

**Ozone Public Information Forum**  
**Pinedale, Wyoming – High School Auditorium**  
**Tuesday October 7, 2008**  
**7:00 p.m.**

**Speaker Biographies**

**Derek C. Montague**

Dr. Montague is an Associate Professor in the Department of Atmospheric Science at the University of Wyoming. He completed his formal education at the University of Southampton, UK, where he obtained a BSc degree in Chemistry, followed by a PhD in Physical Chemistry for investigations of the chemical kinetics of gas-phase reactions. Subsequently, as either a research fellow or faculty member, he worked at various academic institutions in both the UK and the USA, including the Universities of Cambridge, Reading and Leeds, and the Irvine and Los Angeles campuses of the University of California, before coming to Wyoming in 1988. His interests in gas phase photochemistry led him first into atmospheric chemistry and subsequently into other areas of atmospheric science, including hydrometeor microphysics, and the behavior of the atmospheric aerosol, especially its interactions with solar radiation, so important in determining the Earth's radiative energy balance, and one of the major factors influencing climate.

Dr. Montague's current research interests are focused on air quality and atmospheric chemistry issues associated with aerosol optical and hygroscopic properties, and atmospheric visibility. Experimental studies, in the laboratory, at the department's Elk Mountain Observatory, and using the Wyoming King Air research aircraft, have investigated the physical, chemical, and optical characteristics of the atmospheric ambient aerosol as well as the distribution of aerosol precursor trace gases, in both clean and polluted tropospheric environments. They include the ongoing Elk Mountain/Laramie Aerosol Characterization Experiment, the airborne Southwest Wyoming Visibility Study, which characterized particulate pollution in the Green River basin, and the Atmospheric Utilities Signatures Prediction Experiment, which measured air pollutants in California's San Joaquin Valley. He has served on the Green River Basin Visibility Study's oversight committee and has participated in the Southwest Wyoming Technical Air Forum. Earlier studies included those of the budgetary cycles of trace gases that influence global climate and/or stratospheric ozone, the distribution of stratospheric ozone as observed by the CLAES instrument on board the Upper Atmosphere Research Satellite, cloud water and raindrop chemistry, the scavenging of trace species by precipitation, ice crystal and crystal aggregate growth mechanisms, and photochemical transformations of inorganic and organic gaseous species, especially those involving triplet biradicals.

**Frederick J. Miller**

Fred J. Miller, Ph.D. is currently an independent consultant in dosimetry and inhalation toxicology. From February, 1991 until April, 2005 he was employed in various capacities at the CIIT Centers for Health Research (CIIT) and its predecessor organization, the Chemical Industry Institute of Toxicology, serving most recently as Vice President for Research. Dr. Miller

received a B.A. and M.S. in Statistics from the University of Wyoming. In 1968, he began a career as a commissioned officer in the U.S. Public Health Service (PHS). As a mathematical statistician involved with the design and analysis of studies on the effects of air pollutants on animals, Dr. Miller became interested in the use of such studies for assessing human health risks. He was assigned to the U.S. Environmental Protection Agency (EPA) when it was created in 1970. In 1971, he received an EPA long-term training award, which led to his doctoral research on the transport and removal of ozone in the lungs of animals and man. He received a Ph.D. in Statistics from North Carolina State University in 1977.

Dr. Miller is interested in developing and implementing research strategies and projects that permit increased utilization of animal toxicological results to evaluate the likelihood of human risk from exposure to inhaled chemicals. His primary research interests include pulmonary toxicology, respiratory tract dosimetry of gases and particles, lung physiology and anatomy, extrapolation modeling, and risk assessment. He is internationally recognized for his research on the dosimetry of reactive gases. Dr. Miller is active in professional societies and consulting on environmental health issues. The author or co-author of more than 150 publications, Dr. Miller received a number of Scientific and Technical Achievement awards from EPA and is the recipient of the PHS' Outstanding Service Medal. Dr. Miller is a Fellow of the Academy of Toxicological Sciences and has served as a member of the U. S. Environmental Protection Agency's Clean Air Scientific Advisory Committee (CASAC) Ozone Review Panel.

## **Rogene Henderson**

Dr. Rogene Henderson is a Senior Scientist Emeritus at the Lovelace Respiratory Research Institute. Dr. Henderson earned her Ph.D. in chemistry from the University of Texas in 1960 and her B.S./B.A. in chemistry/biology from Texas Christian University in 1955. She was a Fulbright Scholar in physical chemistry in 1955-1956 and held fellowships at the Universities of Texas and Arkansas. Dr. Henderson's research interests are in three major areas: (1) biochemistry of the lung, particularly the surfactant lining layer — she has developed in vivo screening tests for pulmonary toxicants based on analysis of bronchoalveolar washings for biomarkers of lung injury and repair; (2) the mechanisms by which pulmonary inflammation leads to repair or to chronic disease (fibrosis, emphysema); and (3) the pharmacokinetics of inhaled xenobiotics (particularly vapors) and chemical-specific biomarkers of chemical exposure. She has recently conducted studies on the health effects of low-level sarin exposures in rats.

