

DANA L. TRIMBLE

Associate Research Scientist

Division of Atmospheric Sciences, Desert Research Institute

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Professional Preparation

M.S.	Biology	2019	University of Nebraska, Kearney
B.S.	Biology	1994	University of Nevada, Reno

Professional Appointments

2016 – Present	Desert Research Institute – Associate Research Scientist
2002 – 2016	Desert Research Institute – Assistant Research Scientist/Database Manager, and Carbon Laboratory Manager
1996 – 2002	Corporate Express – Senior Systems Administrator/Database Administrator (Microsoft Certified Professional, Certified Novell Administrator)
1997 – 1998	CompUSA – Part-Time Software Instructor
1993 – 1995	Desert Research Institute - Lab Assistant/Administrative Assistant
1992/1993	Canorus, Ltd. – Summer Field Biologist/Crew Supervisor
1990/1991	San Francisco State University, Summer Extended Studies Research Program, Grey Wolves, Bald Eagles, Mountain Goats, and Bighorn Sheep

Awards and Offices

Nevada Veterans Advocate, 2020

Woman of Achievement Award, Nevada Women's Fund, Reno, NV, 2016.

Desert Research Institute Faculty Senator, 2013-2016

Desert Research Institute Faculty Senate Chair, 2015-2016

Chair of the Nevada System of Higher Education Council of Chairs, 2015-2016

Professional Experience

Ms. Dana L. Trimble is an Associate Research Scientist for the Division of Atmospheric Sciences (DAS) at DRI, and Project Manager for the Naval Earth Sciences and Engineering Program (NESEP). She has over 26 years of experience in managing project and laboratory operations, as well as database administration. Ms. Trimble is responsible for overseeing the project, ensuring deliverables are met, quality assurance plans are followed, equipment is installed and delivered, and assists with oversight of personnel assignments. She works closely with the NESEP Director and the REMAS lead, as well as the business manager to effectively manage all related contracts and grants. Ms. Trimble previously oversaw the operations of DRI's Environmental Analysis Facility laboratory and performed Level I and Level II data validation and reporting of more than 50,000 carbon analyses per year. She served as a lead contact person for multiple sponsors to discuss contract matters and analysis status, and assisted with proposal development. Ms. Trimble also serves as DRI's Diversity Officer and is on the NSHE Equity, Diversity and Inclusion Council. Additionally, she has served as DRI Faculty Senate Chair and Chair of the Nevada System of Higher Education's Council of Chairs.

Volunteer Activities

- 2014-current Owner, Co-Founder, and Head Coach, Spanish Springs Youth Volleyball Club, NV
2014-2016 Assistant Coach for Youth Soccer Organization, Reno, NV
1994-1996 Sierra Safari Zoo Volunteer, Reno, NV
1990-1992 Sacramento Zoo Volunteer, Sacramento, CA

Peer-reviewed journal publications

- 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 Chemical Speciation Network PM2.5 samples. *Journal of the Air & Waste Management Association*, 68(5), 494-510.
- 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 PM2.5 samples." *Journal of the Air & Waste Management Association*: Accepted.
- 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 Air Qual. Res.* 15 (4):1145-1159.
- 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 (10):3141-3152.
- 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." *J. Air Waste Manage. Assoc.* 57 (9):1014-1023.
- 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." *J. Air Waste Manage. Assoc.* 56 (4):474-491.
- 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." *Atmos. Chem. Phys* 5 (4):2961-2972.

Selected Technical Reports

- 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
- 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

- 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_{2.5}) Study." Desert Research Institute, 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." DRI 04-307, Desert Research Institute, Reno, NV. http://www.arb.ca.gov/research/apr/past/04-307_v1.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 PM₁₀/PM_{2.5} Air Quality Study (CRPAQS) - Initial data analysis of field program measurements." 2497, Desert Research Institute, Reno, NV. Accessed on 7/29/2005. <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_{2.5} and PM₁₀ in Apex, NV." Desert Research Institute, Reno, NV.
- 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.
- Kuhns, H.D., Chang, M.-C.O., Chow, J.C., Etyemezian, V.R., Chen, L.-W.A., Nussbaum, N.J., Nathagoundenpalayam, S.K., Trimble, D.L., 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.
- Martin, D.L., Jennings, M.R., Welsh, H.H., Dondero, D.L. (maiden name) (1993). "Anuran Survey Protocol for the Sierra Nevada's of California." 3rd Edition, Canorus Limited, Sacramento, CA.
- Martin, D.L., Boss, W.E., Dondero, D.L., Jennings, M.R., Welsh, H.H. (1993). "Sierra Nevada Anuran Survey: An Investigation of Amphibian Population Abundance in the National Forests of the Sierra Nevada's of California." Report V.1.1, prepared for the U.S. Forest Service by Canorus Limited, Sacramento, CA.

