

**Positions Available**

**ENGINEERING**

## Dean College of Engineering

The University of Delaware invites applications and nominations for the position of Dean of the College of Engineering. A major state-assisted research institution with a total enrollment of about 20,000 students, the University has been on an accelerated climb to national and international prominence.

The College of Engineering offers programs in chemical, civil, computer, electrical, environmental, mechanical engineering and materials science. Six centers provide research foci in biomechanical engineering, catalysis, coastal engineering, composite materials, engineering and molecular thermodynamics, and nanomachined semiconductor surfaces. Current research expenditures total about \$20M per annum.

The Dean provides leadership for the College's 89 faculty and approximately 400 graduate and 1000 undergraduate students. Along with the six other deans, the Dean of Engineering reports directly to the Provost and is a crucial component of the central management team, including active participation in University development activities. The Dean is responsible for overall faculty and program development and general financial management of the College. S/he is charged with providing the vision and strategic planning necessary to develop and enhance the quality of the College's undergraduate, graduate, and research programs, and to facilitate collaborations with other colleges, and industrial, governmental, and philanthropic organizations. During the tenure of the next Dean, an additional 60,000 square foot engineering building is scheduled for construction and about 20 faculty hires are anticipated. The Delaware Institute of Biotechnology has been formed with several named Professors and major research responsibilities.

The candidate must meet the requirements for appointment to the rank of professor in one of the departments in the College. In addition, the successful candidate must have experience in attracting and managing sponsored research and demonstrate an appreciation for the administrative support needed to maintain a vigorous research program. Qualifications include an earned doctoral degree, a distinguished scholarly record, management experience and the ability to lead the College in its academic responsibilities.

Applications should include a letter of interest, curriculum vitae, and names of four references. Nominations and applications will be accepted until the position is filled. The Dean will assume office on July 1, 2000. Nominations and expressions of interest will be held in confidence. Candidates should submit materials to: **Dean Daniel Rich, Chair, Engineering Search Committee, Graham Hall, University of Delaware, Newark, DE 19716.** More information regarding this search and the College of Engineering is available at <http://www.udel.edu/engg>.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.



**FACULTY POSITIONS**

### Engineering Research Center for Particle Science and Technology University of Florida

The Engineering Research Center for Particle Science and Technology and the College of Engineering at the University of Florida are inviting applications and nominations for two tenure-track faculty positions at the Associate or Full Professor level. Outstanding research performance and quality scholarship or potential are primary requirements for these positions. Prospective candidates should have experimental expertise and a proven track record in one or more of the general areas of particle science and technology. These areas include but are not limited to 1) physical chemistry of surfaces (interfacial phenomena, surface active substances at fluid-fluid or solid-fluid interfaces, characterization of surface active substances, surface modification of particulate systems); 2) nano-particle processing (characterization, dispersion and rheology, flow, consolidation, etc.); and 3) engineered particulates (synthesis, processing, and characterization of engineered particles of specific shape, size, and surface characteristics; coatings and thin film deposition in particulate systems; and thick film formation with engineered particulates).

A doctoral degree in materials science and engineering, chemical engineering, mechanical engineering, or related discipline is required. The successful candidates are expected to develop independent research and education programs as well as collaborate with the Center faculty. The positions will reside in an appropriate department depending on background, qualifications, and research and teaching experience of the candidates. More information on the Engineering Research Center for Particle Science and Technology can be obtained through its web site at <http://www.erc.ufl.edu/>.

All applications must include curriculum vitae, a brief description of their education and research plan, names, addresses and phone numbers of three references, and should be submitted by the receipt deadline of **January 31, 2000** to:

Chair, Search Committee (801480-90)  
University of Florida  
Engineering Research Center for Particle Science & Technology  
205 Particle Science and Technology Building  
P.O. Box 116135, Gainesville, FL 32611-6135  
Tel: 352-846-1194; Fax: 352-846-1196; E-mail: [rblair@eng.ufl.edu](mailto:rblair@eng.ufl.edu)

*The University of Florida is an Equal Opportunity/Affirmative Action Employer; women and minorities are strongly encouraged to apply.*

### POSTDOCTORAL POSITIONS Materials Research Laboratory The Pennsylvania State University

There are several postdoctoral positions available in the Materials Research Laboratory at The Pennsylvania State University in the areas of ferroelectric polymers and ceramic-polymer composites for electromechanical, dielectric, and electro-optic applications. The research work to be conducted includes polymer film processing (spin coating, solution cast, extrusion, high energy electron irradiation, multilayer actuator, and capacitor fabrication); characterization (x-ray diffraction, SEM, DSC, FT-IR, AFM, dielectric properties, and electric properties under high electric field); and ceramic powder-polymer composite fabrication and characterization (dielectric properties, interface characterization, and breakdown field measurement). The work will also be interfaced with a basic understanding of the materials and development and characterization of devices (multilayer actuator and transducer).

