, 84th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Egami, R.T., Gertler, A.W., Chow, J.C., Watson, J.G., Purcell, R.G., Bowen, J.L., (1991). A medium-volume sampler for use in source apportionment studies, Proceedings, 84th Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Freeman, D.L., Watson, J.G., Chow, J.C., Egami, R.T., (1991). PM<sub>10</sub> source apportionment for mining operations, Lootens, D.J., Greenslade, W.M., Barker, J.M. (Eds.), Environmental Management for the 1990's, Society for Mining, Metallurgy, and Exploration, Littleton, CO, pp. 99-104.
- Sloane, C.S., Watson, J.G., Chow, J.C., Pritchett, L.C., Richards, L.W., (1991). Size-segregated fine particle measurements by chemical species and their impact on visibility impairment in Denver. *Atmospheric Environment*, 25A, 1013-1024.
- Watson, J.G., Chow, J.C., Pace, T.G., (1991). Chemical mass balance, Hopke, P.K. (Ed.) Receptor Modeling for Air Quality Management, Elsevier Press, New York, NY, pp. 83-116.
- Chow, J.C., Watson, J.G., Pritchett, L.C., Lowenthal, D.H., Frazier, C.A., Neuroth, G.R., Evans, K., Moon, D., (1990). Wintertime visibility in Phoenix, Arizona, Proceedings, 83rd Annual Meeting of the Air and Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Egami, R.T., Frazier, C.A., Lu, Z., Goodrich, A., Bird, A., (1990). Evaluation of regenerative-air vacuum street sweeping on geological contributions to PM<sub>10</sub>. *Journal of the Air & Waste Management Association*, 40, 1134-1142. <http://www.tandfonline.com/doi/pdf/10.1080/10473289.1990.10466759>

- Chow, J.C., Egami, R.T., Watson, J.G., DeLong, T., (1990). Applying the air quality source apportionments to geothermal power plant emissions. *Geothermal Resources Council Bulletin*, 19, 208-213.
- Egami, R.T., Chow, J.C., Watson, J.G., de Long, T., (1990). PM<sub>10</sub> source apportionment study in Pleasant Valley, Nevada, *Transactions, 1990 International Symposium on Geothermal Energy*, Geothermal Resources Council, Davis, CA, pp. 1115-1120.
- Eldred, R.A., Cahill, T.A., Wilkinson, L.K., Feeney, P.J., Chow, J.C., Malm, W.C., (1990). Measurement of fine particles and their chemical components in the NPS/IMPROVE networks, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 187-196.
- Houck, J.E., Goulet, J.M., Chow, J.C., Watson, J.G., Pritchett, L.C., (1990). Chemical characterization of emission sources contributing to light extinction, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air and Waste Management Association, Pittsburgh, PA, pp. 437-446.
- Mathai, C.V., Watson, J.G., Rogers, C.F., Chow, J.C., Tombach, I.H., Zwicker, J.O., Cahill, T.A., Feeney, P.J., Eldred, R.A., Pitchford, M.L., Mueller, P.K., (1990). Intercomparison of ambient aerosol samplers used in western visibility and air quality studies. *Environmental Science & Technology*, 24, 1090-1099.
- Richards, L.W., Sloane, C.S., Watson, J.G., Chow, J.C., (1990). Extinction apportionment for the Denver Brown Cloud, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 394-407.
- Sloane, C.S., Watson, J.G., Chow, J.C., Pritchett, L.C., Richards, L.W., (1990). Size distribution and optical properties of the Denver Brown Cloud, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 384-393.
- Watson, J.G., Chow, J.C., Pritchett, L.C., Houck, J.E., Ragazzi, R.A., (1990). Chemical source profiles for particulate motor vehicle exhaust under cold and high altitude operating conditions. *Science of the Total Environment*, 93, 183-190.
- Watson, J.G., Chow, J.C., Pritchett, L.C., Houck, J.E., Burns, S., Ragazzi, R.A., (1990). Composite source profiles for particulate motor vehicle exhaust source apportionment in Denver, CO, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 422-436.
- Watson, J.G., Chow, J.C., Stevens, R.K., (1990). Survey of fine particle sampling systems used in visibility studies, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 109-121.
- Watson, J.G., Chow, J.C., (1990). The role of source apportionment in air quality management, *Proceedings, 1st IUAPPA Regional Conference on Air Pollution: Towards the 21st Century*, National Association for Clean Air, Johannesburg, South Africa.
- Watson, J.G., Robinson, N.F., Chow, J.C., Henry, R.C., Kim, B.M., Pace, T.G., Meyer, E.L., Nguyen, Q., (1990). The USEPA/DRI chemical mass balance receptor model, CMB 7.0. *Environ. Software*, 5, 38-49.
- Ahuja, M.S., Paskind, J.J., Houck, J.E., Chow, J.C., (1989). Design of a study for the chemical and size characterization of particulate matter emissions from selected sources in California, Watson, J.G. (Ed.) *Transactions, Receptor Models in Air Resources Management*, Air & Waste Management Association, Pittsburgh, PA, pp. 145-158.
- Ashbaugh, L.L., Watson, J.G., Chow, J.C., (1989). Estimating fluxes from California's dry deposition monitoring data, *Proceedings, 82nd Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Burns, S., Frey, S.J., Chow, J.C., Watson, J.G., Sloane, C.S., (1989). An overview of the 1987-88 Metro Denver Brown Cloud Study, Mathai, C.V. (Ed.) *Transactions, Visibility and Fine Particles*, Air & Waste Management Association, Pittsburgh, PA, pp. 363-373.
- Chow, J.C., Lu, Z., Pritchett, L.C., (1989). A neighborhood-scale study of PM<sub>10</sub> source contributions in Rubidoux, *Proceedings, 82nd Annual Meeting of the Air & Waste Management Association*, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., (1989). Summary of particulate data bases for receptor modeling in the United States, Watson, J.G. (Ed.) *Transactions, Receptor Models in Air Resources Management*, Air & Waste Management Association, Pittsburgh, PA, pp. 108-133.
- Egami, R.T., Watson, J.G., Rogers, C.F., Ruby, M.G., Rood, M.J., Chow, J.C., (1989). Particle fallout container measurement of dustfall from the atmosphere, Lodge, J.P. (Ed.) *Methods of Air Sampling and Analysis*, 3 ed. Lewis Publishers, Chelsea, MI, pp. 440-445.  
<https://www.researchgate.net/publication/235341548> Particle fallout container measurement of dustfall from the atmosphere

- Freeman, D.L., Chow, J.C., Egami, R.T., Watson, J.G., (1989). Description and applications of a receptor and dispersion modeling software package, Proceedings, 8th World Clean Air Congress: Man and His Ecosystem, 3 ed. Elsevier Science Publishers, The Hague, Netherlands, pp. 295-295.
- Freeman, D.L., Chow, J.C., Egami, R.T., Watson, J.G., (1989). A receptor and dispersion modeling software package, Watson, J.G. (Ed.) Transactions, Receptor Models in Air Resources Management, Air & Waste Management Association, Pittsburgh, PA, pp. 243-268.
- Houck, J.E., Goulet, J.M., Chow, J.C., Watson, J.G., (1989). Chemical source characterization of residential wood combustion emissions in Denver, Colorado; Bakersfield, California; and Mammoth Lakes, California, Proceedings, 82nd Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Houck, J.E., Chow, J.C., Ahuja, M.S., (1989). The chemical and size characterization of particulate material originating from geological sources in California, Watson, J.G. (Ed.) Transactions, Receptor Models in Air Resources Management, Air & Waste Management Association, Pittsburgh, PA, pp. 322-333.
- Houck, J.E., Chow, J.C., Ahuja, M.S., (1989). The chemical characterization of agricultural sources of PM<sub>10</sub> particles in the San Joaquin and Imperial Valleys of California, Proceedings, 82nd Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Mueller, P.K., Shah, J.J., Fitz, D.R., Fung, K.K., Watson, J.G., Chow, J.C., Roberts, P.T., McDade, C., (1989). Measurement of particulate carbonaceous material in rural air of the southwestern U.S.A, Proceedings, 82nd Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Ruby, M.G., Rood, M.J., Chow, J.C., Egami, R.T., Rogers, C.F., Watson, J.G., (1989). Integrating nephelometer measurement of scattering coefficient and fine particle concentrations, Lodge, J.P. (Ed.) Methods of Air Sampling and Analysis, Lewis Publishers, Inc., Chelsea, MI, pp. 450-457.
- Watson, J.G., Chow, J.C., Mathai, C.V., (1989). Receptor models in air resources management: A summary of the APCA International Specialty Conference. Journal of the Air Pollution Control Association, 39, 419-426. <http://www.tandfonline.com/doi/pdf/10.1080/08940630.1989.10466539>
- Watson, J.G., Chow, J.C., Pritchett, L.C., Richards, L.W., Dietrich, D.L., Molenaar, J.V., Faust, J.F., Andersen, S.R., Sloane, C.S., (1989). Comparison of three measures of visibility extinction in Denver, Colorado, Proceedings, 82nd Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Frazier, C.A., Chow, J.C., Farber, R.J., Countess, R.J., (1989). Survey of fugitive dust control methods for PM<sub>10</sub>, Proceedings, 82nd Annual Meeting of the Air & Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Bowen, J.L., Chow, J.C., Rogers, C.F., Ruby, M.G., Rood, M.J., Egami, R.T., (1989). High volume measurement of size classified suspended particulate matter, Lodge, J.P. (Ed.) Methods of Air Sampling and Analysis, 3rd ed. Lewis Publishers, Inc., Chelsea, MI, pp. 427-439.
- Chow, J.C., Watson, J.G., (1988). PM<sub>10</sub> data base requirements and availability, Proceedings, 81st Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Frazier, C.A., Watson, J.G., (1988). A survey of existing fugitive/area source characterization methods for receptor modeling, Hoffnagle, G.F., Lebowitz, M. (Eds.), Proceedings, Particulate Matter/Fugitive Dusts: Measurements and Control in Western Arid Regions, Air Pollution Control Association, Pittsburgh, PA, pp. 176-189.
- Chow, J.C., Watson, J.G., Frazier, C.A., Egami, R.T., Goodrich, A., Ralph, C., (1988). Spatial and temporal source contributions to PM<sub>10</sub> and PM<sub>2.5</sub> in Reno, NV, Mathai, C.V., Stonefield, D.H. (Eds.), Transactions, PM<sub>10</sub>: Implementation of Standards, Air Pollution Control Association, Pittsburgh, PA, pp. 438-457.
- Countess, R.J., Watson, J.G., Chow, J.C., (1988). Assessment of the PM measurement process, Mathai, C.V., Stonefield, D.H. (Eds.), Transactions, PM<sub>10</sub>: Implementation of Standards, Air Pollution Control Association, Pittsburgh, PA, pp. 179-190.
- Egami, R.T., Chow, J.C., Watson, J.G., Frazier, C.A., Freeman, D.L., (1988). Source assessment for PM<sub>10</sub> and carbon monoxide in a woodsmoke dominated airshed, Proceedings, 2nd International Conference on Atmospheric Sciences and Applications to Air Quality, Science Council of Japan.
- Cahill, T.A., Eldred, R.A., Kusko, B.H., Wilkinson, K., Chow, J.C., Malm, W.C., (1987). Total carbon, mass and associated light elements in WHITEX, Novakov, T. (Ed.) Proceedings, Third International Conference on Carbonaceous Particles in the Atmosphere, Lawrence Berkeley Laboratories, Berkeley, CA.