Selected Presentations

- Green, M., Chow, J.C., Watson, J.G., Wang, X.L., Trimble, D.L., and Gronstal, S.B. (2018). Update of IMPROVE Carbon Analysis. Presented at IMPROVE Steering Committee Meeting, Fort Collins, CO, 16 October 2018.
- Chow, J.C., Watson, J.G., Wang, X.L., Trimble, D.L., Gronstal, S.B., Cropper, P.M. (2017). "Update of IMPROVE Carbon Analysis." 2017 IMPROVE Steering Committee Meeting: Ely, MN, 11/24/2017.
- Trimble, D.L., Watson, J.G., Chow, J.C. (2016). "Overview of DRI Nevada System of Higher Education." Desert Research Institute: Reno, NV, 04/14/2016.
- Chow, J.C., Watson, J.G., Wang, X.L., Trimble, D.L., Kohl, S.D. (2015). "Update of IMPROVE Carbon Analysis." 2015 IMPROVE Steering Committee Meeting: Grand Canyon, AZ, 11/3/2015.
- Watson, J.G., Chow, J.C., Wang, X.L., Trimble, D.L., Kohl, S.D. (2015). "Temperature Calibration of Thermal/Optical Carbon Analyzer." IMPROVE Steering Committee Meeting: Grand Canyon, AZ, 11/3/2015.

- Chow, J.C., Watson, J.G., Wang, X.L., Trimble, D.L., Kohl, S.D., Sumlin, B., Gronstal, S., Mayorga, S., Chen, L.W.A. (2014). "Equivalence in OC and EC between single- and multi-wavelength carbon analyzers." IMPROVE Steering Committee Meeting: Cape Romain NWR, SC, 10/15/2014.
- Sumlin, B., Chow, J.C., Watson, J.G., Wang, X.L., Chen, L.W.A., Trimble, D.L. (2014). "Development of a multiwavelength thermal/optical carbon analyzer." 2014 AGU Fall Meeting: San Francisco, CA, 12/16/2014.
- Watson, J.G., Chow, J.C., Wang, X.L., Trimble, D.L., Kohl, S.D., Chen, L.-W.A. (2013). "IMPROVE Carbon Analysis." IMPROVE Steering Committee Meeting: Park City, UT, 10/8/2015.
- Chow, J.C., Wang, X.L., Trimble, D.L., Robles, J.A., Chen, L.W.A., Watson, J.G. (2012). "IMPROVE Carbon Analysis." IMPROVE Technical Steering Committee Meeting: 2012/10/23.
- Chow, J.C., Watson, J.G., Robles, J.A., Wang, X.L., Trimble, D.L. (2011). "IMPROVE Carbon Analysis." IMPROVE Steering Committee Meeting: Frostburg, MD, 10/26/2011.
- Chow, J.C., Watson, J.G., Robles, J.A., Trimble, D.L. (2010). "IMPROVE Carbon Analysis." The IMPROVE Steering Committee Meeting: 2010/10/21/.
- Chow, J.C., Watson, J.G., Trimble, D.L. (2009). "IMPROVE Carbon Analysis." The IMPROVE Steering Committee Meeting: 2009/09/22.
- Fujita, E., Campbell, D., Walker, J., Uppapalli, S., King, A., Arnott, W.P., Zielinska, B., Sagebiel, J., McDaniel, M., Cunningham, A., Sheetz, L., Chow, J.C., Kohl, S.D., Hinsvark, B., Cristani, B., Hackett, E., Trimble, D.L. (2007). "Kansas City Vehicle Emissions Characterization Study - Light Duty Gasoline Vehicle PM Emissions." DAS Science Talk: 2007/04/25/.
- Watson, J.G., Chow, J.C., Chen, L.W.A., DuBois, D., Kohl, S.D., Trimble, D.L. (2007). "PM 2.5 Source Apportionment Study." Project Kick-off Conference Call For the Minnesota Pollution Control Agency, 2007/05/14/.
- Kuhns, H., Chang, M.C.O., Chow, J.C., Etymezian, V., Chen, L.W.A., Nussbaum, N., Nathagoundenpalayam, S.K.K., Trimble, D.L., Kohl, S.D., MacLaren, M., Abu-Aliban, M., Gillies, J., Gertler, A., Damm, C., Denney, C., Skotnik, J., Gallery, C. (2005). "Source Characterization and Emissions in Lake Tahoe from Road Dust, Wood Smoke, and Vehicle Exhaust (poster)." 2005 Tahoe Science Conference.