

# National Incident Command's Flow Rate Technical Group

## Membership List as of 5.27.10

### Member Bios from the Federal Government:

**Dr. Marcia McNutt, Chair of the National Incident Command's Flow Rate Technical Group**, is Director of the Department of the Interior's U.S. Geological Survey. USGS is the nation's largest water, earth, biological science and civilian mapping agency. A distinguished scientist and administrator, Dr. McNutt previously served as president and chief executive officer of the Monterey Bay Aquarium Research Institute in California. Dr. McNutt has participated in 15 major oceanographic expeditions and published 90 peer-reviewed scientific articles. She is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Dr. McNutt received a B.S. in Physics from Colorado College and a PhD in Earth Sciences from Scripps Institution of Oceanography.

**David Absher** is a Technical Petroleum Engineer with the Reserves Section, Resource Evaluation in the Minerals Management Service (MMS) Gulf of Mexico Region. He has been with MMS since 1995 and currently develops independent estimates of hydrocarbon volumes, participates in special projects, and recommends methodologies to revise and update hydrocarbon estimates. Absher holds a B.S. in Petroleum Engineering Technology from Oklahoma State University.

**Lieutenant Commander Richard Brannon** is with the U.S. Coast Guard 8<sup>th</sup> District Gulf Strike Team. During the response to Hurricane Katrina, he was credited with the successful staging of food and supplies to critical areas, coordinating the multiagency response to over 500 sunken or grounded vessels, and saving the federal government over \$1 million by adroitly negotiating service contracts.

**William Courtwright** is a Staff Petroleum Engineer, Resource Evaluation, in the MMS Gulf of Mexico regional office. He serves as Lead Engineer for the Reserves Section Unit 1 in reservoir analyses, reserves inventory, and training for new employees and is responsible for the evaluation and maintenance of reserves data in the Technical Information Management System database for Unit 1. Courtwright has been with MMS Gulf of Mexico region since 1999; he holds a B.S. in Chemical Engineering from the University of Pittsburgh.

**Gerald Crawford** is a Petroleum Engineer with the MMS Gulf of Mexico regional office. He serves as Lead Engineer for the Reserves Section in resolving issues related to reservoir analyses, reserves inventory, and assignments of new producible leases to fields. He has also authored a report on oil and gas reserves in the Gulf.

**Austin Gould** is the Chief of the Office of Research, Development, Test, and Evaluation for the United States Coast Guard. In this role he manages the Coast Guard's Research and Development program, including their Research and Development Center. Austin graduated in 1988 from the United States Coast Guard Academy (BS) and in 1996 from New York University (MBA).

**Dr. William (Bill) J. Lehr** is currently Senior Scientist at the Office of Response and Restoration of the National Oceanic and Atmospheric Administration (NOAA). He was previously Spill Response Group Leader for the same organization, technical analyst with NASA Jet Propulsion Laboratory and held a joint appointment with the Research Institute and Mathematical Science Department at the University of Petroleum and Minerals. Dr. Lehr has also served as an adjunct professor for the World Maritime University and oil spill consultant for UNESCO. Dr. Lehr is a world recognized expert in the field of hazardous chemical spill modeling and remote sensing of oil spills.

**Victor F. Labson** is the Director of the U.S. Geological Survey's (USGS) Crustal Geophysics and Geochemistry Science Center in Denver, Colorado. This Science Center employs more than 100 geophysicists, geochemists, and related technical and professional staff in earth science research. Dr. Labson's 30-year career with the USGS has been focused on the application of ground and airborne geophysical methods to quantitative imaging of the Earth. His most recent focus has been on the relationship of the chemical and physical properties of the Earth to resultant geophysical phenomena.

**Dr. Marcia McNutt** is Director of the USGS, and a distinguished scientist and administrator and the first woman director of the USGS in its 130-year history. Dr. McNutt previously served as president and chief executive officer of the Monterey Bay Aquarium Research Institute (MBARI), in Moss Landing, CA.