- Chow, J.C., Watson, J.G., (1987). Relationships between secondary aerosols and photochemical factors in California's San Joaquin Valley, Proceedings, 80th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., (1987). Inorganic analysis methods, Core, J.E., Houck, J.E. (Eds.), Pacific Northwest Source Profile Library: Source Sampling and Analytical Protocols, Oregon Department of Environmental Quality, Portland, OR.
- Chow, J.C., (1987). Soil and fugitive dust sampling procedures, Core, J.E., Houck, J.E. (Eds.), Pacific Northwest Source Profile Library: Source Sampling and Analytical Protocols, Oregon Department of Environmental Quality, Portland, OR.
- Chow, J.C., (1987). Soil sampling protocols, Core, J.E., Houck, J.E. (Eds.), Pacific Northwest Source Profile Library: Source Sampling and Analytical Protocols, Oregon Department of Environmental Quality, Portland, OR.
- Freeman, D.L., Watson, J.G., Robinson, N.F., Chow, J.C., Egami, R.T., (1987). Uncertainty reduction through use of combined source-receptor models in a PM<sub>10</sub> assessment package, Proceedings, 80th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Watson, J.G., Chow, J.C., (1987). PM<sub>10</sub> sampling and analysis alternatives for receptor modeling, Proceedings, 80th Annual Meeting of the Air and Waste Management Association, Air & Waste Management Association, Pittsburgh, PA.
- Bowen, J.L., Watson, J.G., Chow, J.C., (1986). Characterization of the southwest desert aerosol, Proceedings, 79th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Spengler, J.D., (1986). Overview of Harvard Air Pollution Respiratory Health Study Program, Part I: Project design and ambient monitoring. *J. Ind. Pollut. Control*, 4, 30-54.
- Chow, J.C., Spengler, J.D., (1986). Overview of Harvard Air Pollution Respiratory Health Study Program, Part II: Chemical analysis and quality control/quality assurance aspects. *J. Ind. Pollut. Control*, 4, 18-32.
- Chow, J.C., Watson, J.G., Naylor, M.H., Smith, M.J., (1986). Methods to characterize area sources for receptor models, Proceedings, 79th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Spengler, J.D., (1986). A method of combining dispersion models and trajectory models with principal component analysis and chemical mass balance receptor models, Pace, T.G. (Ed.) Transactions, Receptor Methods for Source Apportionment: Real World Issues and Applications, Air & Waste Management Association, Pittsburgh, PA, pp. 194-211.
- Chow, J.C., Watson, J.G., Frazier, C.A., (1986). A survey of existing fugitive/area source characterization methods for receptor modeling, Proceedings, Particulate Matter/Fugitive Dusts: Measurement and Control in Western Arid Regions, Air & Waste Management Association, Pittsburgh, PA, pp. 1-13.
- Watson, J.G., Chow, J.C., (1986). The potential of receptor models to apportion indoor air pollution to sources, Proceedings, 79th Annual Meeting of the Air Pollution Control Association, Air and Waste Management Association, Pittsburgh, PA, pp. 86-87.86-81-86-87.86-89.
- Chow, J.C., Severance, P.W., Spengler, J.D., (1985). A composite application of source and receptor models to fine particle concentrations in Portage, Wisconsin, Proceedings, 78th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., (1985). The use of source and receptor models for control strategy development, Chan, M.W.H., Hoare, R.W.M., Holmes, P.R., Low, R.J.S., Reed, S.B. (Eds.), Proceedings, POLMET 85: Pollution in the Urban Environment, Elsevier Applied Science Publishers, New York, NV.
- Espinosa, M., Watson, J.G., Chow, J.C., Shahetal, J., (1984). The air pollution literature in developing countries - Part II, Proceedings, 77th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Espinosa, M.E., Watson, J.G., Chai, S., Almeyda, G., Mathai, C.V., Chow, J.C., Matamala, L., Shah, J.J., (1984). Bibliography of articles on air pollution in industrializing countries: 1984, Proceedings, 77th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Chung, C., (1983). Air pollution in the Republic of China (Taiwan). *Journal of the Air Pollution Control Association*, 33, 768-770.  
<http://www.tandfonline.com/doi/pdf/10.1080/00022470.1983.10465640>
- Chow, J.C., Watson, J.G., (1983). Applications of source and receptor models. *J. Ind. Pollut. Control*, 2, 18-30.
- Chow, J.C., Watson, J.G., Knapp, R.R., Shah, J.J., (1983). A monitoring program to evaluate community health related concentrations of fine and inhalable suspended particulates, Proceedings, 76th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.

- Watson, J.G., Chow, J.C., Shah, J.J., Pace, T.G., (1983). The effect of sampling inlets on the PM<sub>10</sub> and PM<sub>15</sub> to TSP concentration ratios. *Journal of the Air Pollution Control Association*, 33, 114-119. <http://www.tandfonline.com/doi/pdf/10.1080/00022470.1983.10465552>
- Watson, J.G., Broten, A.R., Chow, J.C., Smith, S.M., Shah, J.J., (1983). Air pollution in developing countries: A survey of the literature, Proceedings, 76th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Shah, J.J., Scott, R.H., (1982). Source contributions to inhalable particulate matter in major U.S. cities, Proceedings, 75th Annual Meeting of the Air Pollution Control Association, Air Pollution Control Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., Chaung, C.Y., (1982). Air pollution standards, monitoring, concentrations and control in the Republic of China (Taiwan), Proceedings, 75th Annual Meeting of the Air Pollution Control Association, Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Chung, C., Watson, J.G., (1982). Overview of air pollution monitoring and control in Taiwan (in Chinese). *J. Ind. Pollut. Control*, 3, 1-11.
- Watson, J.G., Chow, J.C., Shah, J.J., Countess, R.J., (1982). The effect of sampling inlets on the IP and TSP concentration ratios, Proceedings, 75th Annual Meeting of the Air Pollution Control Association, Air and Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Shortell, V., Collins, J.F., Watson, J.G., Pace, T.G., Burton, R.M., (1981). A neighborhood scale study of inhalable and fine suspended particulate matter source contributions to an industrial area in Philadelphia, Proceedings, 74th Annual Meeting of the Air Pollution Control Association, Air Pollution Control Association, Pittsburgh, PA.
- Watson, J.G., Chow, J.C., (1981). An overview of source-receptor source apportionment, Proceedings, 74th Annual Meeting of the Air Pollution Control Association, Air and Waste Management Association, Pittsburgh, PA, pp. 81-58.81-81-81-58.81-10.
- Chow, J.C., Chen, C., (1974). The relationships between pollen germination and plant species. *J. Fu-Jen Biology*, Cahill, T.A., Eldred, R.A., Kusko, B.H., Wilkinson, K., Chow, J.C., Malm, W.C., Total carbon, mass, and associated light elements in WHITEX, Proceedings: Third International Conference on Carbonaceous Particles in the Atmosphere, U.S. Department of Energy, Washington, DC.

## Major Technical Reports

- Watson, J.G., Chow, J.C., Kohl, S.D., Gronstal, S., Claassen, M., Wang, X.L., (2022). Identifying sources of excessive elemental concentrations in stormwater runoff at the LADWP Haynes and Harbor generating stations. Desert Research Institute for the Electric Power Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., (2021). Review of “Automatic network for monitoring diffused emissions or particles at ArcelorMittal Tubarão, ES: Proposal for location of monitoring stations of the RAMP-AMT project”. Desert Research Institute for ArcelorMittal Tubarao, Reno, NV, USA.
- Watson, J.G., Chow, J.C., (2021). ArcelorMittal Tubarão particulate matter monitoring network data description, design, and analysis plan. Desert Research Institute for ArcelorMittal Tubarao, Reno, NV, USA.
- Watson, J.G., Chow, J.C., Kohl, S.D., Gronstal, S., Claassen, M., Wang, X.L., (2021). Identifying sources of excessive elemental concentrations in stormwater runoff at the LADWP Haynes and Harbor generating stations: Progress report. Desert Research Institute for the Electric Power Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., (2021). Hong Kong fine particulate matter (PM<sub>2.5</sub>) chemical compositions January 1, 2020 – December 31, 2020. Desert Research Institute for Hong Kong Environmental Protection Department, Reno, NV.
- Wang, X.L., Firouzkouhi, F., Claassen, M., Bingham, B., Gronstal, S., Kohl, S.D., Rhode, D., Son, Y.K., Moosmuller, H., Chow, J.C., Watson, J.G., Kumar, N., (2020). Virus transport and mitigation in public transit buses. Desert Research Institute for Nevada Governor's Office of Economic Development, Reno, NV.
- Wang, X.L., Firouzkouhi, F., Claassen, M., Bingham, B., Gronstal, S., Kohl, S.D., Rhode, D., Son, Y.K., Moosmuller, H., Chow, J.C., Watson, J.G., Kumar, N., (2020). Virus transport and mitigation in offices and classrooms. Desert Research Institute for Nevada Governor's Office of Economic Development, Reno, NV.
- Watson, J.G., Abbasi, B., Wang, X.L., Chow, J.C., (2020). Concept paper for real-time microsensing and communication of miner environmental exposure. Desert Research Institute for National Institute of Occupational Health and Safety, Reno, NV.
- Watson, J.G., Chow, J.C., (2020). Review of diffuse dust emission reduction methods. Desert Research Institute for ArcelorMittal Tubarao, Reno, NV, USA.

