# **Speaker Bios**

David Thornton, MPCA

# **Health Session**

Dr. Ryan Allen

Ryan Allen is an Associate Professor of Environmental Health in the Faculty of Health Sciences at Simon Fraser University, currently on sabbatical at the Colorado School of Public Health in Denver. Dr. Allen received a Masters in Environmental Engineering and PhD in Environmental Health, both from the University of Washington in Seattle. His research interests are in the area of air pollution exposure assessment and epidemiology, with particular interests in biomass smoke, the cardiovascular effects of air pollution, and air quality in Asia.

# Dr. Philip Hopke

Dr. Philip K. Hopke is the Bayard D. Clarkson Distinguished Professor at Clarkson University, the Director of the Center for Air Resources Engineering and Science (CARES), and the Director of the Institute for a Sustainable Environment (ISE). Dr. Hopke is the past Chair of EPA's Clean Air Scientific Advisory Committee (CASAC), and has served on the EPA Science Advisory Board (SAB). Professor Hopke is a Past President of the American Association for Aerosol Research (AAAR), and was a member of the more than a dozen National Research Council committees. He is a member of the NRC's Board of Environmental Studies and Toxicology. He is a fellow of the International Aerosol Research Assembly, the American Association for the Advancement of Science and the American Association for Aerosol Research. He is an elected member of the International Statistics Institute and the recipient of the Eastern Analytical Symposium Award in Chemometrics. He is also a recipient of the David Sinclair Award of the AAAR. He served as a Jefferson Science Fellow at the U.S. Department of State during the 2008-09 academic year. Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T. and four years as an assistant professor at the State University College at Fredonia, NY, Dr. Hopke joined the University of Illinois at Urbana-Champaign, rising to the rank of professor of environmental chemistry, and subsequently came to Clarkson in 1989 as the first Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He moved his principal appointment to the Department of Chemical and Biomolecular Engineering in 2000. Since 2002, he has been the Clarkson Professor and Director of CARES. On July 1, 2010, he toke on the directorship of the ISE that houses Clarkson's undergraduate and graduate environmental science degree programs as well as managing its sustainability initiatives.

# Judith Abbott

For the past 18 years, Judy Abbott has served as a research scientist in the NYS Department of Health, Center for Environmental Health, Bureau of Toxic Substance Assessment. She works with other scientists to support programmatic activities and conduct research on human exposure to contaminants in various environmental media (e.g., air, water, soil, food and consumer products). Ms. Abbott has expertise in the application of contaminant fate and transport models and the development of exposure

models. Ms. Abbott was one of the lead scientists that collaborated with USEPA in researching emissions of dioxins/furans from open burning of trash and participated in USEPA's dioxin inventory review process. Her recent research work has focused on human exposure to residential wood smoke.

She holds a Master's Degree in Environmental Science and Engineering from Oregon Graduate Institute of Science and Technology (now: Oregon Health and Science University) and Bachelor Degrees in both chemistry and biology from Skidmore College. In her free time, Ms. Abbott enjoys spending time with her family, especially outdoor adventures.

# **Current and Emerging Trends in Technology**

### John Crouch

John Crouch is the Director of Public Affairs for the Hearth, Patio & Barbeque Association (HPBA) which is the principle North American trade association for woodstoves, pellet stoves, gas fireplaces and all related products. Active in the Hearth Industry for almost 30 years, he has been a local retailer, manufacturer's Representative, and, for over 20 years, the industry's lead representative on wood heat and air quality issues, in North America.

Mr. Crouch has collaborated with USEPA on In-situ field studies, and with the Agency's Burn-Wise program. He has also organized, advised, or participated in, numerous woodstove changeout programs and both of the whole-town changeouts that the industry has undertaken with state and local agency partners Mr. Crouch has represented the North American manufacturers at the ISO technical committee on wood heater emissions, and has presented at industry gatherings in both the U. S. and Australia. He resides, with his family, in Sacramento, California.

Chris Neufeld, Vice President, Blaze King Industries, Inc.

