

**Domagoj Podnar**

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**Education**

MS	2001	University of Nevada, Reno	Computer Science
MS	1999	University of Nevada, Reno	Atmospheric Science
BS	1995	University of Zagreb, Croatia	Mechanical Engineering

**Professional Interest**

Mr. Podnar's interests include high-performance computing, performance measurement and tuning, system administration, atmospheric and dispersion modeling, and the application of artificial intelligence to the area of environment protection.

**Professional Experience**

07/2004 - present	Assistant Research Computer Scientist, Desert Research Institute, Reno, NV
02/2003 - 06/2004	Computer Technologist, Desert Research Institute, Reno, NV
05/2002 - 05/2003	PC Support Specialist, University of Nevada at Reno, Reno, NV
01/2000 - 01/2003	Research Assistant, Desert Research Institute, Reno, NV
08/1999 - 01/2000	Principal Systems Programmer, Dyntel, Research Triangle Park, NC
08/1997 - 08/1999	Research Assistant, Desert Research Institute, Reno, NV
09/1995 - 08/1997	Associate Engineer, Energy Research and Environmental Protection Institute (EKONERG), Zagreb, Croatia

**Computer Experience**

**OS:** DOS, Windows (3.11/95/98/NT/2000/XP), Linux (Red Hat, Mandrake), Solaris, IRIX

**Programming:** Java (Core, 3D, JSP), FORTRAN, C, Perl, HTML, JavaScript, VBScript, ASP, SQL, SAS

**Applications:** IBM VisualAge for Java, Macromedia Dreamweaver, NetObjects Fusion, Allaire Jrun, Apache/Tomcat, Matlab, MS Office Professional, MS Visual Studio, Paint Shop Pro, Adobe Acrobat & Photoshop, Micrografix Designer, AutoCAD, Surfer

**Selected Publications**

Podnar, D., D. Koracin, and A. Panorska, 2002: Application of artificial neural networks to modeling the transport and dispersion of tracers in complex terrain. *Atmos. Environ.*, **36**, 561-570.

D. Koracin, D. Podnar, V. Isakov, J. Chow, Y. Dong, A. Miller, and M. McGown, 2000: PM<sub>10</sub> dispersion modeling for Treasure Valley, Idaho. *J. Air and Waste Manage. Assoc.*, **50**, 174-185.

**Technical Reports**

Koracin, D., D. Podnar, T. McCord, J. Powers, and V. Isakov, 2000: Development of an operational version of the MM5 model for Nevada and California, centered in the Truckee Meadows. Prepared for Washoe County District Health Department, Reno, NV.

## Presentations

- Harris, S., Mills, G., Brown, T. J., Podnar, D., Fearon, M. G., Reinbold, H. J., 2015: Victoria fire weather climatology dataset. Proceedings of the Research Forum at the Bushfire and Natural Hazards CRC & AFAC conference: Adelaide, Australia, September 1, 2015.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2015: Hi-resolution fire weather and climatology from dynamical downscaling. ICBFR: Alhero, Italy, May 28, 2015.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2015: Hi-resolution fire weather and climatology from dynamical downscaling. American Meteorological Society 11th Fire and Forest Meteorology Symposium: Minneapolis, MN, May 6, 2015.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2015: Finally, A 40-year mesoscale gridded fire climatology for Victoria. Project briefing for the Victoria Department of Environment and Primary Industries, April 7, 2015.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2015: Hi-resolution fire weather and climatology from dynamical downscaling. Seminar presentation School of Earth Atmosphere and Environment, Faculty of Science, Monash University: Clayton, Victoria, March 27, 2015.
- Brown, T. J., Mills, G., Harris, H., Podnar, D., Reinbold, H. J., Fearon, M. G., 2014: A hi-resolution 40-year gridded fire weather/danger climatology for Victoria. Australia, VII International Conference on Forest Fire Research: Coimbra, Portugal, November 17, 2014.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2014: Fire weather climatology of Victoria. Invited talk. Project briefing for the Victoria Country Fire Authority: Melbourne, VIC, March 25, 2014.
- Brown, T. J., Mills, G., Harris, S., Podnar, D., Fearon, M. G., Reinbold, H. J., 2014: Fire weather climatology of Victoria. Invited talk. Project briefing for the Victoria Department of Environment and Primary Industries: Melbourne, VIC, March 24, 2014.
- Mills, G., Brown, T. J., Harris, S., Podnar, D., Reinbold, H. J., 2014: Modelling the mesoscale fire weather climatology of Victoria. Australian Meteorological and Oceanographic Society National Conference: Hobart, Tasmania, Australia, February 12, 2014.
- Koracin, D., D. Podnar, T. McCord, G. McCurdy, R. Nelson, and J. Fischer, 2005: Improving mesoscale forecasting using data from the Nevada Department of Transportation operational network. 12th Annual Workshop on Weather Prediction in the Intermountain West, Reno, NV, November 3, 2005.
- Huggins, A., D. Koracin, D. Podnar, and M. Xiao, 2005: A case study of mesoscale and plume dispersion modeling for a February 2004 cloud seeding event in the Walker River basin of California/Nevada. Preprints, Conference on Planned and Inadvertent Weather Modification, *Amer. Meteor. Soc.*, Paper 3.5., San Diego, CA, January 9-13, 2005.
- Koracin, D., D. Podnar, T. McCord, and C. E. Dorman, 2004: Simulations of atmospheric and dispersion processes in the Santa Barbara Channel. 7<sup>th</sup> International Marine Environmental Modeling Seminar, Washington, D.C., October 19-21, 2004.
- Koracin, D., T. McCord, D. Podnar, and C. Dorman, 2003: Modeling of California's June wind, wind stress, and curl of the wind stress. Proceedings of the Oceans 2003 Conference, Paper 1772, San Diego, CA, September 22-25, 2003.

- Podnar, D., and D. Koracin: Impact of Land and Sea Breeze Circulations on the Transport and Dispersion of Atmospheric Pollutants and Aerosols in Monterey Bay. Proc. Third Conference on Coastal Atmospheric and Ocean Prediction and Processes, New Orleans, LA, November 3-5, 1999.
- Podnar, D., and D. Koračin, 1999: Modeling Transport and Dispersion of Tracers in Complex Terrain using Artificial Neural Networks. Proceedings of the 8th International Symposium on Transport and Air Pollution, Section VIII/2, 7-10, Graz, Austria, May 31 - June 2, 1999.
- Koračin, D., V. Isakov, D. Podnar, and J. Frye, 1999: Application of a Lagrangian Random Particle Dispersion Model to the Short-term Impact of Mobile Emissions. Proceedings of the 8th International Symposium on Transport and Air Pollution, pp. 379-388, Graz, Austria, May 31 – June 2, 1999.