- Watson, J.G., Chow, J.C., Kohl, S.D., Gronstal, S., Claassen, M., Wang, X.L., (2020). Program plan for identifying sources of excessive elemental concentrations in stormwater runoff at the LADWP Haynes and Harbor generating stations. Desert Research Institute for the Electric Power Research Institute, Reno, NV.
- Elahifard, M., Abbasi, B., Wang, X.L., Chow, J.C., Watson, J.G., (2019). Characterization of respirable coal mine dust size distribution, chemical composition, and source contributions. University of Nevada, Reno and Desert Research Institute for National Institute of Occupational Health and Safety, Reno, NV.
- Frey, H.C., Adams, P., Adgate, J.L., Allen, G., Balmes, J., Boyle, K.J., Chow, J.C., Dockery, D.W., Felton, H., Gordon, T., Harkema, J.R., Kaufman, J., Kinney, P., Kleinman, M.T., McConnell, R., Poirot, R.L., Sarnat, J.A., Sheppard, E.A., Turpin, B., Wyzga, R., (2019). Advice from the independent particulate matter review panel (formerly EPA CASAC Particulate Matter Review Panel) on EPA's policy assessment for the review of the national ambient air quality standards for particulate matter (External Review Draft- September 2019). North Carolina State University, Raleigh, NC. <https://ucs-documents.s3.amazonaws.com/science-and-democracy/IPMRP-FINAL-LETTER-ON-DRAFT-PA-191022.pdf>
- Wang, X.L., Arnott, W.P., Zhou, H., Taylor, S., Firouzkouhi, H., Moosmuller, H., Chow, J.C., Watson, J.G., (2019). Particle detection and characterization for spacecraft fire safety. Desert Research Institute, Reno, NV.
- Wang, X.L., Khlystov, A.Y., Ho, K.F., Campbell, D.E., Chow, J.C., Kohl, S.D., Watson, J.G., Lee, S.C., Chen, L.-W.A., Lu, M., Ho, S.S.H., (2019). Real-world vehicle emission characterization for the Shing Mun tunnel in Hong Kong and Ft. McHenry tunnel in the U.S. Health Effects Institute, Boston, MA. <https://www.healtheffects.org/publication/real-world-vehicle-emissions-characterization-shing-mun-tunnel-hong-kong-and-fort>
- Watson, J.G., Chow, J.C., (2018). Protocol for applying and validating receptor model source apportionment for PMEH study areas. Desert Research Institute for the World Bank, Reno, NV. [https://www.researchgate.net/publication/333855891\\_Protocol\\_for\\_applying\\_and\\_validating\\_receptor\\_model\\_source\\_apportionment\\_for\\_PMEH\\_study\\_areas](https://www.researchgate.net/publication/333855891_Protocol_for_applying_and_validating_receptor_model_source_apportionment_for_PMEH_study_areas)
- Watson, J.G., Chow, J.C., (2018). Sub-Saharan Africa centers of excellence for air quality research. Desert Research Institute for the World Bank, Reno, NV.
- Watson, J.G., Chow, J.C., (2018). The role of source apportionment in air quality management for the state of Victoria, Australia. Desert Research Institute for EPA Victoria, Reno, NV, USA.
- Bouwer, E.J., Barton, M.D., Betterton, E.A., Blum, J.D., Brantley, S.L., Chow, J.C., Fendorf, S.E., Hazen, R.E., Johnson, C.E., Manton, W.I., Miller, J.R., O'Day, P.A., Toll, J., White, W.H., Mantus, E.K., Wassel, R., Karalic-Loncarevic, M., Rose-Crawford, R., Dawson, T., (2017). Consensus study report: Investigative strategies for lead-source attribution at superfund sites associated with mining activities. The National Academies Press, Washington, DC. <https://www.nap.edu/download/24898>
- Watson, J.G., Chow, J.C., (2017). Fugitive dust emissions, control measures and characterization plans for the Umicore Hoboken Precious Metals Refinery. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for the JingJinJi region of China: Emphasis on Hebei Province. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for Accra, Ghana. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for the National Capital Region of India. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for the Hanoi Capital Region, Vietnam. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for the Greater Johannesburg Area, Republic of South Africa. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for Lagos, Nigeria. Desert Research Institute for the World Bank, Reno, NV.
- Watson, J.G., Chow, J.C., Tropp, R.J., Chen, L.W.-A., (2017). PMEH recommendations for the Greater Cairo Region, Egypt. Desert Research Institute, Reno, NV.
- Balakrishnan, K., Brauer, M., Chen, G.S., Chow, J.C., DeMarini, D.M., Forastiere, F., Heinrich, U., Henderson, R., Huang, W., Knudsen, L.E., Laden, F., Morgan, D.L., Moller, P., Phillips, D.H., Raaschou-Nielsen, O., Nascimento Saldiva, P.H., Samet, J.M., Schauer, J.J., Vineis, P., White, P.A., Yorifuji, T., (2016). IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Outdoor Air Pollution. International Agency for Research on Cancer (IARC), Lyon, France. <http://monographs.iarc.fr/ENG/Monographs/vol109/index.php>
- Harrison, R.M., Khare, M., Chow, J.C., Watson, J.G., Pant, P., Khanna, I., Kanoje, M., Meena, M.L., (2016). Receptor modelling of fine air pollutants. UK-India Education and Research Initiative (UKIERI), Delhi, India.

- Wang, X.L., Kohl, S.D., Chow, J.C., Watson, J.G., (2016). Characterization of real-world emissions from heavy haulers and dozers in Syncrude. Desert Research Institute, Reno, NV.
- Chen, L.-W.A., Tai, Y.C., Wang, X.L., Holmes, H., Chow, J.C., Watson, J.G., (2015). Evaluating atmospheric deposition of particulate matter in the Lake Tahoe Basin. USDA Forest Service, Reno, NV. [https://www.fs.fed.us/psw/partnerships/tahoescience/p094\\_chen.shtml](https://www.fs.fed.us/psw/partnerships/tahoescience/p094_chen.shtml)
- Chen, L.-W.A., Malamakal, T., Wang, X.L., Green, M.C., Chow, J.C., Watson, J.G., (2014). Evaluation of prescribed burning emissions and impacts on air quality in the Lake Tahoe basin. Desert Research Institute, Reno, NV. [http://www.fs.fed.us/psw/partnerships/tahoescience/documents/p076\\_PrescribedBurningReport\\_20141231.pdf](http://www.fs.fed.us/psw/partnerships/tahoescience/documents/p076_PrescribedBurningReport_20141231.pdf)
- Chow, J.C., Watson, J.G., (2014). Quality manual: Environmental Analysis Facility (EAF). Desert Research Institute, Reno, NV.
- Harrison, R.M., Pant, P., Khare, M., Chow, J.C., Watson, J.G., (2014). Receptor modelling of particulate air pollutants: Progress report. University of Birmingham, Birmingham, UK.
- Wang, X.L., Kohl, S.D., Chow, J.C., Watson, J.G., (2014). Progress report for Tier II heavy hauler emission measurement. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., (2014). Chemical source profiles for geological dust samples from the Athabasca Oil Sands Region. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., (2014). Windblown fugitive dust characterization in the Athabasca Oil Sands Region. Desert Research Institute, Reno, NV.
- Chow, J.C., Lowenthal, D.H., Watson, J.G., Chen, L.-W.A., (2013). Source apportionment of SEARCH PM<sub>2.5</sub> measurements with organic markers. Desert Research Institute, Reno, NV.
- Green, M.C., Wang, X.L., Watson, J.G., Chow, J.C., Kohl, S.D., (2013). Spatial distribution of wintertime PM<sub>2.5</sub> in Sparks, NV: Analysis of air quality and meteorological data. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., Sodeman, D.A., (2013). Measurement of real-world stack emissions in the Athabasca Oil Sands Region with a dilution sampling system during August, 2008. Desert Research Institute, Reno, NV, USA.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., Gronstal, S., Zielinska, B., (2013). Measurement of real-world stack emissions in the Athabasca Oil Sands Region with a dilution sampling system during March, 2011. Desert Research Institute, Reno, NV, USA.
- Watson, J.G., Chow, J.C., Wang, X.L., Zielinska, B., Kohl, S.D., Gronstal, S., (2013). Characterization of real-world emissions from nonroad mining trucks in the Athabasca Oil Sands Region during September, 2009. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Lowenthal, D.H., Kohl, S.D., Gronstal, S., (2013). Characterization of real-world emissions from nonroad mining trucks in the Athabasca Oil Sands Region during October, 2010. Desert Research Institute, Reno, NV.
- Reynolds, S., Blanchard, C.L., Lehrman, D.E., Reid, S., Harley, R.A., Kleeman, M., Stoeckenius, T.E., Morris, R., Watson, J.G., Chow, J.C., (2012). Synthesis of CCOS and CRPAQS study findings. San Joaquin Valley Unified Air Pollution Control District, Fresno, CA. [https://www.researchgate.net/publication/316170523\\_Synthesis\\_of\\_CCOS\\_and\\_CRPAQS\\_study\\_findings](https://www.researchgate.net/publication/316170523_Synthesis_of_CCOS_and_CRPAQS_study_findings)
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Chen, L.-W.A., Wang, X.L., (2012). Reformulation of PM<sub>2.5</sub> mass reconstruction assumptions for the San Joaquin Valley. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/234113065\\_Reformulation\\_of\\_PM\\_2.5\\_Mass\\_Reconstruction\\_Assumptions\\_for\\_the\\_San\\_Joaquin\\_Valley](https://www.researchgate.net/publication/234113065_Reformulation_of_PM_2.5_Mass_Reconstruction_Assumptions_for_the_San_Joaquin_Valley)
- Watson, J.G., Chow, J.C., Lowenthal, D.H., Chen, L.-W.A., Wang, X.L., (2012). Reformulation of PM<sub>2.5</sub> mass reconstruction assumptions for the San Joaquin Valley: Literature review. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Green, M.C., Kohl, S.D., (2011). Wintertime PM<sub>2.5</sub> source contributions in Reno, NV. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Lowenthal, D.H., Kohl, S.D., Gronstal, S., (2011). Real-world emissions from non-road mining trucks. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Wang, X.L., Kohl, S.D., Gronstal, S., (2011). Winter stack emissions measured with a dilution sampling system. Desert Research Institute, Reno, NV.
- Bertolin, G., Torcolini, J.C., Weaver, M.S., Watson, J.G., Chow, J.C., (2010). PM<sub>2.5</sub> concentrations, emissions, and source contributions near the Port of Los Angeles. SAIC International, San Diego, CA.
- Chen, L.-W.A., Tropp, R.J., Zhu, D., Chow, J.C., Zielinska, B., Watson, J.G., (2010). Characterizing and assessing the associations of hazardous air pollutant emissions with environmental indicators for the El Paso-Cd. Juarez Border Region. Desert Research Institute, Reno, NV.

- Chow, J.C., Watson, J.G., Cao, J.J., (2010). Proceedings: Leapfrogging Opportunities for Air Quality Improvement. Air & Waste Management Association, Pittsburgh, PA. <http://www.dri.edu/conference-proceedings>
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Wang, X.L., (2010). Measurement system evaluation for fugitive dust emissions detection and quantification. Desert Research Institute, Reno, NV. <https://www.researchgate.net/publication/235341860> Measurement system evaluation for fugitive dust emissions detection and quantification?ev=prf\_pub
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., (2009). Climate change - Characterization of black carbon and organic carbon air pollution emissions and evaluation of measurement methods Phase II: Characterization of black carbon and organic carbon source emissions. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Chen, L.-W.A., (2009). Climate change - Characterization of black carbon and organic carbon air pollution emissions and evaluation of measurement methods. Desert Research Institute, Reno, NV. [http://www.arb.ca.gov/research/apr/past/04-307\\_v2.pdf](http://www.arb.ca.gov/research/apr/past/04-307_v2.pdf)
- Lee, S.C., Watson, J.G., Chow, J.C., Ho, K.F., Wangberg, I., Lau, A.K.H., Guo, H., Liu, S., (2009). Feasibility of establishing air monitoring supersites in Hong Kong. Hong Kong Polytechnic University and the Desert Research Institute, Hong Kong, SAR, China. <https://www.researchgate.net/publication/235341633> Feasibility\_of\_establishing\_air\_monitoring\_supersites\_in\_Hong\_Kong
- Melero, A., Parra, M., Rodriguez-Hefner, E., Chen, L.-W.A., Tropp, R.J., Zhu, D.Z., Chow, J.C., Zielinska, B., Watson, J.G., Li, W.W., (2009). Characterizing and assessing the associations of hazardous air pollutant emissions with environmental indicators for the El Paso-Cd. Juarez border region. City of El Paso Environmental Services Department, El Paso, EX.
- Neulicht, R., Watson, J.G., Chow, J.C., Baldwin, T.A., (2009). Quality assurance project plan for pre-field laboratory quality assurance evaluation of PM<sub>2.5</sub> dilution monitoring device. Research Triangle Institute, Research Triangle Park, NC.
- Cao, J.J., Chow, J.C., Lee, S.C., Zhang, Z.J., Watson, J.G., An, Z.S., Qu, Y.Q., Hu, T.F., Dong, J.G., Rong, B., Ho, K.F., Zhao, K., Li, H., Zhang, T., (2008). Summary report on characterization of indoor air pollutants at Emperor Qin's Terra-Cotta Museum (in Chinese).
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Trimble, D.L., Ho, S.S.H., Veropoulos, K., (2008). Methods to assess carbonaceous aerosol sampling artifacts for IMPROVE and other long-term networks. Desert Research Institute, Reno, NV. [http://www.epa.gov/air/airtrends/specialstudies/20080822\\_improve\\_sampling\\_artifacts.pdf](http://www.epa.gov/air/airtrends/specialstudies/20080822_improve_sampling_artifacts.pdf)
- Chow, J.C., Watson, J.G., Barber, P., Moosmüller, H., Arnott, W.P., Chen, L.-W.A., Paredes-Miranda, G., (2008). EPA STAR Report: NCER Assistance Agreement Final Report Summary. Desert Research Institute, Reno, NV.
- Veranth, J.M., Perry, K., Pardyjak, E.R., Labban, R., Kaser, E., Watson, J.G., Chow, J.C., Etyemezian, V.R., Kohl, S.D., (2008). Characterization of PM<sub>2.5</sub> dust emissions from training/testing range operations. University of Utah, Salt Lake City, UT. <https://www.serdp-estcp.org/Program-Areas/Resource-Conservation-and-Climate-Change/Air-Quality/RC-1190/RC-1190>
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Kohl, S.D., Tropp, R.J., Trimble, D.L., Chancellor, S., Sodeman, D.A., Ho, S.S.H., (2008). Assessment of carbon sampling artifacts in the IMPROVE, STN/CSN, and SEARCH networks. Desert Research Institute, Reno, NV. [http://www.epa.gov/air/airtrends/specialstudies/20080822\\_sampling\\_artifact\\_rev.pdf](http://www.epa.gov/air/airtrends/specialstudies/20080822_sampling_artifact_rev.pdf)
- Watson, J.G., Chow, J.C., Chen, L.-W.A., DuBois, D.W., Kohl, S.D., Trimble, D.L., (2008). Monitoring and data analysis for the Minnesota Particulate Matter 2.5 (PM<sub>2.5</sub>) Study. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., DuBois, D.W., (2008). Receptor modeling for the Minnesota Particulate Matter 2.5 (PM<sub>2.5</sub>) Study. Desert Research Institute, Reno, NV.
- Watson, J.G., Miller, J.W., Moosmüller, H., Kuhns, H.D., Chow, J.C., Chang, O.M.C., Nussbaum, N.J., Mazzoleni, C., Zhu, D., Barber, P.W., Kemme, M.R., Cocker, D.R., (2008). Characterization of off-road diesel emissions of criteria pollutants. Desert Research Institute, Reno, NV and CE-CERT, University of California, Riverside, CA, Reno, NV. <https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Air-Emissions/WP-1336/WP-1336>
- Watson, J.G., Chow, J.C., (2008). Real-world emissions characterization and data uses in Northern Alberta. Desert Research Institute, Reno, NV, USA. [https://mafiadoc.com/real-world-emissions-characterization-and-data\\_598ea9f51723ddcc692f0fce.html](https://mafiadoc.com/real-world-emissions-characterization-and-data_598ea9f51723ddcc692f0fce.html)
- Watson, J.G., Baldwin, T.A., Chow, J.C., (2008). Quality assurance program plan for development of a wet, fine (PM<sub>2.5</sub>) particulate continuous monitoring system. Desert Research Institute, Reno, NV.