The initial appointment is for one year and is renewable for another year. Rank and salary will be commensurate with the qualifications and experience of the selected candidates. For consideration, please send a current CV with a publication list and the names and addresses of three references to Prof. Q.M. Zhang, Position #M-5982, 187 Materials Research Laboratory, The Pennsylvania State University, University Park, PA 16802 or e-mail to [qxz1@psu.edu](mailto:qxz1@psu.edu).

AA/EOE

### SENIOR FACULTY POSITION Biological Computational Sciences in the Chemical Engineering and Materials Science Department Institute of Technology University of Minnesota

The Institute of Technology is conducting a search for a tenured associate professor or professor in biological computational sciences in the Chemical Engineering and Materials Science Department. Applicants must possess a distinguished research record, demonstrated ability in establishing and leading a highly visible research program, and a commitment to teaching and mentoring at the graduate and undergraduate levels. The position affords the opportunity, resources, and flexibility to build a blue chip research program.

Please visit our web site at <http://www.msi.umn.edu/general/jobs/faculty.html> for details.

**UNIVERSITY OF MINNESOTA**  
*Affirmative Action/Equal Opportunity Employer*

**Positions Available**

**POSTDOCTORAL AND  
PHD STUDENT OPPORTUNITIES**  
Thermochemistry Facility  
University of California at Davis

The following postdoctoral and PhD student opportunities are available in the Thermochemistry Facility at the University of California at Davis. Fundamental calorimetric and structural studies on minerals, glasses, and environmental materials: perovskites, high-pressure materials, clays, molecular sieves, carbonates, nanoparticles, nitrides, and refractory ceramics. Work in an active interdisciplinary environment with CHIHR (Center for High Pressure Research) and NEAT (Nanomaterials in the Environment, Agriculture, and Technology) Initiative. Background in chemistry, materials science, geoscience, physics, or environmental science.

Contact Dr. Alexandra Navrotsky; Interdisciplinary Professor of Ceramic, Earth, and Environmental Materials Chemistry; Thermochemistry Facility; Dept. of Chemical Engineering and Materials Science; University of California at Davis, One Shields Avenue, Davis, CA 95616; phone: 530-752-3292; fax: 530-752-9307; <http://www.engr.ucdavis.edu/~thermo/people/alex/>

*The University of California is an affirmative action/equal opportunity employer.*

**FACULTY POSITION**  
Applied Physics  
California Institute of Technology

The Applied Physics Program at Caltech invites applications for a tenure-track position as assistant professor. We are interested in highly qualified candidates who are committed to research and teaching in areas in which fundamental physical principles are applied to important technological problems. The initial term of appointment is normally for four years, and appointment is contingent upon completion of a PhD degree.

Interested candidates should submit a resume, publication list, and a less-than-five-page research prospectus via electronic submission. Please attach your resume/prospectus file in an e-mail addressed to [haa@daedalus.caltech.edu](mailto:haa@daedalus.caltech.edu). Make the e-mail subject "aphcit search" and use your name as the resume/prospectus file name. Submission of Adobe \*.pdf files is encouraged, however, Word 5.x, 6.x, 98 for Mac or Word 95, 6.x and 7.x for Windows will be accepted. Applicants should also complete the registration form at the URL <http://www.cco.caltech.edu/~aph-home/register.html>.

*Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans and disabled persons are encouraged to apply.*

**Molecularly Designed Electronic,  
Photonic, and Nanostructured  
Materials**

An Integrated Graduate Education,  
Research and Training Program

Support for Graduate Research is available in the following fields:  
Applied Physics • Chemistry • Electrical Engineering  
• Materials Science and Engineering

A new initiative funded by NSF to enhance and broaden graduate education. Students entering the PhD training program will receive a 2 year fellowship (minimum stipend \$16,000/yr and associated health benefits, tuition waiver, etc.)

