Invited talks (Abstracts only)

The spallation neutron source: New opportunities

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Abstract. The spallation neutron source (SNS) facility became operational in the spring of 2006, and is now well on its way to become the world-leading facility for neutron scattering. Furthermore, the SNS and the HFIR reactor facility, newly outfitted with a brilliant cold source and guide hall, were brought together within a single Neutron Sciences Directorate at ORNL providing the opportunity to develop science and instrumentation programs which take advantage of the unique characteristics of each source. SNS and HFIR will both operate as scientific user facilities. Access to these facilities is being managed under an integrated proposal system, which also includes the Center for Nanophase Materials Sciences (CNMS) and the electron microscopes in the Shared Research Equipment (SHARE) program.

Presently, SNS has three instruments operating in the user program and seven more will begin operations in 2008. When complete, the facility will accommodate 25 instruments enabling researchers from the United States and abroad to study materials science that forms the basis for new technologies in telecommunications, manufacturing, transportation, information technology, biotechnology, and health.

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