- Budd, A.L., Baldwin, T.A., Chow, J.C., Watson, J.G., Sodeman, D.A., (2007). Lab work to evaluate PM<sub>2.5</sub> collection with a dilution monitoring device for data gathering for emission factor development. Baldwin Environmental, Inc. and Desert Research Institute, Reno, NV.
- Watson, J.G., Barber, P.W., Chang, M.-C.O., Chow, J.C., Etyemezian, V.R., Green, M.C., Keislar, R.E., Kuhns, H.D., Mazzoleni, C., Moosmüller, H., Nolic, D., Whitaker, C.E., (2007). Southern Nevada Air Quality Study - Final Report. Desert Research Institute, Reno, NV. <https://rosap.nrl.bts.gov/view/dot/5549>
- Watson, J.G., Miller, J.W., Moosmüller, H., Kuhns, H.D., Chow, J.C., Chang, O.M.C., Nussbaum, N.J., Mazzoleni, C., Zhu, D., Barber, P.W., Kemme, M.R., Cocker, D.R., (2007). Characterization of off-road diesel emissions of criteria pollutants CY2007 annual report, WP-1336. Desert Research Institute, Reno, NV and CE-CERT, University of California, Riverside, CA, Reno, NV.
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Kohl, S.D., (2007). Non-destructive XRF and SEM analyses on beta attenuation filters for elemental concentrations at the Craig Road monitor. Desert Research Institute, Reno, NV.
- Budd, A.L., Baldwin, T.A., Chow, J.C., Watson, J.G., Sodeman, D.A., (2006). Quality assurance project plan for development of a fine and coarse particulate continuous emissions monitoring system. Baldwin Environmental Inc., Reno, NV.
- Chow, J.C., Watson, J.G., Doraiswamy, P., Chen, L.-W.A., Sodeman, D.A., Ho, S.S.H., Tropp, R.J., Kohl, S.D., Trimble, D.L., Fung, K.K., (2006). Climate change - Characterization of black carbon and organic carbon air pollution emissions and evaluation of measurement methods, Phase I. Desert Research Institute, Reno, NV. [http://www.arb.ca.gov/research/apr/past/04-307\\_v1.pdf](http://www.arb.ca.gov/research/apr/past/04-307_v1.pdf)
- Chow, J.C., Watson, J.G., Chen, L.-W.A., (2006). Contemporary inorganic and organic speciated particulate matter source profiles for geological material, motor vehicles, vegetative burning, industrial boilers, and residential cooking. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341515\\_Contemporary\\_inorganic\\_and\\_organic\\_speciated\\_particulate\\_matter\\_source\\_profiles\\_for\\_geological\\_material\\_motor\\_vehicles\\_vegetative\\_burning\\_industrial\\_boilers\\_and\\_residential\\_cooking](https://www.researchgate.net/publication/235341515_Contemporary_inorganic_and_organic_speciated_particulate_matter_source_profiles_for_geological_material_motor_vehicles_vegetative_burning_industrial_boilers_and_residential_cooking)
- Chow, J.C., Watson, J.G., Doraiswamy, P., Chen, L.-W.A., Sodeman, D.A., Ho, S.S.H., Kohl, S.D., Trimble, D.L., Voepel, H., Fung, K.K., (2006). Climate change - Characterization of black carbon and organic carbon air pollution emissions and evaluation of measurement methods. Phase I: Method intercomparison. Volume I: Interim report. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Kohl, S.D., Voepel, H.E., Chen, L.-W.A., (2006). Measurement and validation for the twelve month particulate matter study in Hong Kong. Desert Research Institute, Reno, NV.
- Fujita, E.M., Zielinska, B., Arnott, W.P., Campbell, D.E., Reinhart, L., Sagebiel, J.C., Chow, J.C., (2006). Gasoline/Diesel PM Split Study: Source and ambient sampling, chemical analysis, and apportionment phase, final report. Desert Research Institute, Reno, NV.
- Fujita, E.M., Campbell, D.E., Zielinska, B., Chow, J.C., (2006). Kansas City vehicle characterization study - Effect of sampling temperature on chemical speciation, Draft report. Desert Research Institute, Reno, NV.
- Fujita, E.M., Campbell, D.E., Zielinska, B., Arnott, W.P., Chow, J.C., (2006). Exposure to air toxics in mobile source dominated microenvironments. Desert Research Institute, Reno, NV.
- Tropp, R.J., Chow, J.C., Watson, J.G., Doraiswamy, P., Sodeman, D.A., Fung, K.K., (2006). Climate change - Characterization of black carbon and organic carbon air pollution emissions and evaluation of measurement methods. Phase I: Method intercomparison. Volume II: Quality Assurance Project Plan (QAPP). Desert Research Institute, Reno, NV.
- Watson, J.G., Miller, W., Moosmüller, H., Kuhns, H.D., Chow, J.C., Zhu, D., Cocker, D.R., (2006). Characterization of off-road diesel emissions of criteria pollutants CY2006 annual report, WP-1336. Desert Research Institute, Reno, NV and CE-CERT, University of California, Riverside, CA, Reno, NV.
- Chang, M.-C.O., Chow, J.C., Kohl, S.D., Voepel, H., Watson, J.G., (2005). Sampling and analysis for the Lake Tahoe atmospheric deposition study. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Chen, L.-W.A., Chang, M.-C.O., Paredes-Miranda, G., (2005). Comparison of the DRI/OGC and Model 2001 Thermal/Optical carbon analyzers. Desert Research Institute, Reno, NV. [http://vista.cira.colostate.edu/improve/Publications/GrayLit/013\\_CarbonAnalyzer/IMPROVECarbonAnalyzerAssessment.pdf](http://vista.cira.colostate.edu/improve/Publications/GrayLit/013_CarbonAnalyzer/IMPROVECarbonAnalyzerAssessment.pdf)
- Chow, J.C., Chen, L.-W.A., Lowenthal, D.H., Doraiswamy, P., Park, K., Kohl, S.D., Trimble, D.L., Watson, J.G., (2005). California Regional PM<sub>10</sub>/PM<sub>2.5</sub> Air Quality Study (CRPAQS) - Initial data analysis of field program measurements. Desert Research Institute, Reno, NV. <http://www.arb.ca.gov/airways/crpaqs/DA/Final/DRIDraftFinal.pdf>