Apply NOW for a unique experience in  
Graduate Education!



M. David Curtis Email: [mdcurtis@umich.edu](mailto:mdcurtis@umich.edu)  
Department of Chemistry  
University of Michigan,  
Ann Arbor, MI 48109-1055  
Phone: (734) 763-2132 • FAX: (734) 763-2307

For details see our website: <http://www.umich.edu/~mater/igert.html>

**DIRECTOR**  
Materials Characterization Facility  
University of California, Irvine

The University of California, Irvine, Department of Chemical/Biochemical Engineering and Materials Science invites applications for a Director, Materials Characterization Facility, beginning January 1, 2000. Salary range of \$60,000 to \$70,000 per year, depending on experience and qualifications. A PhD degree is required in materials science and engineering, physical sciences (i.e., chemistry or physics), or related fields.

**Responsibilities:**

- Experience running and operating centralized characterization facilities, such as transmission and scanning electron microscopy, diffraction techniques or surface analysis
- Direct, formulate and implement a campus-wide Materials Characterization Facility, currently used extensively by undergraduate and graduate students in support of research and teaching programs
- Direct graduate student research
- Develop strong programs of sponsored research
- Interact with other members of the faculty
- Administer on- and off-campus use of equipment, maintenance, and repair
- Develop, modify, and utilize automated systems to accurately track facility users
- Prepare annual budgets and provide timely computerized financial status reports and advise to maximize resources for the facility
- Work with Department Chair on analysis and development of short- and long-range planning for use of the facility and coordinate efforts to obtain new instrumentation
- Recruit, train, and supervise facility staff

Must have excellent scientific and technical written and communication skills, and demonstrate ability to establish effective working relationships with all levels of campus community, industry, state, and government agencies. UCI offers excellent benefits, including a comprehensive insurance package and a minimum three weeks paid vacation. For full consideration, please submit resume referencing Job #CU3703R, and four letters of references by **December 1, 1999** to:

Job #CU3703R  
HR Department  
University of California, Irvine  
Berkeley Place Bldg., Suite 1500  
Irvine, CA 92697-4600



*The University of California is an equal opportunity employer committed to excellence through diversity.*

**Positions Available**

**Materials Science  
and Engineering -  
Assistant Professor,  
Tenure Track**

Candidates must hold a doctoral degree in *Materials Science and Engineering*, a related branch of engineering or the physical sciences. Experience and interest in Electron Microscopy of Advanced Materials is highly desirable. In addition, the ability to initiate independent research programs, pursue excellence in undergraduate and graduate teaching, and interact with industry is important.

Consideration of applications will begin 10/01/99, but the search will remain open until suitable candidates are found. Internal and external search to occur simultaneously.

*Please submit a C.V., at least three pertinent reprints, and names of at least three references to: Professor Michael Dudley, Chairman Materials Science and Engineering, SUNY/Stony Brook, Stony Brook, New York 11794-2275*

SUNY/Stony Brook is an affirmative action/equal opportunity employer.



**PROCESS ENGINEER  
AIXTRON, Inc.**

AIXTRON, Inc., the world-leading, high technology manufacturer of thin film deposition systems for compound semiconductors, is currently seeking candidates for the position of Process Engineer.

Candidates with a background in electrical or electronic engineering, physics, materials science, or chemistry (graduate degree preferred) will be considered. Experience in epitaxial growth of semiconductor materials is desired but not required. Experience in the characterization of semiconductor materials by photoluminescence, x-ray diffraction, electrical techniques, or electron microscopy is strongly desired. This position will be multi-faceted, but primarily involve working at customer sites. Customers are world-leading, high technology producers of compound semiconductor lasers, LEDs, solar cells, and electronic devices such as HBTs. This position involves both the process start-up for new systems as well as providing technical assistance to existing customers. This will be a "hands on" position and provide a broad range of experience both in terms of engineering and scientific aspects.

Compensation commensurate with experience. Please send resumes to AIXTRON, Inc., 1670 Barclay Blvd., Buffalo Grove, IL 60089.

