

Positions Available

**ASSISTANT PROFESSOR
Composite Materials**

William and Mary anticipates a tenure-track position for an Assistant Professor in the Program of Applied Science in connection with William and Mary's membership in the Virginia Consortium for Science and Engineering. Requirements for the successful candidate: PhD in a science or engineering field relating to composite materials, demonstrated capacity to conduct publishable research and to direct doctoral, master's, and bachelor degree students; at least one year of experience beyond the PhD in characterization and evaluation of structural materials and in manufacturing process optimization; demonstrated ability to develop and teach academic courses in chemistry, physics, or materials science. Applicants should submit curriculum vitae and the names of at least three references to: Applied Science Search Committee, c/o Kathee S. Card, Small Hall, P.O. Box 8795, Williamsburg, VA 23187-8795. Review of applications will begin on May 2 and will continue until the position is filled.



The College of William and Mary is an equal opportunity, affirmative action employer. Members of underrepresented groups (including people of color, persons with disabilities, Vietnam veterans and women) are strongly encouraged to apply.

**MATERIALS ANALYSIS
SPECIALIST**

MARTECH, The Center for Materials Research and Technology located at Florida State University, is looking for a person knowledgeable in the areas of thin-film synthesis and materials characterization. This is a "hands on" position involving system maintenance, ongoing development, training of users, establishing procedures, and operating a variety of materials analysis instruments. A partial list of instruments includes: Siemens x-ray facility (3 systems), a Perkin-Elmer ESCA and LEED system, a Quantum Design Magnetometer (SQUID), and a Profilometer. It is important that applicants have good communication and interpersonal skills as the position requires interacting with a wide variety of people. A master's degree in an appropriate area of specialization or a bachelor's degree and two years of appropriate experience.

Send resume to: Dr. Stephan von Molnar, Florida State University, MARTECH, 406 Keen Bldg., Tallahassee, FL 32306-4000; or e-mail to: MARTECH@PHY.FSU.EDU

RESEARCH POSITIONS

High-Rate Constitutive Properties of Solids

The Mechanics of Materials and Equation of State Group at Los Alamos National Laboratory has Postdoctoral and Full-time openings for research scientists in the field of constitutive modeling of high-rate material deformation. The representative materials of interest are metals, plastics, ceramics, composites, and intermetallics. Continuum constitutive models, for use in finite-element or finite-difference codes, are to be developed from knowledge of microscale physical processes in combination with empirical information consisting of Hopkinson bar and shock-wave data, for example. Necessary academic training should include a Ph.D. in Materials Science, Applied Physics, Engineering Mechanics, or related disciplines. Los Alamos National Laboratory has a strong background in all aspects of dynamic materials deformation research and computational application. Research scientists would be working with an experienced team of materials scientists engaged in mechanical properties studies of materials for military and industrial applications. Applicants for these positions should be U. S. citizens capable of qualifying for a Department of Energy "Q" clearance. Interested individuals should send a curriculum vitae containing a list of publications and the names and addresses of three references to: Anna Parks (MS P286), Personnel Services Division **101750-94014**, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A Teletype Device for the Deaf (TDD) is available by calling (505) 665-5357. Los Alamos National Laboratory is operated by the University of California for the US Department of Energy.

Los Alamos
NATIONAL LABORATORY

**RESEARCH SCIENTIST
Environmental Materials Science**

Battelle, Pacific Northwest Laboratories (PNL) is seeking an expert individual to help design, procure, and conduct research on three state-of-the-art oxide epitaxy systems in the Materials and Interfaces Group of the Molecular Science Research Center at PNL. The focus of the research is fundamental environmental science, with an emphasis on the synthesis and chemistry of model surfaces of mineral, catalyst, separations and waste-containment materials.

The successful candidate will likely hold a PhD in chemistry, materials science, or chemical engineering and will help oversee the design, construction, maintenance, operation, and effective scientific utilization of the epitaxy equipment, with particular emphasis on the chemical vapor deposition (CVD) chambers. In addition, the new staff will work closely with other PNL and visiting scientists in meaningful collaborations. Significant experience in CVD, optical spectroscopy and scanning probe microscopy is highly desirable.

PNL, operated by Battelle Memorial Institute for the Department of Energy (DOE), conducts basic and applied research in support of DOE's environmental, energy, and national security missions. PNL's work is carried out by a diverse team of over 4,000 technical professionals and support staff, and features extensive collaboration with academic, government, and industrial researchers. PNL is located beside the Columbia River in a pleasant, semi-rural community in eastern Washington.

For consideration, please forward a copy of your resume including publication list along with three letters of recommendation to: PNL, Dept. 941044RJB, P.O. Box 999, MSIN: K6-21, Richland, WA 99352; or e-mail to: pnl_employ@pnl.gov (use WP 5.1 or ASCII); or fax to (509) 376-9099. Please note on fax/e-mail: Attn: Dept. 941044RJB.



Battelle

...Putting Technology To Work

PNL is an equal opportunity employer M/F/V/D. A legal right to work in the U.S. is required.

