

ENERGY-RELATED RESEARCH IN THE DOE OFFICE OF BASIC ENERGY SCIENCES

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The \$1 billion Basic Energy Sciences (BES) program in the Department of Energy's Office of Science sponsors fundamental research in materials sciences and engineering, chemistry, geosciences, and biosciences that impacts energy resources, production, conversion, efficiency, and the mitigation of the adverse impacts of energy production and use. BES supports a large extramural research program, with approximately 40% of the program's research activities sited at academic institutions. BES also plans, constructs, and operates major scientific user facilities, including synchrotron radiation light sources, neutron scattering facilities, electron-beam microcharacterization centers, nanoscale science research centers, and facilities for materials synthesis and processing.

Dr. Patricia Dehmer, Director of BES, will give an overview of emerging research opportunities including summaries of three recent workshops that will shape the future course of the program – *Basic Research Needs for a Secure Energy Future*, *Basic Research Needs for the Hydrogen Economy*, and *A 20-year Basic Energy Sciences Facilities Roadmap*. Specifically, she will highlight BES' priorities related to the Administration's Hydrogen Fuel Initiative and the BES-sponsored hydrogen workshop report.