

University of Central Florida

Materials Characterization Facility (MCF) - Advanced Materials Processing and Analysis Center (AMPAC)

Web Site Link: <http://www.ampac.ucf.edu/facilities/MCF.php>

Available equipment techniques are listed at the web site.

Director: Dr. Sudipta Seal

Contact Information

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Address: 12443 Research Parkway, Suite 304, Orlando, FL 32826

Description

The Materials Characterization Facility (MCF) is dedicated to providing researchers and industrial partners a place to perform characterization and analysis to advance research; classroom education and hands-on training in the use of state-of-the-art characterization equipment; user-friendly support services with expert advice and data interpretation; and to enhance competitiveness of industrial partners and boost economic development of the Central Florida region.

MCF occupies about 7,000 sq. ft. of space and is supported by 3 full-time research engineers and a full-time facilities coordinator. Collaboration with other Universities is encouraged.

AMPAC is an interdisciplinary research and education center for materials science and engineering located at the University of Central Florida (UCF). Our work intersects with research areas including biology, medicine, energy, microelectronics, and nanotechnology. Materials science and engineering (MSE) is an interdisciplinary field that impacts almost every application area. Finding or developing a material with the right properties, or with affordable fabrication costs, or appropriately characterizing the material composition and/or structure to enable development of specific material properties, is often the limiting factor and enabling technology in most applications.

AMPAC faculty, affiliated faculty, and graduate students conduct in-depth research in materials science and engineering to address the requirements of several applications including energy, microelectronics, nanotechnology, green energy, life sciences, optics, aerospace, and bioengineering with the goals of enhancing scientific understanding and promoting industrial development and economic growth. With research expenditures totaling more than \$3.6M per year, the UCF materials science and engineering research efforts are supported by a number of government agencies, including national laboratories, as well as private industries. The nine AMPAC faculty and 71 students alone author over 80 refereed publications and 100 presentations per year at national and international conferences.

Fee Schedule:

Facility use is negotiated on a per-proposal basis.

Advanced Microfabrication Facility - Advanced Materials Processing and Analysis Center (AMPAC)

Web Site Link: <http://www.ampac.ucf.edu/facilities/AMF.php>

Available equipment techniques are listed at the web site

Director: Dr. Sudipta Seal

Contact Information

Karen Glidewell

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Description

The Advanced Microfabrication Facility (AMF) is a multi-user cleanroom facility dedicated to provide university researchers and industrial and government partners the capabilities to perform cutting edge research, and training and education of students in the use of the available equipment for fabrication and testing of microdevices. AMF consists of a 600 sq. ft. class 100 facility and a 2500 sq. ft. class 1000 facility.

The AMF is supported by a research associate, a graduate student assistant, and a facilities coordinator to assist all users in use of and training on the AMF equipment. Collaboration of UCF researchers with other universities, government agencies, and industrial companies is strongly encouraged.

Fee Schedule:

Facility use is negotiated on a per-proposal basis.

NanoScience Technology Center (NSTC)

Web Site Link: <http://www.nanoscience.ucf.edu/index.php> and
<http://www.nanoscience.ucf.edu/equipment/>

Director: Dr. Sudipta Seal

Contact Information

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Address: 12424 Research Parkway Suite 400 Orlando, FL 32826 (Research Pavilion 4th Floor)

Description

The NanoScience Technology Center (NSTC) was formed in 2005. The NanoScience Technology Center occupies the entire 4th floor of the Research Pavilion building in UCF's Research Park. It contains over 20,000 sq. ft. of advanced chemical, materials development, and biological laboratories in support of a wide range of multidisciplinary research projects.

The common goal and purpose of this center is to strongly promote interdisciplinary research. Research opportunities in areas as diverse as Green Energy, Functional Nanomaterials, Computer/Mathematical Simulations, Assistive Robotics, Quantum Dynamics, Bioimaging, NanoElectronics & NanoPhysics, Integrated Device Development and Advanced Materials have been explored.

The equipment list is given at: <http://www.nanoscience.ucf.edu/equipment/>

Fee Schedule:

Facility use is negotiated on a per-proposal basis.

CREOL – The College of Optics and Photonics

Web Site Link: <http://www.creol.ucf.edu/Research/Facilities.aspx>

Director: Dr. Bahaa Saleh, Dean

Contact Information

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Description

The research activities of College of Optics and Photonics (COP) faculty span the spectrum from basic science and physics of optics, photonics, and related phenomena, to prototype development and demonstration of feasibility in applications. The faculty vigorously pursues joint research projects with industry, academia, and government laboratories. The main facilities of the COP are housed in a state-of-the-art 96,000 sq. ft. building dedicated to optics and photonics research and education. The list of laboratories in this facility is given at the web site.

Fee Schedule:

Facility use is negotiated on a per-proposal basis.