

Educational Programs at the National High Magnetic Field Laboratory



CIRL, the NHMFL's **Center for Integrating Research and Learning** creates partnerships

among teachers, scientists, researchers and educators to translate real-world science into classroom experiences and career opportunities for talented undergraduates.

RESEARCH EXPERIENCES FOR UNDERGRADUATES and **RESEARCH EXPERIENCES FOR TEACHERS**

These signature programs place students and teachers in authentic laboratory environments. Since 1992, the REU program has provided **175 talented undergraduates** with experiences that encourage them to pursue graduate courses of study and careers in the sciences. Since 1999, **73 RET teachers** have been challenged to translate real world science to their classrooms. A recently launched research project will measure how these programs affect teacher practice and student attitudes toward science.

Student and teacher presentations and papers since 1999, several of which have been published, can be viewed at reu.magnet.fsu.edu and <http://ret.magnet.fsu.edu>



Alex Vitkalov, one of the undergraduate summer interns in the NHMFL, shown in front of the refrigerator and electrical equipment that he used to measure GLASSY ELECTRON BEHAVIOR in Dr. Dragana Popovic's laboratory, research funded under DMR 0071668.

NHMFL Tours and Outreach. In academic year 2003-2004, outreach was provided to **over 7000 schoolchildren**; the Annual NHMFL Open House attracted **over 2800 members of the general public**, and laboratory tours were given to **over 1500 children and adults**. New programs such as *Science Night at Borders Bookstore*, *Girls in Science* and *Focus on Physics* further extend the informal science education mission of the **Center for Integrating Research and Learning at the NHMFL**.

Curriculum Development continues with **Project Superconductivity**, to debut at the 2004 Applied Superconductivity Conference in Jacksonville, FL and **Project Recertification**, which has been adopted statewide in Florida as a resource for middle school and high school teachers.