Chris has been in the hearth industry for more than 15 years, all of which

have been with Blaze King Industries, Inc. of Walla Walla Washington, the industry leader in catalytic wood combustion technology. He is an Executive Committee Member of the Catalytic Hearth Coalition (CHC) and during the NSPS review served as an SER (Small Entity Representative) to the EPA. A graduate of California State University Polytechnic in Pomona, Chris received a B.S. in Marketing. Prior to working in the hearth industry, Chris was the Vice President of Marketing for Bay Meadows and Santa Anita Park, both leaders in the thoroughbred horse racing industry. Chris is married to Carolyn, his wife of 30 years and has two grown sons & 3 grandchildren. Chris enjoys working with local, state and Federal air resource regulators and is committed to working towards more aggressive stove change out programs. An avid outdoorsman, Chris enjoys hiking, fishing and hunting.

### **Dutch Dresser**

Dr. Harry Dresser, known only as Dutch by those who've met him, has spent his adult life interested in innovation and change. He has woven together work in education, administration, information technology, business, and politics, generally engaged in all of them at the same time. Dutch is what

happens to the kid who today would be diagnosed with attention deficit disorder if he's lucky and spends nearly 70 years doing the things he loves. Dutch brings the perspective of a generalist to today's deliberations.

#### Nathan Russell

Nathan Russell has been an assistant project manager at NYSERDA for four years and manages the HVAC R&D program. He co-manages the Biomass Thermal R&D program with Ellen Burkhard of Environmental group where one of the primary objectives is to develop a high efficiency and low emission biomass thermal market. He graduated from RPI with a bachelor's degree in aeronautical engineering and a master's degree in mechanical engineering.

# **Case Studies**

Lisa Herschberger

Dr Jim Conner

James Conner has lived in Fairbanks Alaska for 27 years and is currently the Air Quality Manager for the Fairbanks North Star Borough's and has managed their Air Quality program since 2003. He got his B.S. in Physics from U.C. Davis and his Ph.D. from the University of Alaska Fairbanks in experimental Physics.

Dr. Conner has worked in natural gas exploration in California for Halliburton, at the Los Alamos National Lab's Van de Graf accelerator, taught physics at UAF, and managed one of NASA's eight Distributed Active Archive Centers at the Alaska Synthetic Aperture Radar Facility at UAF before taking a job running the air quality monitoring program at the Fairbanks North Star Borough.

# Dr David Synder

Dr. Snyder is an Assistant Professor of Chemistry at the University of Wisconsin-Stevens Point. He earned his PhD in Environmental Chemistry and Technology from the University of Wisconsin-Madison. His research interests include real-time measurement of atmospheric pollutants, source apportionment of particulate air pollution, and chemical education.

### Dr Jim Hodina

James Hodina is the Manager of the Environmental Public Health Division and Air Pollution Control Officer for Linn County Public Health located in Cedar Rapids, Iowa. In this role, Jim oversees the duties of three environmental branches: Air Quality, Environmental Quality, and Healthy Homes. He also serves as the Co-Chair of the NACAA Emissions and Modeling Committee. Jim has a B.S. in Civil Engineer from Iowa State University and an M.S. in Environmental Management from the Illinois Institute of Technology. He is certified as a Qualified Environmental Profession by the Institute of Professional

Environmental Practice. Jim has 22 years of environmental and quality improvement experience in industry, consulting, and government.

### Eric Merchant

Eric is a graduate of the University of Minnesota, with a Master's Degree in Public Health – go Golden Gophers! Eric began his professional career as an environmental consultant in the Minneapolis/St. Paul Twin Cities area and then took a position with the Montana Department of Environmental Quality (MDEQ) where he has been working on air quality related issues for nearly fifteen years. He began his career with MDEQ writing air quality permits for industrial sources and then moved on to managing Air Quality Policy and Planning. In this current capacity Eric is charged with rule and SIP development and implementation; dispersion modeling services; meteorological services; and the ambient monitoring Quality System.

