



Program Managers Air Force Office of Scientific Research

The Air Force Office of Scientific Research (AFOSR), located in Arlington, Virginia, continues to expand the horizon of scientific knowledge through its leadership and management of the Air Force's basic research program. As a vital component of the Air Force Research Laboratory (AFRL), AFOSR's mission is to discover, shape, and champion basic science that profoundly impacts the future Air Force. Applications are invited for the following Program Manager positions.

Chemistry in Extreme Environments

Chemistry in Extreme Environments (Summer 2012) AFOSR is currently looking for a new program manager for a portfolio that will start in FY13 focused in the broad area of energetic chemistry. Expertise is sought in the chemistry and physics of energetic compounds. The focus of this portfolio will be directed at exploring the unusual properties that have been observed under extreme conditions such as the transformations of molecular solids into more compact structures representing an exciting opportunity to explore new classes of high energy density solids.

Computational Materials Science

Computational Materials Science (Summer 2012) requires an individual with broad expertise and demonstrated experience in understanding structure-property relationships in metallic and ceramic materials from the atomic to nano- and micro-structural to macroscopic length scales, and how their synthesis, processing, and characterization can be exploited to achieve the desired physical, mechanical, and functional properties.

Condensed Matter and Materials Theory

Condensed Matter and Materials Theory (Summer 2012) requires an individual with broad expertise and demonstrated

experience in theoretical and computational materials research relevant to the exploitation of self-assembly chemistry in achieving complex structural arrangements with nanoparticles and nanodomain phase separation control.

Biomaterials

Biomaterials (Summer 2012) requires an individual with broad expertise and demonstrated experience in exploring new classes of autonomic materials for sensing, actuation, and energy conversion based on the diverse range of stimuli-responsive properties of biomolecules.

Structural Mechanics

Structural Mechanics (Summer 2012) requires an individual with broad expertise and demonstrated experience in structural health monitoring and prognosis sciences relevant to air and space platforms. Expertise is sought in multi-scale modeling and prognosis including physics-based models that quantitatively predict the materials performance and durability of metallic and composite flight structures operating at various regime novel and/or research experience of revolutionary on-board health monitoring and embedded NDE concepts.

REQUIREMENTS

Applicants must have a PhD degree or equivalent experience in the physical sciences, engineering, or a closely related field, plus six or more years of successful research, research administration, and/or managerial experience pertinent to the position. RSA's Program Managers coordinate and facilitate research collaborations across AFRL, DoD, and other funding agencies including developing international collaborations within the research community.

APPLICATION DEADLINES

June 30, 2012 and July 31, 2012

HOW TO APPLY

Applicants should indicate within their cover letter and subject line of the email, which Program they are applying to. Please submit curriculum vitae to Ms. Maria King at afrl.afosr.om@afosr.af.mil. Questions concerning these announcements can be directed to Dr. Joan Fuller at joan.fuller@afosr.af.mil or via phone at 703-696-8457.

AFRL is an Equal Opportunity Employer

FACULTY POSITION**Department of Materials Science and Engineering**

The Department of Materials Science and Engineering of the University of Florida invites applications for a non-tenure track faculty Lecturer position dedicated to undergraduate laboratory instruction. This position will be a renewable 12-month appointment starting from the Fall 2012 Term. The main duties for this position include teaching two general laboratory courses for juniors (Materials Lab 1 in Fall; Materials Lab 2 in Spring) and coordinating specialty laboratory courses for seniors. In addition, this Lecturer will coordinate the entire laboratory experimental experience for undergraduate students in the Materials Science and Engineering degree program, which includes contributing to the curriculum of the Capstone Design course (EMA 4714), student participation in the Integrated Product and Process Design (IPPD) program (EMA 4915), and Research Experience for Undergraduates (REU), computer software use, etc.

The candidate is expected to have extensive laboratory experiences, with a broad knowledge of various types of materials including metals, ceramics, electronic materials, polymers, and biomaterials. The candidate should be dedicated to a career in undergraduate teaching, and have either a doctoral degree in materials science and engineering or a related field, or a master's degree with appropriate experience.

The UF MSE Department is a vibrant, multidisciplinary highly-collaborative environment and has consistently ranked among the top departments in the nation for both graduate and undergraduate programs. It is also among the largest MSE departments in the nation with more than 30 faculty members, ~250 graduate students, over 340 undergraduates, and over \$10 million in annual research expenditures. The department provides integrated Materials Science and Engineering education devoted to biomaterials, ceramics, composites, electronic and optical materials, metals, and polymers.

We are dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment; we strongly encourage applications from women, members of underrepresented groups, individuals with disabilities, and veterans.

The search committee will begin reviewing applications on May 30, 2012, and will continue to receive applications until the position is filled. To apply, please reference **position number 00009567**, send a curriculum vitae, a statement of prior teaching and laboratory experiences, teaching philosophy and vision for undergraduate laboratory experience, and contact information for three references to:

Chair of the Search Committee
Materials Science and Engineering Faculty Search
Department of Materials Science and Engineering
P.O. Box 116400
University of Florida
Gainesville, FL 32611-6400

PDF files of the application package should be e-mailed to Ms. Venice Walker at facultysearch@mse.ufl.edu. For additional information about the Department and University, please visit our Web site at <http://www.mse.ufl.edu>.

The University of Florida is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority group members. According to Florida law, applications and meetings regarding applications are open to the public on request.



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Visit www.mrs.org/sustainability-forum to watch the five-part video series filmed at the 2012 MRS Spring Meeting.

Keynote Presentations:

Social Barriers to Renewable Energy
Martin Pasqualetti Arizona State University

**Sustainable Development—
 An Industrial Ecologist's Perspective**
Roland Clift University of Surrey

The Role of Water in Sustainable Development
Heather Cooley Pacific Institute

Investing in Sustainable Development
Nancy Pfund DBL Investors

Investments in Sustainability at the National Science Foundation
Ashley White National Science Foundation

Panel Discussions:

Sustainable Development Metrics
John Baglin IBM Almaden Research Center
Heather Cooley Pacific Institute
Anu Ramaswami University of Colorado at Denver

Sustainable Development of Alternative Energy Sources
David Ginley National Renewable Energy Lab
Martin Pasqualetti Arizona State University
Nancy Pfund DBL Investors
Elizabeth Wilson University of Minnesota

**Life-cycle Assessment Case Study—
 Sustainable Development in the Auto Industry**
Roland Clift University of Surrey
Alan Hurd Santa Fe Institute
Alan Taub General Motors Company

www.mrs.org/sustainability-forum

Connect with others interested in materials, energy and sustainability via the **Materials for Energy and Sustainable Development** LinkedIn group.



Read more about the role of materials in sustainable development efforts in the April 2012 Special Issue of *MRS Bulletin*: "Materials for Sustainable Development."