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EDUCATION

Ph.D.	1998	Carnegie Mellon University	Environmental Engineering
M.S.	1994	Johns Hopkins University	Environmental Engineering
B.S.	1993	California Institute of Technology	Engineering & Applied Science
B.A.	1993	Occidental College	Physics

NON-RESEARCH PROFESSIONAL EXPERIENCE

None after award of Ph.D.

SELECTED TECHNICAL REPORTS

- Etyemezian, V., S. Ahonen, J. Gillies, J. Goreham, I. Kavouras, G. Nikolich, D. Shafer, M. Sweeney, and M. Young (2006). Plutonium Soil Stabilization Study at the Nevada test Site: Final Report. Prepared for Encapco Technologies LLC, Napa, CA, and the Naval Facilities Engineering Service Center, Port Hueneme, CA. March, 2006.
- Kavouras, I.G., V. Etyemezian, J. Xu, D. DuBois, and M. Pichford (2005). Preliminary Assessment of the Principal Causes of Dust-Resultant Haze at IMPROVE sites in the Western United States: Final report. Prepared for the Western Regional Air Partnership, Phoenix, AZ, November, 2005.
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- Hampden Kuhns, Claudio Mazzoleni, M.-C. Oliver Chang , Judith C. Chow, Gayathri Parthasarathy , Vic Etyemezian, Hans Moosmuller, Peter Barber, Nicholas Nussbaum, Suresh Kumar K. Nathagoundenpalayam , Steve Kohl, Djordje Nikolic, John Watson (2004), Meridian School Bus Biodiesel Evaluation Study, report prepared for Community Planning Agency of Southwest Idaho by Desert Research Institute, Reno, NV, June 20.
- Green, M., M-c O. Chang, J.C. Chow, H. Kuhns, L-W Anthony Chen, N. Nussbaum, D. Nikolich, P. Arnott, S. Kumar, and V. Etyemezian (2004). Las Vegas Carbon Source Apportionment Study: Final Report. Prepared for Clark County Department of Air Quality Management, Las Vegas, NV. December 28, 2004.
- Etyemezian, V., H. Kuhns, G. Nikolich, and K. Graham (2004). The Las Vegas Road Dust Emissions Technology Assessment: Final Report. Prepared for Clark County Department of Air Quality Management, Las Vegas, NV. July, 2004.
- Chow, J.C., J.G. Watson, D. Crow, S. Kohl, H. Kuhns, V. Etyemezian, and J. Engelbrecht (2002). Source Profiles for the Big Bend Regional Aerosol Visibility and Observational (BRAVO) Source Characterization Study. Prepared for the Cooperative Institute for Atmospheric Sciences and Terrestrial Applications (CIASTA) Program c/o National Oceanic and Atmospheric Administration, Las Vegas, NV, by Desert Research Institute, Reno, NV. February 2002.
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- Zufall, M J; W. Dai, C.I. Davidson, and V. Etyemezian (1999). Dry deposition of particles to wave surfaces: I. Mathematical modeling: *Atm. Env.* 33: 4273-4272.
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PRESENTATIONS AT PROFESSIONAL MEETINGS

- Etyemezian, V., H. Kuhns, and G. Nikolich (2005). TRAKER: A method for fast assembly and update of paved and unpaved road dust emission inventories. Paper presented at the 2005 EPA Emission Inventory Conference, Las Vegas, NV, April, 2005.
- Etyemezian, V., H. Kuhns, G. Nikolich, D. Fitz, K. Bumiller, R. Merle, and R. Langston (2005). Vehicle based measurement of PM₁₀ paved road dust emissions in Las Vegas, NV. Spatial distribution of emissions using TRAKER. Paper presented at the *Air and Waste Management annual meeting*, Minneapolis, MN, June , 2005.
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- Varma, R., H. Moosmüller, W. P. Arnott, J. Walker, H. D. Kuhns, V. Etyemezian, and J.A. Gillies (2004). Emission factors of scattering cross section for visibility impairment from fugitive dust sources. Paper presented at the *Regional and Global Perspectives on Haze: Causes, Consequences, and Controversies* (AWMA Visibility Specialty Conference), Asheville, NC, October 25-29, 2004.
- Gillies, J.A., W.P. Arnott, E. Etyemezian, D.A. Gillette, H. Kuhns, H. Moosmüller, W.G. Nickling, J. Allwine, and R. Hashmonay (2004). Characterizing and quantifying fugitive dust emissions from Department of Defense sources including unique military activities. Poster presented, *Partners in Environmental Technology Technical Symposium and Workshop*, SERDP/ESTCP, Washington, D.C., 29 Nov. - 2 Dec. 2004.
- Kuhns H., C. Mazzoleni, H. Moosmüller, D. Nikolic, R. Keislar, P. Barber, V. Etyemezian, J. Watson (2004) Spatial Analysis of Remotely Sensed Vehicle Exhaust Emissions from Light Duty Gasoline Vehicles in Clark County, Nevada. Paper presented at the *Air and Waste Management annual meeting*, Indianapolis, IN, June 22-25.
- Xu, J., D. DuBois, M. Green, D. Freeman, V. Etyemezian, and M. Pitchford (2004). Causes of Haze Assessment for WRAP Class I Areas - Preliminary Conceptual Model Development. Poster presented at the *Regional and Global Perspectives on Haze: Causes, Consequences, and Controversies* (AWMA Visibility Specialty Conference), Asheville, NC, October 25-29, 2004.