Dr. Henderson is currently a member of: the U.S. Army Deployment Toxicology Science Working Group, a member and Vice-Chair of the Board of Scientific Councilors (BOSC) for the U.S. Environmental Protection Agency (EPA) Office of Research and Development; and a member of the American Cancer Society (ACS) Advisory Group on Cancer and the Environment. She is a former member of the NIEHS Advisory Council (1991-95), the Health Effects Institute Research Committee (1997-2005), and the National Research Council/National Academy of Sciences (NRC/NAS) Board on Environmental Studies and Toxicology (1998-2004).

Until recently, Dr. Henderson was Chair of the U.S. EPA's Clean Air Scientific Advisory Committee (CASAC) and served as Chair of CASAC's Ozone Review Panel. Other past advisory committee activities include: Member, NIH Toxicology Study Section (1982-86);

Member, NRC/NAS Committee on Epidemiology of Air Pollution (1984-85); Member, New Mexico PCB Expert Advisory Panel (1985-86); Member, NAS/NRC Committee on Toxicology (1985-1991); Chair, NAS/NRC Committee on Toxicology (1992-1998); Chair, Panel on Hyperbarics and Mixtures, NAS/NRC Subcommittee on Submarine Air Quality (1986-88); Member, NAS/NRS Committee on Biological Markers (1986-89); Chair, NAS/NRC Subcommittee on Biological Markers in Pulmonary Toxicology (1986-89); Member, Advisory Committee for the Burroughs Wellcome Toxicology Scholar Award (1987-89); Member, Associated Western Universities Laboratory Advisory Board (1988-89); Member, NAS/NRC Committee on Risk Assessment Methodology (1989-91); Member, NAS/NRC Subcommittee on Spacecraft Maximum Allowable Concentrations for Space Station Contaminants (1989-94); Member, World Health Organization (WHO) Advisory Group on Use of Biological Markers in Risk Assessment (1989, 1992); Member, NAS/NRC Subcommittee on Guidelines for Estimating Acceptable Acute Exposures for Hazardous Substances (1990-92); Member, WHO Task Group on Benzene (1991); Member, EPA Science Advisory Board (SAB) Environmental Health Committee (1991-95); Chair, NAS/NRC Subcommittee on Permissible Exposure Levels for Military Jet Fuels (1992-96); Member, EPA/HERL Ad Hoc Advisory Group on Applications of Specimen Banking, Biological Monitoring and Biological Markers for Exposure Assessment (1993); Member, ILSI/EPA Committee on Dose Selection for Chronic Bioassays (1993); member, WHO Panel on Biomarkers in Australia (1993); Member, American Petroleum Institute (API) Advisory Panel on Benzene (1993); Member, EPA Advisory Panel on Revising the Ozone Criteria Document (1993); Member, NAS/NRC Subcommittee on Military Smokes and Obscurants (1994-98); Member, Scientific Advisory Panel of the Mickey Leland National Urban Air Toxics Research Center (1995-97); Invited Member of the January 1995 National Toxicology Program Workshop on "Mechanism-Based Toxicology in Cancer Risk Assessment: Implications for Research, Regulation, and Legislation;" Member of the Ad Hoc Advisory Group on Biologic Markers for EPA SAB, Environmental Health Committee (1989); Member, Naval Submarine Medical Research Laboratory Submarine Atmosphere Health Assessment Program (1995); Chair, NAS/NRC Subcommittee on Zinc Cadmium Sulfide (1995-98); Chair, NAS/NRC Committee on Risk-Based Criteria for Non-RCRA Hazardous Waste (1998-99); Member, IOM Committee to Assess Science Base for Tobacco Harm Reduction (1999-2001); Member, NAS/NRC Committee on Estimating the Public Health Benefits of Proposed Air Pollution Regulations (2000-2002); Chair, NAS/NRC Committee on Assessing Human Health Risks of Trichloroethylene ((2004-); Chair, BOSC Symposium on Risk Assessment Practices of the EPA (2004); Chair, Review Panel for the US EPA PM/O<sub>3</sub> Research Program (2005); Co-Chair, WHO Task Group on Environmental Health Criteria for Bentonite, Kaolin and Selected Clay Minerals (2005); member, Institute of Medicine (IOM) Committee on Asbestos: Selected Health Effects (2005-). Dr. Henderson is a National Associate of the National Academy of Science.

### **Peter F. Hess**

Peter Hess served as the Deputy Air Pollution Control Officer at the San Francisco Bay Area Air Quality Management District for thirty three years. Peter's trademark is attaining the federal ozone ambient air quality standard by applying sound science and foreword thinking regulatory measures. Peter Hess oversaw the 330 person staff and managed a \$50 million per year operating budget for the regional air quality agency serving the 7 million persons in bay area.

Peter testified before the U. S. Senate Environment and Public Works Subcommittee on the amendments to the Federal Clean Air Act. He also participated in the writing of the California

Clean Air Act. Peter was instrumental in the framing the federal emission offset program and is recognized as developing the nation's first emission banking program and the corresponding federal programs.

Peter Hess was the 2006 President of the Air & Waste Management Association. The Air & Waste Management Association (A&WMA) is a nonprofit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for information exchange, professional development, networking opportunities, public education, and outreach to more than 8000 environmental professionals in 65 countries. A&WMA also promotes global environmental responsibility and increases the effectiveness of organizations to make critical decisions that benefit society. Peter also served as President of the California Air Pollution Control Officers Association in 1996.

Peter has thirty-one publications and two sections in the reference book the Air Pollution Engineering Manual. Peter has appeared on many television and radio shows as a recognized air quality expert.