**POSTDOCTORAL RESEARCH  
ASSOCIATES  
GaN and Related Compounds  
Kansas State University**

Applications are invited for postdoctoral research associate positions working in the area of GaN and related compounds. The positions involve materials synthesis, device processing, and studies of optical and transport properties of the group III-V nitrides. Major facilities of the KSU physics semiconductor group include a MOCVD system for the growth of III-nitride materials (GaN, InN, AlN, alloys, multiple quantum well, and heterojunction structures); LEO 440 SEM system with e-beam lithograph capability; a photolithograph system; a Plams-Therm Series 790 ICP dry etching system; picosecond and femtosecond time-resolved laser spectroscopy systems operating from IR to deep UV; and Hall, photo-conductivity, and conductivity transient measurement facilities. For more information about the group, please check <http://www.phys.ksu.edu/~jiang>.

Candidates should have a strong background in experimental semiconductor physics and the ability to work independently. Send letter of application and vita including names, phone numbers, and e-mail addresses of three references to Prof. H.X. Jiang or Prof. J.Y. Lin, Department of Physics, 116 Cardwell Hall, Kansas State University, Manhattan, KS 66506-2601; Tel: 785-532-1627 or 532-1614; Fax: 785-532-5636. Screening of applications will begin **December 1, 1999** and continue until the positions are filled.

*KSU is an equal opportunity employer and actively seeks diversity among its employees.*

**FACULTY POSITION  
Mechanical Engineering-Solids  
The Johns Hopkins University**

The Johns Hopkins University, Department of Mechanical Engineering, invites applications for a full-time tenure-track faculty position at the assistant professor level in the general area of computational/theoretical mechanics of materials. Multiscale modeling and simulations are of particular interest, with the intent of bridging the length scales from atomistics to continua. Scientific issues addressed at small scales may involve applications to nanotechnology and MEMS. The immediate research environment includes strong groups in experimental mechanics and material behavior at small scales. Opportunities for interactions across the University include the NSF MRSEC on Nanostructured Materials, the Whitaker Biomedical Engineering Institute, and the NSF Engineering Research Center for Computer-Integrated Surgical Systems and Technology.

The successful candidate must have an earned doctorate degree, and is expected to develop a strong independent research program as well as contribute to both undergraduate and graduate instruction. Applicants should submit, before **January 14, 2000**, a curriculum vita, the names of at least three references, and a short statement of research interests to: Chair, Solids Search Committee, Department of Mechanical Engineering, The Johns Hopkins University, Baltimore, MD 21218-2681.

*The Johns Hopkins University is an EEO/AA Employer. Women and minorities are strongly encouraged to apply.*

**ENDOWED CHAIR HOLDER AND DIRECTOR  
Center for Materials for Information Technology  
The University of Alabama**

The University of Alabama is seeking candidates for the position of Endowed Chair Holder and Director of the Center for Materials for Information Technology in Tuscaloosa, Alabama. The position will be available on August 16, 2000, and the appointment will be made as a senior faculty member in a department appropriate to the candidate's field of specialization. The Center, an NSF Materials Research Science and Engineering Center, has eight industrial sponsors and an interdisciplinary focus with faculty members from six different academic departments participating in materials research related to information storage. The Center's research has focused on magnetic information storage, but leadership of the director in the exploration of new storage concepts is expected.

Responsibilities will include organization and evolution of the center, establishment of foci for collaborative research, initiation of research projects appropriate to his/her own expertise, and interaction with industrial, federal, and state agencies to represent the capabilities of the researchers and the facilities of the Center. Candidates should have a PhD degree and a strong record of scholarship and leadership in some area of science or engineering. Experience in both academic and industrial environments would be preferable. Additional information about the MINT Center and the University of Alabama can be obtained from <http://www.as.ua.edu/mint/>.

Applicants interested in this position are requested to send their curriculum vitae and the names of three possible references to Dr. Chet Alexander, Chair, MINT Search Committee, The University of Alabama, P.O. Box 870209, Tuscaloosa, AL 35487-0209. Consideration of applicants will begin on **January 7, 2000**, and will continue until the position is filled.