# **Market Impacts of Emission and Efficiency Standards**

**Bob Ferguson** 

Mr. Ferguson founded Ferguson, Andors & Company in 1991, offering a full range of product development consulting and regulatory compliance services focused on the hearth, patio and barbecue industry. Clients include both small and large companies from around the world. From 1980 to 1990, he was Director of Research and Development at Vermont Castings where he was responsible for all aspects of product development, product performance and product safety. He is co-inventor for a number of patents related to the hearth product performance and combustion technology. He has served on the Board of Directors and has held several committee chairs for the Hearth, Patio & Barbecue Association (HPBA) predecessors (HPA/WHA) and was a director and officer for the HEARTH Education Foundation. · He represented the manufacturers' interests during the Regulatory Negotiations (RegNeg) that resulted in the current EPA New Source Performance Standards for Wood Heaters. · He chaired or acted as facilitator during the development of the ASTM particulate measurement and fireplace emissions test methods, as well as the wood heater and pellet heater emission test methods. He is currently helping to facilitate an ASTM test method for hydronic heaters that employ partial thermal storage. · He is also a voting member of the CSA B415.1 and B365 Technical Committees that address Solid Fuel Appliance Performance Standards in Canada. Currently he is providing HPBA with technical consulting services for the NSPS review/revision process that is now underway at EPA. · He holds a BS in Chemical Engineering from Clarkson University in Potsdam, New York.

# John Ackerley

John Ackerly is the founder and President of the Alliance for Green Heat, a consumer non-profit that promotes cleaner and more efficient residential biomass heating with a focus on low and middle-income families. He has 25 years of experience in advocacy and non-profit management with human rights and environmental groups in Washington, DC. John serves on the Board of the Biomass Thermal Energy Council, the Steering Committee of the New England Biomass Working Group, the Advisory Board of the Maryland Clean Energy Center and Chairs the Solid Fuels Working Group of the Building Performance Institute that is developing energy audit standards for wood stoves. He earned a BA from Dartmouth College and a JD at the Washington College of Law. He heats his home in Maryland with about 2 cords of very dry wood.

### Christian Rakos

# Chris Wiberg

Chris Wiberg is the Manager of Biomass Energy Services at Timber Products Inspection (TP) and Biomass Energy Lab (BEL) in Conyers, GA. His primary responsibilities include serving as the manager of the biomass laboratory as well as the manager of pellet mill auditing and inspection services. He also assists pellet producers in the set up and operation of internal testing laboratories and quality management programs.

Achieving four year degrees in both Toxicology and Chemistry from Minnesota State University – Mankato in 1995, Mr. Wiberg now has over 17 years of experience in the field of physical and chemical analysis and 13 years specifically in the biomass industry.

Mr. Wiberg has also been involved in the development of biomass standards, quality management, and testing methodology. He is currently Co-Chair of the Pellet Fuels Institute Standards Committee, a member of the US Technical Advisory Group (TAG) for ISO TC 238 for the development of solid biofuel standards and is a member of ISO TC 238 Working Groups 2, 3, 4, 5, and 6. Additionally, Mr. Wiberg has developed a quality manual template for use in setting up quality management systems at solid biofuel production facilities and is experienced in setting up on-site laboratories.

As a strong proponent for the development of the solid biofuels industry for over a decade, Mr. Wiberg is a member of the Pellet Fuels Institute, the Biomass Thermal Energy Council, and the US Industrial Pellet Association. He is a member of the "Heating the Midwest with Renewable Biomass" Steering Committee, Chairman of the HTM Benefits Action Team, and HTM conference Co-Chair. He has also served on numerous committees, advisory panels, etc.

Mr. Wiberg has also been active in the fields of safety and industrial hygiene. His expertise lies in the development of safety programs, hazard assessments and employee exposure monitoring. Mr. Wiberg was approved by the American Board of Industrial Hygiene as a Certified Industrial Hygienist (CIH) in 2005.

### Christian Rakos

### Lisa Rector

Lisa Rector is a Senior Policy Analyst at NESCAUM and an expert in the environmental impacts of woody biomass combustion, as well as technical and policy approaches to addressing emissions. For the past 14 years she has worked on a wide variety of technical and policy issues related to biomass. She has authored multiple reports for NYSERDA and other state and federal agencies on the emissions impacts of various biomass heating technologies and strategies for mitigating emissions and other deleterious impacts of biomass combustion. She has also worked extensively with the states and EPA to develop

biomass policies. She is currently working closely with EPA and states across the country on the development of new source performance standards (NSPS) for residential wood heaters and on the rules impacting industrial, commercial and institutional (ICI) boilers. Furthermore, she has extensive experience in emissions testing, test protocols, monitoring and modeling for combustion sources. She leads NESCAUM's National Residential Wood Combustion workgroup, NESCAUM's Stationary Source and Permitting Committee, NESCAUM's Compliance and Enforcement Committee and NESCAUM's Biomass Workgroup.

<u>Overview and Status of Current Draft of USEPA's NSPS for Residential Wood Heating Devices</u> *Gil Wood*