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- Veranth, J., R. Labban, J. Chow, J. Watson, V. Etyemezian, and J. Engelbrecht (2004). Development of new computational and analytical tools for distinguishing local and regional sources of fugitive dust. Poster presented at the *Partners in Environmental Technology Technical Symposium and Workshop*, Washington, D.C., 29 Nov. - 2 Dec. 2004.
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- Etyemezian, V., H. Kuhns, N. Robinson, and J. Watson (2000) The Use of Databases in Air Quality Field Studies. Presented at the *2000 NARSTO Conference*, Queretaro, Mexico, NARSTO.
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- Wells, R.C., H. Kuhns, V. Etyemezian, J.G. Watson, J.C. Chow, and J.V. Woy (2000) Adapting Hazardous Air Pollutant Emission Compliance Tests for Source Apportionment: Example for a Waste-to-Energy Facility. Presented at the *AWMA 93rd Annual Conference and Exhibition*, Salt Lake City, Air and Waste Management Association. Deposition of atmospheric pollutants on a limestone building
- Zufall, M., W. Dai, C.I. Davidson, and V. Etyemezian (1999). Mathematical Modeling and Wind Tunnel Experiments on Dry Deposition of Particles to Wave Surfaces. Presented at *1999 Annual Conference of the American Association for Aerosol Research*, Tacoma, WA, American Association for Aerosol Research.
- Strader, R; C. Davidson, V. Etyemezian, and S. Finger (1998). Vertical gradients of airborne concentration and deposition of pollutants on buildings. Presented at *5th International Aerosol Conference*, Edinburgh, Scotland, American Association for Aerosol Research.
- Etyemezian, V., J. Davidson, S. Finger, M. Striegel, and J. Chow (1997). Effect of Rain Delivery on Soiling Patterns at the Cathedral of Learning. Presented at *1997 Annual Conference of the American Association for Aerosol Research*, Denver, American Association for Aerosol Research.
- Etyemezian, V; C.I. Davidson, S. Finger, N. Barabas, J. Doan, B. Fontaine, G. Mumpower, J. Venkat, S. Sherwood, and J.C. Chow (1995). Deposition of atmospheric pollutants on a

limestone building. Presented at *1995 Annual Conference of the American Association for Aerosol Research*, Pittsburgh, American Association for Aerosol Research.

Etyemezian, V., M.R. Lutz, C.I. Davidson, S. Finger, S.I. Sherwood, and J. Chow (1995). Deposition of Atmospheric Pollutants to a Limestone Building. Proceedings of *National Conference for Innovative Technologies and Hazardous Waste Management*, Pittsburgh, American Society of Civil Engineers.

PATENTS AND INTELLECTUAL PROPERTY ACTIVITIES

Kuhns, H., V. Etyemezian, M. Green, and M. Pitchford (2001). Apparatus and Method for Mobile Sampling of Kinetically Re-Entrained Aerosols. U.S. Patent application filed June, 2001. Patent was not awarded due to expiration of one year grace period following initial public disclosure.

Etyemezian, V., H. Kuhns, M. Pitchford, S. Ahonen, D. Nikolic (2003). Apparatus and Method for Measuring Surface Soil Stability. Provisional Patent Application filed June, 2003.

Etyemezian, V., H. Kuhns, M. Pitchford, S. Ahonen, D. Nikolic (2003). Apparatus and Method for Measuring Surface Soil Stability. Patent Application Filed June, 2004. Status: Pending

PROFESSIONAL ACTIVITIES

- Served on Western Regional Air Partnership Dust Emissions Joint Forum (April, 2004 – present)
- Chair, DRI Faculty Senate (May 2004 – May 2005)
- Vice-Chair, DRI Faculty Senate (May 2003 – May 2004)
- Senator, DRI Faculty Senate (May 2002 – May 2005)
- Program and Budget Committee (May 2003 – present), Chair (May 2003 – May 2004)
- Member DRI Safety Committee (2003)
- Participated in 1 staff and 5 faculty search committees, chaired 3 search committees
- Peer-reviewed manuscripts for *Atmospheric Environment*, *Environmental Science and Technology*, *Journal of the Air and Waste Management Association*, *Chemosphere*, *Science of the Total Environment*.
- Technical Committee, Fugitive Dust, Air and Waste Management Association, June 2003 – present
- Technical Committee, Indoor Air Pollution, Air and Waste Management Association, June 2002 – June 2003
- Provided mentoring and guidance for junior faculty: Jin Xu, David DuBois, and Ilias Kavouras (May, 2003 – present)