*The University of Alabama is an affirmative action/equal opportunity educator and employer.*

**Positions Available**

**ASSISTANT/ASSOCIATE PROFESSOR OF CERAMIC ENGINEERING**  
**Department of Metallurgical and Materials Engineering**  
**Colorado School of Mines**

The Department of Metallurgical and Materials Engineering is seeking a new faculty member for the Colorado Center for Advanced Ceramics. This is a tenure-track position that will be filled at either the assistant or associate professor level based on the qualifications of the successful applicant. A PhD degree in ceramic engineering, materials science, engineering, or a closely related discipline is required with a minimum of three years postdoctoral experience in industry, a national laboratory, or an equivalent research position being highly desirable. Individuals with specialization in electronic or optical ceramic engineering with experience in transmission electron microscopy and/or surface analysis techniques such as atomic force microscopy will be given special consideration. The new faculty member will be expected to develop a significant research and teaching effort in ceramic science and engineering for electronic application.

Applicants should send a curriculum vitae, a statement describing teaching experience and philosophy, research goals, and the names, addresses, telephone and fax numbers of at least three professional references to:

Colorado School of Mines  
Office of Human Resources, Metallurgy Search #99-091190  
1500 Illinois Street, Golden, CO 80401  
Tel: 303-273-3250; Fax: 303-384-2025



Review of applications will begin **December 1, 1999** and continue until the position is filled.

*CSM is an EEO/AA employer. Women and minorities are encouraged to apply.*

**ENGINEERING POSITIONS**  
**Materials Research Corporation**

Materials Research Corporation, a worldwide technology leader providing solutions to manufacturers of semiconductors, magnetic disks, and other technically advanced thin film applications, invites applications for the following positions:

**R&D ENGINEER**

**Qualifications:**

- MS or PhD degree in materials science and engineering
- Knowledge of deformation processing and relationship to microstructure and texture
- Knowledge of thin films and electronic materials
- Excellent written and oral skills
- 1-5 years industrial experience
- Knowledge of casting/powder metallurgy, computer modeling; i.e., FEA

**Typical Duties:**

- Plan, conduct, and interpret experiments directed at new product development, and optimize quality and performance of existing products
- Responsible for microstructure/texture development and correlation to target performance
- Deformation processing of materials including forging, rolling, and powder metallurgy processing
- Prepare technical reports
- Communicate and translate findings to manufacturing
- Participate in customer technology partnership teams

**SR. RESEARCH ENGINEER**

**Qualifications:**

- PhD degree in materials science
- Experience in PVD materials utilized for semiconductors or data storage, including Cu, Ta, ferroelectrics, ceramics, and/or magnetic alloys
- High level of experimental design results

**Typical Duties:**

- Conduct research programs on the development of new sputtering projects
- Translate industry trends into R&D programs for the development of new products
- Coordinate joint programs with targeted customers and universities

We offer an excellent salary and benefits package. For confidential consideration, please forward your resume and salary requirements to Human Resources Department, Materials Research Corporation, 542 Route 303, Orangeburg, NY 10962, or e-mail to [sinski\\_dee@notes.mrc.sony.com](mailto:sinski_dee@notes.mrc.sony.com).



*Equal Opportunity Employer*

**Distinguished  
Fellowship**

**Lawrence Livermore  
Postdoctoral Fellowship**

The Lawrence Livermore National Laboratory Director has established a Lawrence Livermore Postdoctoral Fellowship. This is a highly desirable, prestigious position with ample resources and freedom to conduct cutting edge research in the fields of the candidate's choice. Duration for the Fellowship is up to three years. Two openings are immediately available, and two additional positions will be available every year to a maximum of six. Fellowships are awarded only to candidates with exceptional talent, credentials, and a track record of research accomplishment.

Candidates will do original research in one or more aspects of science relevant to the mission and goals of LLNL which include: Physics, Computational Mathematics, Computer Science, Chemistry, Material Science, Engineering, Environmental Research, Atmospheric Science, Geological Sciences, Energy, Laser Science, and Biological Science. Successful candidates may participate in experimental or theoretical work at LLNL, and will have access to LLNL's extensive computing facilities, specialized laboratory facilities, and field equipment. A senior scientist will serve as a mentor to each of the Fellows. The candidates will receive full management and administrative support. The salary is \$6000/mo.

Please refer to our web page <http://www.llnl.gov/urp/LLNLPostDoc/LLNLPostDoc.htm> for eligibility requirements and application information. Please reference source code AJMVBA9AD. The deadline for application is Dec. 30, 1999. No applications will be accepted after this date. Lawrence Livermore National Laboratory is operated by the University of California for the U.S. Department of Energy.