- Chow, J.C., Chang, M.-C.O., Green, M.C., Nikolich, G., Trimble, D.L., Kohl, S.D., Watson, J.G., (2005). Monitoring and analysis of PM<sub>2.5</sub> and PM<sub>10</sub> in Apex, NV. Desert Research Institute, Reno, NV.
- Fujita, E.M., Campbell, D.E., Zielinska, B., Chow, J.C., (2005). Kansas City PM Characterization Study. Round 1 Testing Report - Addendum A, Chemical Speciation. Desert Research Institute, Reno, NV.
- Fujita, E.M., Campbell, D.E., Centric, A., Arnott, W.P., Chow, J.C., Zielinska, B., (2005). Exposure to air toxics in mobile source dominated microenvironments, year-2 annual report. Desert Research Institute, Reno, NV.
- Hopke, P.K., Cowling, E., Poirot, R.L., Allen, G., Chow, J.C., Croes, B., Demerjian, K., Eatough, D.J., Edgerton, E., Felton, H.D., Husar, R.B., Ito, K., Kenski, D., Lumley, T., McMurry, P., Prather, K., Russell, A., Turner, J., White, W.H., Zeng, Y.S., (2005). EPA's final draft national ambient air monitoring strategy: An advisory by the ambient air monitoring and methods subcommittee of the EPA Clean Air Science Advisory Committee. U.S. Environmental Protection Agency, Washington, DC. [https://yosemite.epa.gov/sab/sabproduct.nsf/FA9EBA6E90F17DBC8525700B005520A5/\\$File/SAB-CASAC-05-006\\_unsigned.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/FA9EBA6E90F17DBC8525700B005520A5/$File/SAB-CASAC-05-006_unsigned.pdf)
- Kuhns, H.D., Mazzoleni, C., Chang, M.-C.O., Chow, J.C., Parthasarathy, G., Etyemezian, V.R., Moosmüller, H., Barber, P.W., Nussbaum, N.J., Nathagoundenpalayam, S.K., Kohl, S.D., Nikolic, D., Watson, J.G., (2005). Meridian school bus biodiesel evaluation study. Desert Research Institute, Reno, NV. [http://www.researchgate.net/publication/228792289\\_Meridian\\_School\\_Bus\\_Biodiesel\\_Evaluation\\_Study\\_Final\\_Report](http://www.researchgate.net/publication/228792289_Meridian_School_Bus_Biodiesel_Evaluation_Study_Final_Report)
- Watson, J.G., Chow, J.C., Chen, L.-W.A., Lowenthal, D.H., Trimble, D.L., Park, K., (2005). Fresno supersite final report. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Doraiswamy, P., Chen, L.-W.A., Lowenthal, D.H., Trimble, D.L., Park, K., (2005). Quality assurance final report for the Fresno Supersite. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., (2005). Measurement and composition of ultrafine particles. Japanese Automobile Research Institute, Tokyo, Japan.
- Chang, M.-C.O., Chow, J.C., Watson, J.G., (2004). Characterization of particulate emissions from casting processes using a dilution sampling system. A preliminary study to optimize the dilution sampling system in a foundry process. Desert Research Institute, Reno, NV.
- Chow, J.C., (2004). Initial data analysis of CRPAQS field program measurement - Interim status report. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Barber, P., Moosmüller, H., Arnott, W.P., Chen, L.-W.A., Paredes-Miranda, G., (2004). Measurement, modeling and analysis methods for airborne carbonaceous fine particulate matter (PM<sub>2.5</sub>) - NCEER assistance agreement annual report summary. Desert Research Institute, Reno, NV.
- Chow, J.C., (2004). Chow and Watson presentations 2003 & 2004: Pune, Guangzhou, New Orleans, Endicott House, MARAMA.
- Chow, J.C., Watson, J.G., (2004). Ultrafine particles and human health. Japanese Automobile Research Institute, Tokyo, Japan.
- Fitz, D.R., Chow, J.C., Zielinska, B., (2004). Development of a gas and particulate matter organic speciation profile database. University of California, CE-CERT, Riverside, CA. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.558.9779&rep=rep1&type=pdf>
- Fujita, E.M., Campbell, D.E., Arnott, W.P., Zielinska, B., Chow, J.C., (2004). Exposure to air toxics in mobile source dominated microenvironments (draft study plan). Desert Research Institute, Reno, NV.
- Green, M.C., Chang, M.-C.O., Chow, J.C., Kuhns, H.D., Chen, L.-W.A., Nussbaum, N.J., Nikolic, D., Arnott, W.P., Kumar, S., Etyemezian, V.R., (2004). Las Vegas carbon source apportionment study, final report. Desert Research Institute, Reno, NV.
- Kuhns, H.D., Chang, M.-C.O., Chow, J.C., Etyemezian, V.R., Chen, L.-W.A., Nussbaum, N.J., Nathagoundenpalayam, S.K., Trimble, T.C., Kohl, S.D., MacLaren, M., Abu-Allaban, M., Gillies, J.A., Gertler, A.W., (2004). DRI Lake Tahoe Source Characterization Study. Desert Research Institute, Reno, NV.
- Richard, T., Bachmann, J.D., Cachier, H., Cary, R.A., Chow, J.C., Currie, L.A., Doddridge, B.G., Gundel, L.A., Fuller, K.A., Hannson, H.C., Hemming, B., Hildemann, L.M., Kamens, R.M., Lee, S., Liu, L.J.S., Mauderly, J.L., Mazurek, M.A., Malm, W.C., Moore, T., Moosmüller, H., Niessner, R., Pandis, S.N., Pankow, J.F., Puxbaum, H., Schauer, J.J., Watson, J.G., Zielinska, B., (2004). Atmospheric Particulate Carbon Exchange (APACE). Fort Lewis College, Durango, CO. <http://www.wrapair.org/APACE/default.htm>
- Veranth, J.M., Perry, K., Pardyjak, E.R., Labban, R., Yin, F., Veranth, M., Watson, J.G., Chow, J.C., Etyemezian, V.R., Kohl, S.D., Engelbrecht, J.P., (2004). Characterization of PM<sub>2.5</sub> dust emissions from training/testing range operations - Annual report. University of Utah, Salt Lake City, UT.

Watson, J.G., Chow, J.C., (2004). Fresno supersite study: Assistance agreement quarterly report summary for the period of January 1, 2004, to March 31, 2004. Desert Research Institute, Reno, NV.

Chow, J.C., Watson, J.G., Barber, P.W., Moosmüller, H., Arnott, W.P., Chen, L.-W.A., (2003). Understanding thermal and optical carbon analysis methods. Desert Research Institute, Reno, NV.

Chow, J.C., Zielinska, B., Watson, J.G., Kohl, S.D., (2003). Tong Liang PM<sub>2.5</sub> Characterization Study: Annual Report. Desert Research Institute, Reno, NV.

Chow, J.C., (2003). Trip to Beijing Oct. 2003 - Personal photographs 10/14-10/19/2003.

Chow, J.C., Watson, J.G., (2003). Guangzhou Technical Workshop, February 2003.

Fitz, D.R., Chow, J.C., Zielinska, B., (2003). Development of a gas and particulate matter organic speciation profile database. Desert Research Institute, Reno, NV.

Fujita, E.M., Watson, J.G., Chow, J.C., Zielinska, B., Islam, M., (2003). Demonstration PM study plan for Pune, Maharashtra, India. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341576\\_Demonstration\\_PM\\_study\\_plan\\_for\\_Pune\\_Maharashtra\\_India](https://www.researchgate.net/publication/235341576_Demonstration_PM_study_plan_for_Pune_Maharashtra_India)

Heij, B., Schneider, T., Chow, J.C., (2003). Energy and Environment Workshop: Energy Use, Spatial Planning and Air Quality. National Institute for Public Health and the Environment, Bilthoven, the Netherlands.

Tropp, R.J., Engelbrecht, J.P., Lowenthal, D.H., Kohl, S.D., Dickerson, A.L., DuBois, D.W., Chow, J.C., Watson, J.G., Countess, R.J., Countess, S.J., (2003). Assessment of PM<sub>2.5</sub> chemical speciation results for Texas: Part 1. Desert Research Institute, Reno, NV.

Veranth, J.M., Perry, K., Pardyjak, E.R., Labban, R., Seshadri, G., Yin, F., Veranth, M., Watson, J.G., Chow, J.C., Kohl, S.D., Engelbrecht, J.P., (2003). Characterization of PM<sub>2.5</sub> dust emissions from training/testing range operations - Annual Report 2003. University of Utah, Salt Lake City, UT.

Chow, J.C., Watson, J.G., Crow, D., Kohl, S.D., Kuhns, H.D., Etyemezian, V.R., Engelbrecht, J.P., (2002). Source profiles for the Big Bend Regional Aerosol Visibility and Observational (BRAVO) Source Characterization Study. Desert Research Institute, Reno, NV.

Chow, J.C., Watson, J.G., Kohl, S.D., Gonzi, M.P., Chen, L.-W.A., (2002). Measurements and validation for the twelve month particulate matter study in Hong Kong. Desert Research Institute, Reno, NV. [http://www.epd.gov.hk/epd/english/environmentinhk/air/studyreports/files/final\\_version\\_hkpdfinalreport\\_rev12-12-02.pdf](http://www.epd.gov.hk/epd/english/environmentinhk/air/studyreports/files/final_version_hkpdfinalreport_rev12-12-02.pdf)

Chow, J.C., Watson, J.G., Gonzi, M.P., Crow, D., (2002). Field audit of continuous gas and particle samplers - St. Louis Supersite - audit results and findings - draft final report. Desert Research Institute, Reno, NV.

Etyemezian, V.R., Kuhns, H.D., Gillies, J.A., Green, M.C., Chow, J.C., Kohl, S.D., Watson, J.G., (2002). Treasure Valley road dust study, Final report. Desert Research Institute, Las Vegas, NV. [https://www.researchgate.net/publication/235341555\\_Treasure\\_Valley\\_road\\_dust\\_study\\_Final\\_report](https://www.researchgate.net/publication/235341555_Treasure_Valley_road_dust_study_Final_report)

Green, M.C., Chow, J.C., Hecobian, A., Etyemezian, V.R., Kuhns, H.D., Watson, J.G., (2002). Las Vegas Valley visibility and PM<sub>2.5</sub> study - final report. Desert Research Institute, Las Vegas, NV.

Green, M.C., Chow, J.C., (2002). Plans for Carbon Apportionment in Clark County.

Louie, P.K.K., G.S.P., L., B.T.W., Y., Sin, D.W.M., Yu, J.Z., Lau, A., Bergin, M., Zheng, M., Chow, J.C., Watson, J.G., (2002). Twelve-month particulate matter study in Hong Kong. Hong Kong Environmental Protection Department, Wan Chai, Hong Kong, SAR, China. <http://www.epd.gov.hk/epd/english/environmentinhk/air/studyreports/files/content.pdf>

Veranth, J.M., Pardyjak, E.R., Seshadri, G., Labban, R., Watson, J.G., Chow, J.C., Etyemezian, V.R., Kohl, S.D., (2002). Characterization of PM<sub>2.5</sub> dust emissions from training/testing range operations, Annual report. University of Utah, Salt Lake City, UT.

Watson, J.G., Chow, J.C., Hering, S.V., Fitz, D.R., (2002). Final report for Phase I of Fresno supersite measurements. Desert Research Institute, Reno, NV.

Chow, J.C., Watson, J.G., Bowen, J.L., Gonzi, M.P., (2001). Field audit of continuous gas and particle samplers - St. Louis Supersite and Illinois EPA site - Summary report. Desert Research Institute, Reno, NV.

Fitz, D.R., Chow, J.C., (2001). Development of a gas and particulate matter organic speciation profile database - draft work plan. University of California CE-CERT, Riverside, CA.

Samet, J., Cass, G.R., Chow, J.C., Croes, B.E., Forster, R.E., Greenbaum, D.S., Hopke, P.K., Koutrakis, P., Krewski, D., Liou, P.J., Mauderly, J.L., McClellan, R.O., Oberdörster, G., Parkin, R., Penner, J.E., Schlesinger, R., Speizer, F.E., Utell, M., White, R., White, W.H., Wyzga, R.E., Yosie, T.F., (2001). Research Priorities for Airborne Particulate Matter III. Early Research Progress. National Research Council. National Academy Press, Washington, DC. [www.nap.edu/catalog/10065.html](http://www.nap.edu/catalog/10065.html)