- Supervised Djordje Nikolich (2000 – 2003), Sean Ahonen (2000 – 2002), Arsineh Hecobian (1999 – 2000), Anthony DeLeon (2003 – 2005), Karl Graham (2003 – 2004), and Alex Nikolich (2003 – present) as undergraduate research assistants.
- Supervised 1 Technologist for work on multiple projects (George Nikolich, 2003 – present)
- Oliver Ranch Science School Curriculum Committee (2004)

RESEARCH, SCHOLARLY, OR CREATIVE EFFORT

Completed

Testing Re-entrained Aerosol Kinetic Emissions from Roads (TRAKER), Clark County, Nevada Regional Transportation Commission, (02-SEP-99 to 01-DEC-99, \$24,600,Co-PI).

Treasure Valley Secondary Aerosol Formation Study, State of Idaho Department of Environmental Quality, (25-OCT-99 to 15-NOV-00, \$297,315, Co-PI).

Big Bend Regional Aerosol and Visibility Observational Study (BRAVO), National Oceanic & Atmospheric Administration, (01-JUL-01 to 30-JUN-06, \$110,000, Co-I).

Big Bend Regional Aerosol and Visibility Observational Study, National Oceanic & Atmospheric Administration, (01-MAY-98 to 30-APR-99, \$467,900,Co-I).

Treasure Valley/Boise Road Dust Study, State of Idaho Department of Environmental Quality, (01-DEC-00 to 31-JAN-02, \$370,632,PI).

Field Testing and Evaluation of Dust Deposition and Removal Mechanisms, WESTAR, (01-JAN-02 to 31-DEC-02, \$94,936, PI).

Las Vegas "Drive-Off" Project, Clark County, Nevada. Department of Air Quality and Environmental Management, (01-OCT-04 to 30-SEP-05, \$44,675, PI)

Assessment of the Major Causes of Dust-Resultant Haze in the WRAP, Western Governor's Association, (01-JUL-04 to 31-DEC-04, \$50,291, PI)

Alternate Technologies for Quantifying Pave Road Dust Emission Measurements (Drive-off Phase II), Clark County, Nevada, Department of Air Quality and Environmental Management, (01-OCT-04 to 30-SEP-05, \$30,301, PI)

Pollutant Emissions Study for Biodiesel (B20), Community Planning Association of Southwest Idaho, (03-NOV-03 to 31-OCT-04, \$111,000, Co-I).

Lake Tahoe Source Characterization Study, State of California - Air Resources Board, (30-JUN-02 to 31-DEC-03, \$120,489,Co-I).

Particulate Matter Emissions Factors for Dust from Unique Military Activities, DOD - Strategic Environmental R&D Program, (24-SEP-04 to 24-SEP-08, \$50,000, Co-I).

Las Vegas Air Study, DOT - Federal Transit Administration, (14-MAY-99 to 30-SEP-05, \$2,212,728, Co-I).

Soils Equipment Preparation and Calibration for Ambient Monitoring, DOE (01-OCT-03 to 30-SEP-04, \$113,243, PI)

Characterizing and Quantifying Local and Regional Particulate Matter Emissions from Department of Defense Installations, DOD - Strategic Environmental R&D Program, (01-OCT-00 to 26-JAN-05, \$973,000, Co-PI).

Las Vegas Valley Carbon Source Apportionment Study, Clark County, (01-JUN-02 to 30-JUN-03, \$141,289.79, Co-I).

Salton Sea Ecosystem Restoration – Air Quality: Peer-Review, CA Department of Water Resources (01-JAN-05 to 31-MAR-05, \$13,000, PI)

Salton Sea Ecosystem Restoration – Air Quality: Preparation of Work Plan, CA Department of Water Resources (01-JAN-05 to 31-MAR-05, \$71,000, PI)

In Progress

Field Study of ENCAPCO Treatment Product at Smoky Site, NTS, Nevada, ENCAPCO Inc (01-APR-03 to 31-DEC-05, \$196,789, PI)

Uranium Oxide Soil Stabilization Study in Yuma Proving Ground, AZ, ENCAPCO Inc (01-JAN-05 to 31-DEC-2006, \$496,324, Co-I)

Salton Sea Ecosystem Restoration – Air Quality: Field Work, CA Department of Water Resources (01-AUG-05 to 01-AUG-06, \$200,796, PI)

New Mexico SIP Pilot Study, Western Governors Association, (01-OCT-05 to 31-DEC-05, \$20,000, Co-I)

Air Quality Monitoring, Yucca Mountain Environmental Monitoring Program, Department of Energy, (01-OCT-05 to 31-SEP-06, \$341,841, Co-I)

Particulate Matter Emissions Factors for Dust from Unique Military Activities, DOD - Strategic Environmental R&D Program, (24-SEP-04 to 24-SEP-08, \$2,100,000, Co-I).

Pre-remediation Ambient Monitoring and PI-SWERL, DOE (01-JAN-06 to 31-SEP-06, \$153,000, PI)