LLNL is an equal opportunity employer with a commitment to workforce diversity.



**Positions Available**

**ASSISTANT PROFESSOR  
Mechanical, Materials and Aerospace Engineering Department  
University of Central Florida**

In order to elevate the existing research program in Miniaturization of Energy and Chemical Systems to international prominence and to substantially enhance research activities in this area, the University of Central Florida plans to add several faculty members. As a part of that plan, the Mechanical, Materials and Aerospace Engineering Department invites applications for a tenure-track Assistant Professor position with specialization in either tribology, mechatronics, MEMS sensors/actuators, and/or micro-fabrication.

A PhD degree, or in final stages of completion, in mechanical engineering or closely related field is required. Postdoctoral research experience is preferred. Responsibilities include developing a sponsored research program in the candidate's area of expertise and teaching core undergraduate and graduate courses in the department. The Department has 23 full-time faculty; offers BS, MS, and PhD degrees; and has approximately 600 undergraduate and 140 graduate students. Detailed information can be found at <http://www-mmae.engr.ucf.edu/>.

A complete resume, list of publications, and at least three references should be submitted to: Chair, Miniaturization Search Committee, Department of Mechanical, Materials & Aerospace Engineering, University of Central Florida, P.O. Box 162450, Orlando, FL 32816-2450. Review of applications will begin in **November 1999**. As an agency of the state of Florida, UCF makes all search records, including transcripts, available for public review upon request.

*The University of Central Florida is an Equal Opportunity/Affirmative Action Employer.*

**INTERDISCIPLINARY FACULTY POSITION  
Nanomaterials in the Environment, Agriculture, and Technology  
University of California at Davis**

The University of California at Davis, as part of a new initiative on Nanomaterials in the Environment, Agriculture, and Technology (NEAT), announces a search for ladder-rank faculty at any level for an interdisciplinary appointment in an appropriate combination of departments in physical sciences, engineering, environmental and agricultural sciences, and biological sciences. Initial research areas targeted by NEAT are: synthesis and crystallography of nanomaterials, characterization of nanoparticle surfaces by modern spectroscopic and imaging techniques, and/or interaction of nanoparticles with the environment and biosphere. We seek creative and interactive colleagues at the forefront of research and education. The NEAT initiative has been awarded an NSF-IGERT grant in support of integrative graduate education. UC Davis plans to make 12 NEAT faculty appointments, in these and other research areas, over the next six years. Also see our website at <http://neat.ucdavis.edu>.

Send CV, a statement of research goals, and the names, mail and e-mail addresses, and telephone numbers of three references to Professor A. Navrotsky, Chair, NEAT Steering Committee, Dept. of Chemical Engineering and Materials Science, University of California at Davis, One Shields Avenue, Davis, CA 95616; e-mail: [anavrotsky@ucdavis.edu](mailto:anavrotsky@ucdavis.edu). This position will remain open until filled but we encourage applications by **January 1, 2000**. PhD degree required.

*The University of California is an affirmative action/equal opportunity employer.*

**TENURE-TRACK POSITIONS  
Department of Mechanical Engineering  
The University of New Mexico**

The University of New Mexico, Department of Mechanical Engineering invites applications for two tenure-track positions at the level of Assistant Professor. One position is in the broad area of solid mechanics. The other position is in the area of materials with emphasis on polymers, composites, or other advanced materials. Candidates must hold an earned doctorate in mechanical engineering or a closely related field at the time of hiring and have significant experience in the topical area of the position for which they are applying. Successful applicants will be expected to have a strong commitment to research, teaching, and scholarship. Interested individuals are invited to open our website at <http://me.unm.edu> for additional information about the position, Department, University and locale.

Applicants must send a cover letter indicating position of interest, a full curriculum vitae, a one-page description of professional objectives, and the names, regular and e-mail addresses, phone and fax numbers of at least four references to: Mechanical Engineering Search Committee Chair, Department of Mechanical Engineering, The University of New Mexico, Albuquerque, NM 87131-1361. Completed applications must be received by **January 15, 2000** to be considered.