- Veranth, J.M., Seshadri, G., Satya, S., Watson, J.G., Chow, J.C., Etyemezian, V.R., (2001). Characterization of PM<sub>2.5</sub> dust emissions from training/testing range operations, Annual report. University of Utah, Salt Lake City, UT.
- Watson, J.G., Chow, J.C., Fitz, D.R., Ouchida, P., (2001). Quality Assurance Project Plan, Fresno Supersite - Phase II (Revision 1). Desert Research Institute, Reno, NV.
- Brook, J.R., Woodhouse, S.A., Blanchard, P., Dann, T., Dabek-Zlotorzynska, E., Goldthorp, S., Wiebe, A., Li, S.M., Guise-Bagley, L., Hoff, R., Mamedov, A., Hanson-Smith, L., Nejedly, Z., Campbell, J.L., Chow, J.C., (2000). Chemical mass balance analyses of Toronto area PM<sub>2.5</sub>. Environment Canada, Toronto, ON, Canada.
- Kuhns, H.D., Chow, J.C., Watson, J.G., Crow, D., Green, M.C., Etyemezian, V.R., Stockwell, W.R., (2000). Secondary aerosol formation in the Treasure Valley: Study design and monitoring plan. Desert Research Institute, Las Vegas, NV.
- Kuhns, H.D., Etyemezian, V.R., Stockwell, W.R., Kohl, S.D., Green, M.C., Watson, J.G., Chow, J.C., (2000). Treasure Valley secondary aerosol study - final report. Desert Research Institute, Las Vegas, NV.
- Watson, J.G., Chow, J.C., (2000). Reconciling urban fugitive dust emissions inventory and ambient source contribution estimates: Summary of current knowledge and needed research. Desert Research Institute, Reno, NV. <http://www.epa.gov/ttn/chief/efdocs/fugitivedust.pdf>
- Watson, J.G., Chow, J.C., Kohl, S.D., Kuhns, H.D., Robinson, N.F., Frazier, C.A., Etyemezian, V.R., (2000). Annual report for the Robbins Particulate Study - October 1997 through September 1998. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Kohl, S.D., Kuhns, H.D., Robinson, N.F., Frazier, C.A., Etyemezian, V.R., (1999). Annual report for the Robbins Particulate Study: October 1996 through September 1997. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., (1999). BRAVO protocol for chemical source characterization of particle emitters in Texas and Mexico. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., (1998). Guideline on speciated particulate monitoring. Desert Research Institute, Reno, NV. <http://epa.gov/ttn/amtic/files/ambient/pm25/spec/drispec.pdf>
- Chow, J.C., Zielinska, B., Watson, J.G., Fujita, E.M., Richards, H.W., Neff, W.D., Dietrich, D., Hering, S.V., (1998). Northern Front Range Air Quality Study. Volume A: Ambient measurements. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341491\\_Northern\\_Front\\_Range\\_Air\\_Quality\\_Study\\_Volume\\_A\\_Ambient\\_measurements](https://www.researchgate.net/publication/235341491_Northern_Front_Range_Air_Quality_Study_Volume_A_Ambient_measurements)
- Chow, J.C., Koutrakis, P., (1998). Proceedings-PM<sub>2.5</sub>: A Fine Particle Standard. Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., (1998). Measurement and modeling methods for assessing environmental impacts of fugitive dust and other sources. Desert Research Institute, Reno, NV.
- Fujita, E.M., Watson, J.G., Chow, J.C., Robinson, N.F., Richards, L.W., Kumar, N., (1998). Northern Front Range Air Quality Study. Volume C: Source apportionment and simulation methods and evaluation. Desert Research Institute, Reno, NV. <https://www.dri.edu/images/stories/editors/eafeditor/Fujitaetal1998NFRAQSCMB.pdf>
- Tropp, R.J., Kohl, S.D., Chow, J.C., Frazier, C.A., (1998). Final report for the Texas PM<sub>2.5</sub> sampling and analysis study. Desert Research Institute, Reno, NV.
- Watson, J.G., Robinson, N.F., Lewis, C.W., Coulter, C.T., Chow, J.C., Fujita, E.M., Conner, T.L., Pace, T.G., (1998). CMB8 applications and validation protocol for PM<sub>2.5</sub> and VOCs. Desert Research Institute, Reno, NV. [http://www.epa.gov/scram001/models/receptor/CMB\\_Protocol.pdf](http://www.epa.gov/scram001/models/receptor/CMB_Protocol.pdf)
- Watson, J.G., Chow, J.C., Edgerton, S.A., Ruiz, M.E., (1998). Program plan for the Mexico City Aerosol Characterization Study. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Moosmüller, H., Green, M.C., Frank, N.H., Pitchford, M.L., (1998). Guidance for using continuous monitors in PM<sub>2.5</sub> monitoring networks. U.S. Environmental Protection Agency, Research Triangle Park, NC. <http://www.epa.gov/ttn/amtic/pmpolgud.html>
- Watson, J.G., Fujita, E.M., Chow, J.C., Zielinska, B., Richards, L.W., Neff, W.D., Dietrich, D., (1998). Northern Front Range Air Quality Study. Final report. Desert Research Institute, Reno, NV. <https://www.dri.edu/images/stories/editors/eafeditor/Watsonetal1998NFRAQSFinal.pdf>
- Zielinska, B., McDonald, J.D., Hayes, T., Chow, J.C., Fujita, E.M., Watson, J.G., (1998). Northern Front Range Air Quality Study, Volume B: Source measurements. Desert Research Institute, Reno, NV. <https://www.dri.edu/images/stories/editors/eafeditor/Zielinskaetal1998NFRAQS.pdf>
- Chow, J.C., Watson, J.G., (1997). Imperial Valley/Mexicali Cross Border PM<sub>10</sub> Transport Study. Desert Research Institute, Reno, NV.

- [https://www.researchgate.net/publication/235341485\\_Imperial\\_ValleyMexicali\\_Cross\\_Border\\_PM\\_10\\_Transport\\_Study?ev=srch\\_pub](https://www.researchgate.net/publication/235341485_Imperial_ValleyMexicali_Cross_Border_PM_10_Transport_Study?ev=srch_pub)
- Chow, J.C., Watson, J.G., (1997). Fugitive dust and other source contributions to PM<sub>10</sub> in Nevada's Las Vegas Valley. Desert Research Institute, Reno, NV.
- Chow, J.C., Egami, R.T., (1997). San Joaquin Valley Integrated Monitoring Study: Documentation, evaluation, and descriptive analysis of PM<sub>10</sub>, PM<sub>2.5</sub>, and precursor gas measurements - Technical Support Studies No. 4 and No. 8 - Final report. Desert Research Institute, Reno, NV.
- Pitchford, M.L., Chow, J.C., Watson, J.G., Moore, C.T., Campbell, D.E., Eldred, R.A., Vanderpool, R.W., Ouchida, P., Hering, S.V., Frank, N.H., (1997). Prototype PM<sub>2.5</sub> federal reference method field studies report - An EPA staff report. U.S. Environmental Protection Agency, Las Vegas, NV. <http://www.epa.gov/ttn/amtic/pmfrm.html>
- Watson, J.G., Chow, J.C., Rogers, C.F., Green, M.C., Kohl, S.D., Frazier, C.A., Robinson, N.F., DuBois, D.W., (1997). Annual report for the Robbins Particulate Study - October 1995 through September 1996. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., DuBois, D.W., Green, M.C., Frank, N.H., Pitchford, M.L., (1997). Guidance for network design and optimal site exposure for PM<sub>2.5</sub> and PM<sub>10</sub>. U.S. Environmental Protection Agency, Research Triangle Park, NC. <http://www.epa.gov/ttn/amtic/files/ambient/pm25/network/r-99-022.pdf>
- Watson, J.G., Chow, J.C., Rogers, C.F., DuBois, D.W., Cahill, C.F., (1997). Analysis of historical PM<sub>10</sub> and PM<sub>2.5</sub> measurements in Central California. Desert Research Institute, Reno, NV.
- Watson, J.G., Robinson, N.F., Lewis, C.W., Coulter, C.T., Chow, J.C., Fujita, E.M., Lowenthal, D.H., Conner, T.L., Henry, R.C., Willis, R.D., (1997). Chemical mass balance receptor model version 8 (CMB) user's manual. Desert Research Institute, Reno, NV. [www.dri.edu/images/stories/editors/eafeditor/Watsonetal1997CMB8Manual.pdf](http://www.dri.edu/images/stories/editors/eafeditor/Watsonetal1997CMB8Manual.pdf)
- Watson, J.G., Ashbaugh, L.L., Casuccio, G.S., Chow, J.C., Francis, S., Gaffney, P., Fine, J., Gill, T., Gillies, J.A., Higashi, R., Hopke, P.K., Kennedy, A., Lowenthal, D.H., Magliano, K.L., Roth, P.M., Sagebiel, J.C., Shimp, D., VanCuren, R.A., Zielinska, B., Ziman, S.D., Zobeck, T., (1997). The Fugitive Dust Characterization Study (FDCCS): Potential methods and research needs for receptor methods to distinguish among fugitive dust sources. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., (1997). Investigacion sobre particula A Y deterioro atmosferico - Aerosol and visibility evaluation research - 1997 annual report. Desert Research Institute, Reno, NV.
- Chow, J.C., Walsh, P.A., Audrain, A., Sampson, W., Lancaster, N., (1996). Status of women implementation plan. Desert Research Institute, Reno, NV.
- Gillies, J.A., Chow, J.C., Nickling, W.G., (1996). Resuspension of particles by wind: Research initiatives. Desert Research Institute, Reno, NV.
- Koracin, D., Isakov, V., Chow, J.C., Uliasz, M., (1996). Atmospheric and dispersion modeling in the Pocatello area. Desert Research Institute, Reno, NV.
- Miller, P.R., Poth, M.A., Bytnerowicz, A., Fenn, M.E., Temple, P.J., Chow, J.C., Watson, J.G., Frazier, C., Green, M.C., Johnson, D.W., (1996). Ecosystem level alterations in soil nutrient cycling: An integrated measure of cumulative effects of acidic deposition on a mixed conifer forest in Southern California. USDA Forest Service, Pacific Southwest Research Station, Riverside, CA.
- Watson, J.G., Chow, J.C., Gillies, J.A., Moosmüller, H., Rogers, C.F., DuBois, D.W., Derby, J.C., (1996). Effectiveness demonstration of fugitive dust control methods for public unpaved roads and unpaved shoulders on paved roads. Desert Research Institute, Reno, NV. [http://www.arb.ca.gov/airways/Documents/reports/dri\\_dustcontrol.pdf](http://www.arb.ca.gov/airways/Documents/reports/dri_dustcontrol.pdf)
- Watson, J.G., Blumenthal, D.L., Chow, J.C., Cahill, C.F., Richards, L.W., Dietrich, D., Morris, R., Houck, J.E., Dickson, R.J., Andersen, S.R., (1996). Mt. Zirkel Wilderness Area reasonable attribution study of visibility impairment, Vol. II: Results of data analysis and modeling. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341794\\_Mt\\_Zirkel\\_Wilderness\\_Area\\_reasonable\\_attribution\\_study\\_of\\_visibility\\_impairment\\_Vol\\_II\\_Results\\_of\\_data\\_analysis\\_and\\_modeling](https://www.researchgate.net/publication/235341794_Mt_Zirkel_Wilderness_Area_reasonable_attribution_study_of_visibility_impairment_Vol_II_Results_of_data_analysis_and_modeling)
- Chow, J.C., Watson, J.G., Divita, F., Jr., (1995). Evaluation of source profile development in the Vaal Triangle and Eastern Transvaal Highveld, South Africa. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Egami, R.T., Divita, F., Jr., (1995). Las Vegas Valley PM<sub>10</sub> Study - Volume I: Program plan. Desert Research Institute, Reno, NV.
- Gillies, J.A., Chow, J.C., (1995). Resuspension of particles by wind: A literature review. Desert Research Institute, Reno, NV.
- Watson, J.G., Rogers, C.F., Chow, J.C., (1995). PM<sub>10</sub> and PM<sub>2.5</sub> variations in time and space. Desert Research Institute, Reno, NV.

