TECHNICAL AND ECONOMIC CHALLENGES IN COMMERCIAL DEVELOPMENT OF UNCONVENTIONAL GAS RESERVOIRS
A Multidiscipline Workshop

Unconventional resources require novel approaches to access, develop and produce in an environmentally sensitive manner, making them high cost initiatives to pursue. The challenge for engineers and scientists is significant in unlocking these reservoirs in an economically viable manner especially when their heterogeneity, stress anisotropy and fluid sensitivity are also incorporated into their already complex behavior. In addition to the economic challenges, the concern for land, surface and groundwater contamination with completion and fracturing fluids require close attention to selecting chemical additives, monitoring and controlling fracture pathways created as a result of the stimulation operations. The workshop will bring together experts from energy industry, academic and government organizations to discuss the technical and commercial issues and challenges.

With increased attention to drilling and production operations in unconventional gas shale reservoirs in the US and around the globe, a strategic plan for unconventional systems across all science and engineering disciplines is critical for development of unconventional gas resources and will significantly impact the focus of any future strategy in the oil and gas industry. Participation of experts from multidisciplinary backgrounds at the workshop will provide better comprehension of the economic and technical barriers constraining the development of these large reservoirs and will help develop a roadmap for vital research and development needs to overcome these challenges while enabling environmentally conscious solutions.

Released copies of the workshop presentations will be available to the attendees at the UNGI website (ungi.mines.edu) following the workshop. A summary report of the workshop will also be made available at the same URL immediately after the symposium.

Dr. John Poate  
Vice President of Research and Technology Transfer  
Colorado School of Mines

Dr. Azra N. Tutuncu  
Director, Unconventional Natural Gas Institute (UNGI)  
Colorado School of Mines

Dr. Jeremy Boak  
Director, Center for Oil Shale Technology and Research  
Colorado School of Mines