*The University of New Mexico is a Research I Institution (Carnegie Foundation Category), a Minority Institution, and an Equal Opportunity/Affirmative Action Employer and Educator.*

**FACULTY POSITION  
Materials Science/Biomaterials  
Brown University**

The Division of Engineering at Brown University announces the opening of a tenure-track position in materials science in the area of biomaterials. The appointment may be made at the Assistant or Associate Professor level, depending on the qualifications of the candidate selected. Candidates for the associate rank should have substantial research experience beyond their doctoral dissertation. The appointment is expected to begin on September 1, 2000.

The appointee will be expected to establish a strong research program in the field of biomaterials. Candidates in all areas of biomaterials are encouraged to apply. Research topics of particular interest include interfacial phenomena, functionalized and self-organized systems, bio-sensors, and tissue engineering. The appointee will also be expected to teach undergraduate and graduate courses in materials science and biomaterials, as well as contribute to the undergraduate core curriculum of the Division of Engineering. In addition, this person will be expected to make significant contributions to the development of the new biomedical engineering initiative at Brown.

Qualifications include a PhD or equivalent degree, a background in materials science, and demonstrated research accomplishments in the field of biomaterials. Applicants should have the ability to make clear and effective presentations. Interested persons should send a complete resume, including the names of at least three references, to:

Professor Clyde L. Briant  
Search Committee Chair  
Division of Engineering  
Box D  
Brown University  
Providence, RI 02912


To ensure full consideration, applicants should respond by **January 15, 2000**.



*Brown University is an Equal Opportunity/Affirmative Action employer. Women and members of minority groups are strongly encouraged to apply.*

**To place your ad  
contact Mary E. Kaufold today!  
724-779-8312  
[kaufold@mrs.org](mailto:kaufold@mrs.org)**

**Positions Available**

**Washington State University**      **DIRECTOR**  
 **SCHOOL OF MECHANICAL AND MATERIALS ENGINEERING**

The College of Engineering and Architecture at Washington State University invites applications and nominations for the position of Director, School of Mechanical and Materials Engineering, effective August 16, 2000. A Ph.D. in Mechanical Engineering, Materials Science or a closely related field is required. Candidates should have a superior record in research and teaching at the full professor level. Preference will be given to candidates with demonstrated administrative capabilities and academic leadership. The position is at the rank of Professor with tenure. The initial appointment is for a four-year period with the possibility of reappointment. The appointment is for 12 months and salary is negotiable, commensurate with qualifications and experience.

The School of Mechanical and Materials Engineering is one of five engineering departments in the College of Engineering and Architecture at Washington State University. The School consists of three campuses: the main campus at Pullman with 23 faculty and the two branch campuses -- Tri-Cities and Vancouver each with four full-time faculty on site. The School maintains comprehensive research and instructional programs in Mechanical Engineering, Materials Science and Engineering, and Manufacturing Engineering. The School offers B.S., M.S., and Ph.D. Degrees in Mechanical and Materials Science and Engineering. A new B.S. in Manufacturing Engineering is offered at the Vancouver campus. Current research thrusts are in MEMS, turbulence, combustion, nonlinear dynamics and controls, two-phase flow, manufacturing processes and automation, virtual reality applications, CAE systems integration, solid mechanics, heat transfer, thin films, superplasticity, intermetallic materials, fracture mechanics, deformation mechanisms, embrittlement phenomena, corrosion, electronic materials, composites, wood technology and adhesion. Research capabilities have recently been enhanced by the opening of a new Engineering Teaching and Research Laboratory building in Pullman. A new engineering laboratory building is under construction on the Vancouver campus.

*Applications and nominations should be sent to:*  
MME Director Search Committee  
School of Mechanical and Materials Engineering  
Washington State University, Pullman, WA 99164-2920

Screening of applicants will begin January 1, 2000, and will continue until the position is filled. *Washington State University is an EEO/AA employer. Protected group members are encouraged to apply. All new employees must show employment eligibility verification as required by the U.S. Immigration and Naturalization Service.*

**National Research Council**  
**TEACHING/RESEARCH POSTDOCTORAL AWARDS**  
**in Physics at the**  
**United States Military Academy**  
**and the Army Research Laboratory**

The U.S. Military Academy (USMA) at West Point, New York, and the Army Research Laboratory (ARL) invite applications (phase I) for postdoctoral teaching and research associateship awards to be administered by the National Research Council (NRC). Applicants who are considered by USMA as qualified for teaching appointments in physics will be invited to choose a research project and develop a proposal (phase II) based on NRC approved research opportunities at ARL. Awards will be for three years and include part-time research during the academic year and full-time research in the summers following the first year. The teaching requirement at West Point involves teaching two sections (32 students) per semester in an introductory undergraduate calculus-based course. Teachers plan and present instruction, write examinations, and supervise laboratory experiments. Teachers will also counsel and evaluate students as well as provide additional instruction as required. ARL has extensive applied physics facilities for materials research.