- Watson, J.G., Blumenthal, D.L., Chow, J.C., Cahill, C.F., Cal, M.P., Divita, F., Jr., Freeman, D.L., Gillies, J.A., Richards, L.W., Chinkin, L.R., Lindsey, C., Prouty, J., Dietrich, D., Cobb, D., Houck, J.E., Dickson, R.J., Andersen, S.R., (1995). Mt. Zirkel Wilderness Area reasonable attribution study of visibility impairment - Volume I: Study plan. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Solomon, P.A., (1995). Transactions-Regional Photochemical Measurement and Modeling Studies. Air & Waste Management Association, Pittsburgh, PA.
- Chow, J.C., Watson, J.G., (1994). Contemporary source profiles for geological material and motor vehicle emissions. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341474\\_Contemporary\\_source\\_profiles\\_for\\_geological\\_material\\_and\\_motor\\_vehicle\\_emissions](https://www.researchgate.net/publication/235341474_Contemporary_source_profiles_for_geological_material_and_motor_vehicle_emissions)
- Chow, J.C., Watson, J.G., (1994). Work plan to improve PM<sub>10</sub> fugitive dust emissions inventory. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., (1994). Guidelines for PM<sub>10</sub> sampling and analysis applicable to receptor modeling. Desert Research Institute for U.S. Environmental Protection Agency, Reno, NV. <https://nepis.epa.gov/Exe/ZyPDF.cgi/00002TI4.PDF?Dockkey=00002TI4.PDF>
- Divita, F., Jr., Pritchett, L.C., Chow, J.C., Watson, J.G., Frazier, C.A., (1994). Thermal/optical reflectance carbon analysis of aerosol filter samples. DRI Standard Operating Procedure #2-204.4. Desert Research Institute, Reno, NV.
- Main, H.H., Richards, L.W., Chinkin, L.R., Evans, V.A., Chow, J.C., Divita, F., (1994). PM<sub>10</sub> source receptor modeling study for the Seattle-Tacoma area. Sonoma Technology, Inc., Santa Rosa, CA.
- Chow, J.C., Watson, J.G., Fujita, E.M., Lowenthal, D.H., Lu, Z., Frazier, C.A., Fairley, D., de Mandel, R., Long, G., Cordova, J., (1993). Results from the 1991-92 pilot study of wintertime PM<sub>10</sub> in the San Francisco Bay Area. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., de Mandel, R., Chan, W., Cordova, J., Fairley, D., Fujita, E.M., Levaggi, D.A., Long, G., Perardi, T., Rothenberg, M., (1993). Measurements and modeling of PM<sub>10</sub> in San Francisco's Bay Area, Volume I: Program plan. Desert Research Institute, Reno, NV.
- Chow, J.C., (1993). Laboratory analysis data for the Tucson Urban Haze Study. Desert Research Institute, Reno, NV.
- Chow, J.C., Fujita, E.M., Lu, Z., (1993). Laboratory analysis data for the Bay Area PM<sub>10</sub> Study (Phase I). Desert Research Institute, Reno, NV.
- Gertler, A.W., Harrington, R.F., Chow, J.C., Watson, J.G., Tanner, R.L., Lu, Z., Henry, R.C., Grosjean, D., (1993). Receptor modeling of acidic air pollutants and oxidants to forested regions in the Sierra Nevada. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Lu, Z., Gertler, A.W., (1993). Particulate and gaseous organic receptor modeling for the Southern California Air Quality Study. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Magliano, K.L., (1993). Air quality data analysis methods (AIR-228). Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Coulombe, W.G., Grantz, D., Farber, R.J., Ashbaugh, L.L., Zeldin, M., (1993). Program plan for demonstrating effectiveness of windblown dust controls in Antelope Valley. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., (1993). Visibility in the Mojave Desert during the summer of 1990: Analysis of data from the Visibility Impact Study (VIS). Desert Research Institute, Reno, NV.
- Chow, J.C., Egami, R.T., (1992). Evaluation of the Vaal Air Characterization Study. Desert Research Institute, Reno, NV.
- Chow, J.C., Pritchett, L.C., Frazier, C.A., Watson, J.G., Gertler, A.W., (1992). Quality assurance plan of light absorption and carbon analyses for the Clean Air Status and Trends Network (CASTNET). Desert Research Institute, Reno, NV. <http://www.dri.edu/images/stories/editors/eafeditor/Chowetal1992CASTNetProgPlan.pdf>
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Lu, Z., Frazier, C.A., Pritchett, L.C., Hinsvark, B.A., (1992). San Joaquin Valley Air Quality Study (SJVAQS)/Atmospheric Utility Signatures - Predictions and Experiment (AUSPEX) monitoring and analysis for aerosols and visibility, Volume III: Aerosol measurements and data bases, Final report. Desert Research Institute, Reno, NV. <http://www.dri.edu/images/stories/editors/eafeditor/Chowetal1990SJVAQSAUSPEXVol1.pdf>
- Chow, J.C., Ono, D.M., (1992). Transactions-PM<sub>10</sub> Standards and Nontraditional Particulate Source Controls. Air & Waste Management Association, Pittsburgh, PA.
- Egami, R.T., Chow, J.C., (1992). Systems and performance audits of the Vaal Air Characterization Study. Desert Research Institute, Reno, NV.

- Egami, R.T., Bowen, J.L., Chow, J.C., Watson, J.G., Schmidt, S., Jones, G., (1992). Program plan for Naval Weapons Center Visibility Impact (VIS) Study, summer 1990. Desert Research Institute, Reno, NV.
- Tegen, A.M., Annegarn, H.J., Chow, J.C., Müller, C., (1992). Final report on the Vaal Air Characterization Study. Annegarn Environmental Research, Johannesburg, South Africa.
- Chow, J.C., Watson, J.G., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Sloane, C.S., (1991). The 1989-90 Phoenix PM<sub>10</sub> Study, Volume II: Source apportionment. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Hinsvark, B.A., Frazier, C.A., Lowenthal, D.H., Chandra, S.F., Pritchett, L.C., (1991). Standard operating procedures for the Imperial Valley/Mexicali PM<sub>10</sub> source apportionment study. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Sloane, C.S., (1991). The 1989-90 Pilot Tucson PM<sub>10</sub> Study, Volume II: Source apportionment. Desert Research Institute, Reno, NV.
- Pritchett, L.C., Purcell, R.G., Chow, J.C., Watson, J.G., (1991). DRI Model 4000X Thermal/Optical Carbon Analyzer, Owner's Manual. Desert Research Institute, Reno, NV.
- Pritchett, L.C., Purcell, R.G., Chow, J.C., Watson, J.G., (1991). DRI Model 4000X Thermal/Optical Carbon Analyzer, Maintenance and Troubleshooting Manual. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Chinkin, L.R., Sloane, C.S., (1991). The 1989-90 Phoenix, AZ Urban Haze Study. Volume II: The apportionment of light extinction to sources. Desert Research Institute, Reno, NV. <http://www.dri.edu/images/stories/editors/cafeditor/Watsonetal1991PhoenixUrbanHazeVol2Results.pdf>
- Watson, J.G., Chow, J.C., Egami, R.T., Bowen, J.L., Frazier, C.A., Gertler, A.W., Lowenthal, D.H., Fung, K.K., (1991). Measurements of dry deposition parameters for the California Acid Deposition Monitoring Program. Desert Research Institute, Reno, NV. <http://www.arb.ca.gov/research/apr/past/a6-076-32.pdf>
- Watson, J.G., Chow, J.C., Frazier, C.A., Lowenthal, D.H., (1991). Program plan for an Imperial Valley/Mexicali PM<sub>10</sub> source apportionment study. Desert Research Institute, Reno, NV.
- Bowen, J.L., Watson, J.G., Chow, J.C., Egami, R.T., Frazier, C.A., Gertler, A.W., (1990). Field operations manual for the California Acid Deposition Monitoring Program: Meteorology, ozone, and dry deposition. Desert Research Institute, Reno, NV.
- Chan, M., Moon, K.C., Chow, J.C., (1990). PM<sub>10</sub> monitoring in the San Joaquin Valley. AV Projects, Inc., Monrovia, CA.
- Chow, J.C., Richards, L.W., (1990). San Joaquin Valley Air Quality Study (SJVAQS)/Atmospheric Utility Signatures - Predictions and Experiment (AUSPEX) monitoring and analysis for aerosols and visibility, Volume I: Program plan. Desert Research Institute, Reno, NV. <http://www.dri.edu/images/stories/editors/cafeditor/Chowetal1990SJVAQSAUSPEXVol1.pdf>
- Chow, J.C., Watson, J.G., Bowen, J.L., Frazier, C.A., Gertler, A.W., Hinsvark, B.A., Fung, K.K., (1990). Laboratory operations manual for the California Acid Deposition Monitoring Program: Sample pretreatment, sample preparation, and chemical analysis, Final report. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341458\\_Laboratory\\_Operations\\_Manual\\_for\\_the\\_California\\_Acid\\_Deposition\\_Monitoring\\_Program\\_Sample\\_pretreatment\\_sample\\_preparation\\_and\\_chemical\\_analysis\\_Final\\_report](https://www.researchgate.net/publication/235341458_Laboratory_Operations_Manual_for_the_California_Acid_Deposition_Monitoring_Program_Sample_pretreatment_sample_preparation_and_chemical_analysis_Final_report)
- Chow, J.C., Richards, L.W., (1990). San Joaquin Valley Air Quality Study/Atmospheric Utility Signatures - Predictions and Experiment (AUSPEX), Part E: Monitoring and analysis for aerosols and visibility, Volume II: Standard Operating Procedures. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Lowenthal, D.H., Pritchett, L.C., Richards, L.W., (1990). San Joaquin Valley Air Quality Study, Phase 2: PM<sub>10</sub> modeling and analysis, Volume I: Receptor modeling source apportionment. Desert Research Institute, Reno, NV.
- Frazier, C.A., Watson, J.G., Chow, J.C., Robinson, N.F., Bowen, J.L., Gertler, A.W., Lowenthal, D.H., Fung, K.K., (1990). Data processing and data validation operations manual for the California Acid Deposition Monitoring Program: Meteorology, ozone, and dry deposition data. Desert Research Institute, Reno, NV.
- Freeman, D.L., Watson, J.G., Chow, J.C., Pritchett, L.C., Lu, Z., (1990). PM<sub>10</sub> source apportionment study for Gold Quarry Mine. Desert Research Institute, Reno, NV.
- Gertler, A.W., Watson, J.G., Chow, J.C., (1990). Program plan for receptor modeling of acidic air pollutants and oxidants to forested regions in the Sierra Nevada. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Egami, R.T., Bowen, J.L., Frazier, C.A., Gertler, A.W., Fung, K.K., (1990). Program plan for the California Dry Deposition Monitoring Program. Desert Research Institute, Reno, NV.

