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Meso Scale Science: Challenges and Opportunities

HARRIET KUNG, Basic Energy Sciences, Department of Energy, Office of Science

The Director of DOE's Office of Science issued a charge to the Basic Energy Sciences Advisory Committee (BESAC) in 2011 to define the research agenda for mesoscale science, the regime where classical, quantum, and nanoscale science meet. The charge builds on over a decade's strategic planning BESAC has undertaken that establishes the importance of nanoscale science – atomic and molecular scale understanding of how nature works and how this relates to advancing the frontiers of science and innovation. Beyond a new level of science, the opportunity for new, cheaper and more efficient technology and solutions to societal problems is significant and timely. This presentation will discuss the impact of the report and how it has shaped and will continue to inform future research programs in DOE Office of Science.