The awards, to begin July 1, 2000, include a beginning annual stipend of \$40,000 with annual increases, reimbursement for initial relocation to West Point, an allowance for professional travel, and subsidized health insurance. Applicants must be US citizens and have earned a PhD degree within the 5-year period proceeding July 1, 2000. Applicants should send by **November 15, 1999**, a curriculum vitae, transcripts, a statement of teaching philosophy, research interests, career goals, and three letters of recommendation to:

Department of Physics, ATTN: NRC Awards  
United States Military Academy, West Point, NY 10996-1995

Overviews are available on the Web of USMA at <http://www.dean.usma.edu/physics/physics.htm> and of ARL at <http://info.arl.mil/>.

For questions, contact Col. Thomas Lainis, Department of Physics, USMA by phone at 914-938-3014, or by e-mail at [ht8134@usma.edu](mailto:ht8134@usma.edu).

*Qualified applicants will be reviewed without regard to race, creed/employer*

**LABORATORY MANAGEMENT POSITIONS**  
**Vitreous State Laboratory**  
**Catholic University of America**

**Laboratories Manager/Project Manager**  
A PhD degree or the equivalent is required in a discipline related to the duties of the position such as physics, chemistry, or materials science. Specific knowledge is required in environmental waste remediation, new market identification, and regulatory compliance. Experience in glass analysis and characterization, and with high temperature processing of materials. Ability to design instruments, solve problems, and prioritize organizational goals. A minimum of five years supervisory experience or demonstrated supervisory skills. Experience in technical writing. Knowledge of government contracting practices. At least five years management or professional experience in the scientific environment. Five years with demonstrated ability for laboratory management. 40 hours per week, 9 AM to 6 PM, overtime and shift work may be required. Job site is Washington, DC. Proof of legal right to work in the U.S. must be stated on the resume. Send resume to address listed below.

**Lab Supervisor**  
Expertise in scientific computer programming, especially FORTRAN and C computer languages. Experience in computer modeling. Ability to solve problems, to prioritize and direct conflicting goals, and to properly apply resources. Ability to perform data analysis and experimental work. Ability to summarize and review data and to draw scientific conclusions from experiments. A postgraduate degree, preferably in physical chemistry and five years of management or professional experience in laboratory management is required. 40 hours per week, 9 AM to 6PM, overtime and shift work may be required. Job site is Washington, DC. Proof of legal right to work in the U.S. must be stated on the resume.

Send resume to:  
ATTN: Carol Lee Matlack, Catholic University of America  
VSL 403 Hannan Hall, Washington, DC 20064

*AA/EEOE*

**PRINCIPAL SCIENTISTS & RESEARCH ENGINEERS**  
**Nova Crystals, Inc.**  
**[www.NovaCrystals.com](http://www.NovaCrystals.com)**

Nova Crystals, Inc., a fabless photonics innovation house, develops high-performance photonic devices for the Optical Networking, Wireless Communications, Solid State Lighting, and Intra-Chip Communications markets. The company is currently located in Ithaca, NY but is relocating its operations to the Bay Area, CA in January 2000. The open position will be filled at the California location.

The successful Principal Scientist (10+ years experience) or Research Engineer (3+ years experience) candidate will have a PhD degree or equivalent in Electrical Engineering/Applied Physics/ Materials Science with experience conducting research in an industrial or government lab. The successful candidate will have broad knowledge and deep expertise in III-V electronic and opto-electronic device physics and materials science.

The company offers a competitive compensation package. Interested candidates should send cover letter and CV by **January 10, 2000** to Maria Rosetti, Nova Crystals, Inc., 30 Brown Road, Ithaca, NY 14850, Email: [maria\\_rosetti@novacrystals.com](mailto:maria_rosetti@novacrystals.com); fax 607-257-2995.