Graduate Courses in Physics and Nanotechnology at SCSU

Summer 2010

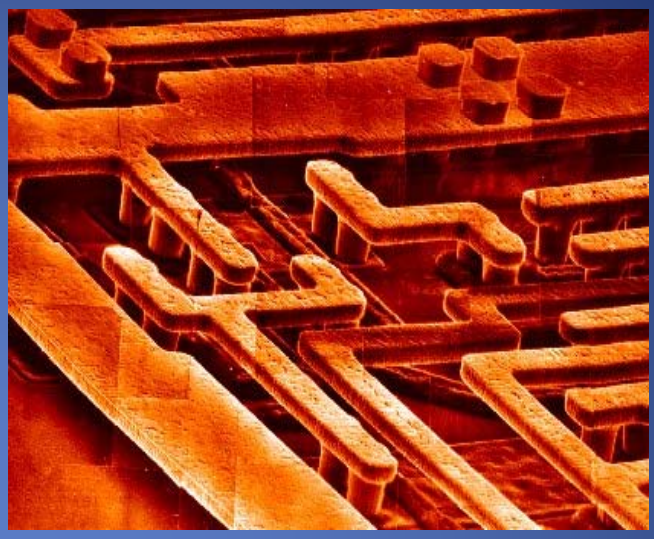
Southern Connecticut State University

SCSU

SUMMER at Southern

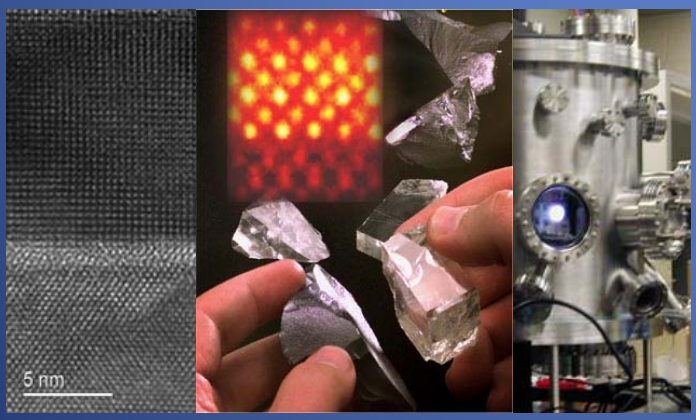
The Physics Department at SCSU is pleased to offer three graduate courses in Physics & Nanotechnology during the 2010 Summer Session

www.southernct.edu/physics



SCE 575: *Interdisciplinary Research in Materials Science, Microscopy and Nanotechnology*

Students will collaboratively develop a research topic, identify materials and methods required and then actively investigate a research question. This course is designed to provide an opportunity for students to experience the integrated nature of science. Activities will be developed from a range of disciplines. Materials science and nanotechnology will be studied as examples of interdisciplinary science that involves all disciplines. Students will be required to present the results of their research and will develop a teaching module based on their research experience. **Dr. Christine Broadbridge broadbridge@southernct.edu Monday-Thursday, 9a-3p, July 12-July 22 [3 credits]**



PHY 503: *Teaching and Learning Physics through Interactive Lectures and Problem Solving*

An introduction to the current research on the learning and teaching of physics with an emphasis on issues, approaches and materials associated with lectures and problem solving. Curricular materials shown to be effective with a range of students will be investigated and distributed. This course is a companion to PHY 511, Experiments and Demonstrations in Physics (soon-to-be renamed Teaching & Learning Physics through Investigations and Demonstrations and offered alternate years). **Dr. Karen Cummings cummingsk2@southernct.edu Monday - Thursday, 10a-4p, June 28-July 8 [3 credits]**

Scholarships available!

https://www.southernct.edu/crisp

PHY 522: Nanoscale Fabrication and Synthesis

Fundamentals of condensed phase nucleation and growth as applied to the synthesis of nanoscale structures. Properties of condensed matter at the small scale, including the effects of the increasing surface to volume ratio. Overview of the synthesis and fabrication techniques employed to produce nanostructures, and introduction to the methods of nanostructure characterization. Laboratory visits and hands-on experience at the state-of-the-art synthesis and microscopy facilities at SCSU and Yale.

Dr. Maria Gherasimova gherasimovm1@southernct.edu

Tuesday - Thursday, 5:20p - 9:40p, July 6-July 22 [3 credits]

Center for Research on Interface Structures and Phenomena

An NSF-funded Materials Research Science & Engineering Center (MRSEC)