Positions Available

**RESEARCH PHYSICIST
Naval Research Laboratory
GS-1310-13**

\$49,947* (or higher step in accordance with regulations)
*Pay is based on 4.23% locality pay adjustment—base pay is \$47,920

The Naval Research Laboratory is actively recruiting a Research Physicist to independently perform research in theoretical and experimental physics and to serve as a research Program Manager with responsibility for formulating research programs, soliciting funding for and guiding research in the areas of self-assembling structures, complex fluids, and molecular materials. The selectee will utilize a number of techniques required to elucidate the structure, physical properties and function of the microstructures/phases in relation to their molecular architecture. It is expected that the selectee will utilize the results from the basic research programs to formulate application-oriented programs of technological relevance to the Navy and DoD. The selectee will maintain knowledge of and utilize to the fullest extent, research methodologies and results in the areas of self-assembling structures, complex fluids, and molecular materials.

Position requires a bachelor's degree or higher in physics or a related field and demonstrated experience in the areas of complex fluids, liquid crystals, and polymeric systems with special relevance to electrooptic, pyroelectric, fiber optic biosensors, and holographic applications including self-assembling lipid micro- and nano-structures, and cubic phases for biomedical and material development applications, as well as demonstrated experience in utilizing and applying the following equipment and techniques: fiber optic biosensors, dielectric spectroscopy, photon correlation spectroscopy, differential scanning calorimetry, polarization and differential interference contrast microscopy, synchrotron techniques, and x-ray and electron diffraction techniques.

To apply: Interested applicants may contact Ms. Patti Reed at (202) 404-8308 to request a copy of Vacancy Announcement #69-0008-94, application forms, and/or information. Applicants should submit a comprehensive Personal Qualifications Statement (SF-171) postmarked by May 31, 1994 to:

NAVAL RESEARCH LABORATORY
Human Resources Office
(Attn: Code 1812.1PCR)
4555 Overlook Avenue, SW
Washington, DC 20375-5320

*An Equal Opportunity Employer.
U.S. Citizenship Required.*

**HEAD
Department of Ceramic Engineering
Clemson University**

Applications and nominations are invited for the position of Department Head of Ceramic Engineering, Clemson University. Candidates should have an earned doctorate in ceramic engineering or a closely related field, strong leadership ability, a proven research record, and a commitment to ceramic engineering education. Preference will be given to candidates having a bachelor's degree in ceramic engineering and registration as Professional Engineer. Anticipated starting date is January 1, 1995. Screening of applicants will begin July 1, 1994, and will continue until the position is filled.

The Ceramic Engineering Department offers degrees at all levels and a MS and PhD in Materials Science and Engineering. Presently, there are 145 undergraduates, 30 graduates, 10 faculty, and two Endowed Chairs.

Submit application containing a detailed resume, references, and a statement of capabilities and qualifications to:

Prof. C.C. Fain
Ceramic Engineering Department
Clemson University
Clemson, SC 29634-0907
Telephone: (803) 656-3038
FAX: (803) 656-1453

*Clemson University is an equal opportunity,
affirmative action employer.*

Positions Wanted

The following advertisements are from MRS members seeking employment in materials research and development.

PROSPECTIVE EMPLOYERS—
To correspond confidentially with the applicant,
**REPLY TO THE APPROPRIATE
BOX NUMBER, AS FOLLOWS:**

Box _____, No. _____,
c/o MRS Bulletin
Materials Research Society
9800 McKnight Road
Pittsburgh, PA 15237-6006

PhD (1994) seeks industrial/academic research position. Expertise in thin-film synthesis (PECVD, sputtering) surface modification, tribology, adhesion and mechanical properties of thin films, transmission electron microscopy, x-ray diffraction, scanning Auger spectroscopy, and x-ray photoelectron spectroscopy. **Employers—Please reply to Box XIX, 504.**

PhD in Materials Characterization seeks industry/academic position in developing advanced materials and process. Expertise in microstructure and failure analysis of solder alloys, ferroelectric materials, integrated circuit and related materials. Experience in thin-film processing. Extensive experience in electron microscopy (TEM, SEM, XEDS, HREM, and specimen preparation). Excellent organization and computer skills. **Employers—Please reply to Box XIX, 503.**

PhD in Electrical Engineering (12/93), specialization in electronic materials and devices, seeks R&D position. Expertise in thin-film process development/study of process-property relationships, and device fabrication. Extensive hands-on experience in dc/RF sputtering, design of magnetron sputtering sources, evaporation, dc and microwave characterization of thin films, RBS, EDX, AES, XRD, SEM, design and fabrication of microwave passive components, electronic circuits, thick film circuits. Strong computer skills. **Employers—Please reply to Box XIX, 505.**

Materials Engineering Position sought with a semiconductor manufacturer. Degrees include MSMS (May 1994) with an emphasis in semiconductors, Master of International Management, and AB in chemistry. Laboratory experience at SRI International and University of Southern California (GaAs MBE research under Dr. Madhukar). Excellent interpersonal and communication skills with four years of technical sales experience. **Employers—Please reply to Box XIX, 502.**

Postdoc in Materials/Metallurgical Engineering seeks position in company or university. Extensive experience in materials research, processing and analysis. Strong background in thin film technology, metal contacts to semiconductors, ion implantation and metal processing. Hands-on experience in TEM, EDX, AES, XPS, SIMS, SEM, XRD. Salary and location open. **Employers—Please reply to Box XIX, 501.**