

ENERGY RESEARCH AND DEVELOPMENT CENTER (ERDC)

110 Engineering Research Laboratory Philip Whitefield (Director)

The Energy Research and Development Center (ERDC) provides an environment for researchers from various Missouri S&T disciplines to collaborate on sponsored projects involving energy and its impact on society and the environment. The mission of the ERDC is to educate students in energy topics that address key challenges that face society related to energy issues involving industry and government, for the benefit of the university, the state of Missouri, and the nation. Topics of interest include developing "Hybrid Energy Systems" that combine legacy and renewable energy sources, development of drop-in compatible biofuels, application of alternative energy sources including wind and solar, plug-in hybrid vehicles, the bulk power system, high temperature electrolysis to produce hydrogen, cyber-security of energy management systems, synthetic fuel development, advanced nuclear energy systems such as small modular reactors, and petroleum exploration and extraction methods. More than 41 faculty researchers are affiliated with the Center. Researchers affiliated with the Energy R&D Center also closely collaborate with other research centers including Materials Research Center, Intelligent Systems Center, Center for Infrastructure Engineering Studies, and the Environmental Research Center. For more information visit the web site at <http://energy.mst.edu> or contact erdc@mst.edu.