**Don Maclay** is a Petroleum Engineer currently on the staff of the Regional Supervisor of the Office of Production and Development, MMS Gulf of Mexico Region.. He provides technical support to the Regional Supervisor in the evaluation of requests relating to the efficient recovery of hydrocarbon resources in the Federal OCS. He holds a BS in Petroleum Engineering from the University of Southern California and a MS in Geology from Tulane University.

**Darren Mollot** is the Senior Technical Adviser in the Office of Planning and Environmental Analysis at the Department of Energy (DOE). The Office of Planning and Environmental Analysis is housed at the National Energy Technology Laboratory and is tasked with leading the development of the technology performance metrics and forecasting the benefits based on the projected metrics and goals.

**William Reese** is the Principal Associate Director for Global Security at Los Alamos National Laboratory. Rees' recent assignments include the Science and Technology Policy Institute in Washington, D.C., where he was a fellow and deputy under secretary of defense for Department of Defense (DoD) Laboratories and Basic Sciences, DUSD (LABS).

**Franklin Shaffer** is a Senior Research Engineer with DOE National Energy Technology Laboratory. For 25 years he has led the development of new high speed particle image velocimetry (PIV) tools to study particle flow dynamics of energy processes. He has received numerous national and international awards for development of new high speed imaging tools, including the R&D 100 Award and the Federal Laboratory Award for Excellence in Technology Transfer.

## **Member Bios from Academia:**

**Dr. Alberto Aliseda** is an Assistant Professor of Mechanical Engineering at the University of Washington. His research and teaching focuses on fluid mechanics with applications to Energy, Environmental and Biomedical Flows.

**Dr. Paul Bommer** is a Senior Lecturer in Petroleum Engineering at the University of Texas at Austin. He teaches courses in drilling, production, artificial lift, and facilities. He also spent twenty-five years in private practice, specializing in drilling and production operations and oil and gas appraisals.

**Dr. Peter C. Cornillon** is a Professor of Physical Oceanography at the University of Rhode Island. His areas of interest range from the large-scale, e.g., subtropical gyre circulation, to the small-scale, e.g., frontal dynamics in the open ocean and on the continental shelf. He has also been working as a satellite oceanographer since 1981.

**Dr. Juan C. Lasheras** is a Professor in the Department of Mechanical and Aerospace Engineering at the University of California at San Diego. His research interests include turbulent flows, two-phase flows, and bio-medical fluid mechanics, and biomechanics.

**Dr. Ira Leifer** is an Associate Researcher at the University of California at Santa Barbara. His research projects include a simulation of a surface oil spill by a hydrocarbon seep, and an estimate of the release points of oil slicks in the ocean using the natural laboratory of the Santa Barbara Channel.

**Dr. James J. Riley** is a Professor of Mechanical Engineering at the University of Washington. He is a pioneer in the development and application of direct numerical simulation to transitioning and turbulent flows. His current research emphasizes turbulent, chemically-reacting flows, as well as waves and turbulence in density-stratified flows and rotating flows.

**Dr. Omer Savas** is a Professor with the Department of Mechanical Engineering at the University of California at Berkeley. His research interests include fluid mechanics, aircraft wake vortices, biofluid mechanics, boundary layers, instrumentation, rotating flows, transient aerodynamics, turbulent flows, and vortex dynamics.

**Dr. Steven Wereley** is an Associate Professor of Mechanical Engineering at Purdue University. His research interests include biological flows at the cellular level, and electrical and optical manipulation of particles and fluids.

**Dr. Poojitha D. Yapa** is a Professor of Civil and Environmental Engineering at Clarkson University. His research interests include modeling of deep water oil and gas jets and plumes, modeling of the fate of oil spills and related oil spill processes, and oil shoreline interaction.

**Pedro Espina** is a Scientific Advisory for the National Institute of Standards and Technology.