- Watson, J.G., Chow, J.C., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Chinkin, L.R., Sloane, C.S., (1990). The 1989-90 Phoenix Urban Haze Study, Volume I: Program plan. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Chinkin, L.R., Sloane, C.S., (1990). The 1989-90 Phoenix PM<sub>10</sub> Study, Volume I: Program plan. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Richards, L.W., Haase, D.L., McDade, C., Dietrich, D.L., Moon, D., Chinkin, L.R., Sloane, C.S., (1990). The 1989-90 Pilot Tucson Urban Haze Study, Volume I: Program plan. Desert Research Institute, Reno, NV.
- Watson, J.G., Rogers, C.F., Chow, J.C., Mathai, C.V., Tombach, I.H., Zwicker, J.O., (1990). An intercomparison of aerosol samplers used in western visibility studies. Desert Research Institute, Reno, NV.
- Watson, J.G., Robinson, N.F., Chow, J.C., Henry, R.C., Kim, B.M., Nguyen, Q., Meyer, E.L., Pace, T.G., (1990). Receptor model technical series, Volume III (1989 revision): CMB7 user's manual. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Pritchett, L.C., Frazier, C.A., Houck, J.E., (1989). Pacific Northwest Source Profile Project, Volume II: Source profiles. Desert Research Institute, Reno, NV.
- Chow, J.C., Pritchett, L.C., Lu, Z., Hinsvark, B.A., Chandra, S.F., (1989). A neighborhood-scale study of PM<sub>10</sub> source contributions in Rubidoux, CA, Volume I: Data interpretation. Desert Research Institute, Reno, NV.
- Chow, J.C., Pritchett, L.C., Lu, Z., Hinsvark, B.A., Chandra, S.F., (1989). A neighborhood-scale study of PM<sub>10</sub> source contributions in Rubidoux, CA, Volume II: Ambient concentrations data base. Desert Research Institute, Reno, NV.
- Chow, J.C., Pritchett, L.C., Lu, Z., Hinsvark, B.A., Chandra, S.F., (1989). A neighborhood-scale study of PM<sub>10</sub> source contributions in Rubidoux, CA, Volume III: Chemical mass balance receptor modeling results. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Egami, R.T., Frazier, C.A., Lu, Z., (1989). The State of Nevada Air Pollution Study (SNAPS): Executive summary. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Pritchett, L.C., Frazier, C.A., Houck, J.E., (1989). Pacific Northwest Source Profile Project, Volume I: Chemical analysis. Desert Research Institute, Reno, NV.
- Core, J.E., Rau, J.A., Chow, J.C., Watson, J.G., Pritchett, L.C., Frazier, C.A., Kalman, D., Houck, J.E., Ward, D., Cooper, J.A., Redline, D., (1989). Receptor modeling source profile development for the Pacific Northwest States: The Pacific Northwest Source Profile Library. Oregon Department of Environmental Quality, Portland, OR.
- Egami, R.T., Chow, J.C., Pritchett, L.C., Schmidt, S.W., (1989). Ambient PM<sub>10</sub> Sampling Study at Pleasant Valley, Nevada during January 13 through March 14, 1989. Desert Research Institute, Reno, NV.
- Houck, J.E., Chow, J.C., Watson, J.G., Simons, C.A., Pritchett, L.C., Goulet, J.M., Frazier, C.A., (1989). Determination of particle size distribution and chemical composition of particulate matter from selected sources in the San Joaquin Valley. Final Report. OMNI Environmental and Desert Research Institute, Beaverton, OR and Reno, NV. [http://www.arb.ca.gov/research/apr/past/a6-175-32a\\_i.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32a_i.pdf),  
[http://www.arb.ca.gov/research/apr/past/a6-175-32b\\_i.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32b_i.pdf),  
[http://www.arb.ca.gov/research/apr/past/a6-175-32a\\_ii.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32a_ii.pdf),  
[http://www.arb.ca.gov/research/apr/past/a6-175-32b\\_ii.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32b_ii.pdf),  
[http://www.arb.ca.gov/research/apr/past/a6-175-32c\\_ii.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32c_ii.pdf),  
<http://www.arb.ca.gov/research/apr/past/a6-175-32a.pdf>,  
<http://www.arb.ca.gov/research/apr/past/a6-175-32b.pdf>,  
[http://www.arb.ca.gov/research/apr/past/a6-175-32app\\_ii.pdf](http://www.arb.ca.gov/research/apr/past/a6-175-32app_ii.pdf)
- Houck, J.E., Chow, J.C., Watson, J.G., Simons, C.A., Pritchett, L.C., Goulet, J.M., Frazier, C.A., (1989). Determination of particle size distribution and chemical composition of particulate matter from selected sources in California, Executive summary. OMNI Environmental Services Inc., Beaverton, OR and the Desert Research Institute, Reno, NV.
- Ireson, R.G., Watson, J.G., Chow, J.C., (1989). Issues in determining causes of, and developing control strategies for, high PM<sub>10</sub> concentrations in the San Joaquin Valley and South Coast air basins. Systems Applications, Inc., San Rafael, CA.
- Watson, J.G., Bowen, J.L., Chow, J.C., Egami, R.T., Gertler, A.W., Coulombe, W.G., Frazier, C.A., (1989). Field operations manual for the California Acid Deposition Monitoring Program: Meteorology, ozone, and dry deposition. Desert Research Institute, Reno, NV.
- Watson, J.G., Bowen, J.L., Chow, J.C., Egami, R.T., Gertler, A.W., Fung, K.K., (1989). Revised Program Plan for California Acid Deposition Monitoring Program. Desert Research Institute, Reno, NV.

- Chow, J.C., Watson, J.G., Egami, R.T., Frazier, C.A., Goodrich, A., Ralph, C., (1988). PM<sub>10</sub> source apportionment in Reno and Sparks, Nevada for state implementation plan development: Chemical mass balance results. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Lu, Z., Egami, R.T., (1988). PM<sub>10</sub> source apportionment study in Pleasant Valley, Nevada. Desert Research Institute, Reno, NV.
- Chow, J.C., Frazier, C.A., Watson, J.G., Egami, R.T., (1988). PM<sub>10</sub> source apportionment in Reno and Sparks, Nevada for state implementation plan development, Volume II: Data. Desert Research Institute, Reno, NV.
- Miller, D.F., Chow, J.C., Fought, C., Ragland, P., Rogers, C.F., (1988). SO<sub>2</sub> measurements in the national parks. Desert Research Institute, Reno, NV.
- Trijonis, J.C., McGown, M., Pitchford, M.L., Blumenthal, D.L., Roberts, P.T., White, W.H., Macias, E.S., Weiss, R.E., Waggoner, A.P., Watson, J.G., Chow, J.C., Flocchini, R.G., (1988). RESOLVE project: Visibility conditions and causes of visibility degradation in the Mojave Desert of California. Naval Weapons Center, China Lake, CA. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA206321>
- Watson, J.G., Chow, J.C., Richards, L.W., Andersen, S.R., Houck, J.E., Dietrich, D.L., (1988). The 1987-88 Metro Denver Brown Cloud Air Pollution Study, Volume II: Measurements. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341744\\_The\\_1987-88\\_Metro\\_Denver\\_Brown\\_Cloud\\_Air\\_Pollution\\_Study\\_Volume\\_II\\_Measurements](https://www.researchgate.net/publication/235341744_The_1987-88_Metro_Denver_Brown_Cloud_Air_Pollution_Study_Volume_II_Measurements)
- Watson, J.G., Chow, J.C., Richards, L.W., Andersen, S.R., Houck, J.E., Dietrich, D.L., (1988). The 1987-88 Metro Denver Brown Cloud Air Pollution Study, Volume III: Data interpretation. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/235341746\\_The\\_1987-88\\_Metro\\_Denver\\_Brown\\_Cloud\\_Air\\_Pollution\\_Study\\_Volume\\_III\\_Data\\_interpretation](https://www.researchgate.net/publication/235341746_The_1987-88_Metro_Denver_Brown_Cloud_Air_Pollution_Study_Volume_III_Data_interpretation)
- Watson, J.G., Hoffer, T.E., Chow, J.C., (1988). Guidance on methods to investigate existing visibility impairment and attribute it to sources. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Richards, L.W., Andersen, S.R., Houck, J.E., Dietrich, D.L., (1988). The 1987-88 Metro Denver Brown Cloud Air Pollution Study, Volume I: Program plan. Desert Research Institute, Reno, NV. [https://www.researchgate.net/publication/344943193\\_The\\_1987-88\\_Metro\\_Denver\\_Brown\\_Cloud\\_Air\\_Pollution\\_Study\\_Volume\\_I\\_Program\\_plan#fullTextFileContent](https://www.researchgate.net/publication/344943193_The_1987-88_Metro_Denver_Brown_Cloud_Air_Pollution_Study_Volume_I_Program_plan#fullTextFileContent)
- Watson, J.G., Chow, J.C., Egami, R.T., Frazier, C.A., Goodrich, A., Ralph, C., (1988). PM<sub>10</sub> source apportionment in the Truckee Meadows, Nevada for state implementation plan development, Volume I: Modeling methods and results. Desert Research Institute, Reno, NV.
- Chow, J.C., (1987). Quality assurance project plan for the determination of particle size distributions and chemical composition of particulate matter from selected sources in California, Part II: Laboratory operations. Desert Research Institute, Reno, NV. <http://www.dri.edu/images/stories/editors/eafeditor/Chow1987CASourceProfilesLabOps.pdf>
- Chow, J.C., Egami, R.T., Frazier, C.A., Watson, J.G., Bowen, J.L., (1987). Chemical characterization of 1985 total suspended particulate matter samples at Bullhead City, Arizona. Desert Research Institute, Reno, NV.
- Chow, J.C., Frazier, C.A., Watson, J.G., (1987). Chemical characterization of ambient particulate samples collected during winter of 1986-87 at Denver, CO. Desert Research Institute, Reno, NV.
- Freeman, D.L., Robinson, N.F., Watson, J.G., Chow, J.C., Egami, R.T., (1987). Level I PM<sub>10</sub> assessment package user's guide. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Robinson, N.F., (1987). Western States Acid Deposition Project, Phase I, Volume 4: An evaluation of ambient aerosol chemistry in the western United States, Final report. Desert Research Institute, Reno, NV.
- Watson, J.G., Gertler, A.W., Prowell, G.H., Chow, J.C., Hering, S.V., Richards, L.W., Blumenthal, D.L., (1987). Causes of secondary aerosol in the San Joaquin Valley determined from the WOGA aerosol data base. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., McDade, C., Farber, R.J., Barr, S., (1987). Suggested program plan for a SCENES Summer Intensive Study. Desert Research Institute, Reno, NV.
- Watson, J.G., Chow, J.C., Freeman, D.L., Egami, R.T., Roberts, P., Countess, R.J., (1987). Model and data base description for California's Level 1 PM<sub>10</sub> assessment package. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., (1986). Ambient air quality monitoring assistance for low-level SO<sub>2</sub> monitoring program: Quality assurance project plan. Desert Research Institute, Reno, NV.
- Chow, J.C., Gertler, A.W., Egami, R.T., (1986). Program plan to evaluate the effectiveness of street sweeping to reduce ambient particulate loadings. Desert Research Institute, Reno, NV.
- Chow, J.C., Watson, J.G., Egami, R.T., Wright, B., Ralph, C., Naylor, M.H., Smith, J., Serdoz, R., Shifley, L., (1986). Program plan for the State of Nevada Air Pollution Study (SNAPS). Desert Research Institute, Reno, NV.

- Chow, J.C., Harlos, D.P., McLafferty, M., (1984). Associations between indoor and outdoor air pollution levels and respiratory illness in children. Harvard University, School of Public Health, Boston, MA.
- Watson, J.G., Broten, A.R., Smith, S.M., Chow, J.C., Shah, J.J., (1984). A literature review of air pollution work in developing countries. Air and Waste Management Association.
- Chow, J.C., (1983). Air pollution issues in developing countries. Harvard University, Cambridge, MA.
- Özkaynak, H., Thurston, G.D., Tosteson, T., Smith, C.M., Kinney, P.L., Beck, B., Skornik, W., Colome, S.D., Chow, J.C., Schatz, A.D., Matthews, P., (1983). Analysis of health effects resulting from population exposures to ambient particulate matter. Harvard School of Public Health, Cambridge, MA.
- Mueller, P.K., Watson, J.G., Chow, J.C., Fung, K.K., Heisler, S.L., (1982). Eastern regional air quality measurements: Volume 1, Final report. Electric Power Research Institute, Palo Alto, CA.
- Watson, J.G., Knapp, R.R., Chow, J.C., (1982). Ambient concentrations of air pollutants in Ingenio, Puerto Rico. Environmental Research and Technology, Inc. (ERT), Concord, MA.
- Chow, J.C., (1981). Test of filter extraction efficiency. Documented in Sulfate Regional Experiment (SURE) Program file. Electric Power Research Institute, Palo Alto, CA.
- Heisler, S.L., Watson, J.G., Shaw, J.J., Chow, J.C., Collins, J.F., Whitney, J., (1981). Recommendations for the design of aerosol characterization studies in Houston and El Paso. Environmental Research and Technology, Concord, MA.
- Watson, J.G., Chow, J.C., Shah, J.J., (1981). Analysis of inhalable and fine particulate matter measurements. U.S. Environmental Protection Agency, Research Triangle Park, NC.  
<https://nepis.epa.gov/Exe/ZyPDF.cgi/2000X0ZF.PDF?Dockey=2000X0ZF.PDF>
- Watson, J.G., Knapp, R.R., Moore, E., Wilson, G.M., Chow, J.C., Earsy, R., Lavery, T.F., (1981). An air monitoring program for Union Carbide Grafito, Yabucoa, Puerto Rico, Final report. Environmental Research and Technology, Inc., Concord, MA.
- Chow, J.C., Watson, J.G., Moore, E., (1980). Automated ammonium analysis procedure - Standard operating procedure 6000-215. Environmental Research and Technology, Inc., Concord, MA.
- Chow, J.C., (1978). Ammonium analysis by Technicon Auto Analyzer II, Standard Operating Procedure. Environmental Research and Technology, Inc., Concord, MA.