

Positions Available



**SUPERCONDUCTOR
TECHNOLOGIES INC.**

Superconductor Technologies Incorporated has immediate openings for scientists and engineers in a major effort to develop thin-film superconductors for microelectronic applications. We offer the opportunity to participate in the creation of a new organization and a growing business, to share in its ownership, and to interact closely with staff of the Institute for Theoretical Physics and the University of California at Santa Barbara. Applicants are sought as follows:

Materials Scientist/Engineer: to develop techniques for the growth of epitaxial superconducting thin films and to address the related process development and characterization issues. A Ph.D. in materials science or an allied field is required.

Senior Microwave Engineer: to design thin-film superconducting microwave components. A masters degree and ten years experience in the design and development of products involving microwave and millimeter wave components are required.

Solid State Physicist: to assume responsibility for superconducting properties characterization and interpretation, measurement development, and device physics. A Ph.D. or equivalent in solid state physics is required as is experience in superconductivity. A materials science or solid state chemistry background is desirable.

Microwave Marketing Specialist: to interact with customers to interpret their needs, to define products and their market potential, to translate these opportunities into engineering priorities. Ten years experience in the industry required as are a technical degree and substantial engineering experience.

STI is located in an attractive area one mile from the Pacific Ocean and five minutes from the University of California at Santa Barbara. Santa Barbara is one of the finest communities in the country with abundant cultural and recreational opportunities. Interested persons should send a resume to:

**Dr. Fred R. Gamble, Jr.
Superconductor Technologies Inc.
460 Ward Drive, Suite F
Santa Barbara, California 93111-2310**

STI is an equal opportunity employer.

Positions Available

**STAFF SCIENTIST
Materials and Chemical
Sciences Division**

Conceive, plan, and conduct experimental research on metal electrical contacts for compound semiconductors and oxide superconductors. Develop practical technologies for achieving low resistance ohmic or rectifying contacts to these materials for fabrication of typical solid state devices. Study the factors affecting growth and perfection of epitaxial and heteroepitaxial layers of semiconductors and superconductors on various substrates. Requires demonstrated extensive experience, innovation, and leadership capability in the field of structural and electrical characterization of electronic materials including outstanding expertise in the use of the atomic resolution microscope, analytical electron microscopes and related techniques. Requires exceptional skill in the preparation of thin cross-section specimens for high resolution electron microscopy including specimens from hazardous materials, and expertise in the interpretations and computer simulation of lattice images. Successful candidate will have published extensively in the field of electron microscopy and electrical characterization of electronic materials, be familiar with state-of-the-art solid state device fabrication technology, and will have significant experience beyond the PhD level. Please apply to Job A/4934 at the Lawrence Berkeley Laboratory, 1 Cyclotron Rd., Employment, Mailstop 90-1042, Berkeley, CA 94720.

*An equal opportunity employer.
M/F/H.*

**SENIOR RESEARCH PROFESSOR
WOOD-BASED COMPOSITES
Washington State University**

PhD in wood science and technology, engineering, or materials science preferred. Significant record of achievement in forest products related research as evidenced by publication record required. Preference will be given to applicants with experience in wood composites and engineering applications of wood composites. Duties include providing leadership to an established research program, teaching graduate courses and directing graduate student research, developing an externally funded research program, and interacting with the industry. Nine-month academic appointment with summer salary available through grants and contracts. This is a new position currently funded for up to five years with potential for conversion to a tenure track position. Salary commensurate with qualifications and experience. Letters of application, resumes, and names of four references should be sent to: Chair, Search Committee, Wood Materials and Engineering Laboratory, Washington State University, Pullman, WA 99164-1806. The closing date is **February 1** or until the position is filled.

*WSU is an EO/AA educator and employer.
Protected group members are encouraged to apply.*

**FACULTY POSITION
MATERIALS SCIENCE
AND ENGINEERING
University of Wisconsin - Madison**

The University of Wisconsin-Madison is seeking candidates who are interested in a teaching/research career in the general areas of processing, characterization (electrical, magnetic, optical, etc.) and electron microscopy as applied to any of the following composite materials systems: metal-matrix composites, ceramic composites, and superconducting material composites. Although academic rank is open, preference will be made at the Assistant Professor level. The department and college have research activities in the areas of metals, ceramics, semiconductors, and polymers. We have been experiencing expansion of the department and have added five new faculty members in recent years. Candidates must have the capability of developing an active research program and interact effectively with others. Interested persons should submit an application including a resume and a list of three references to:

Chairman
Faculty Search and Screen Committee
Department of Materials
Science and Engineering
University of Wisconsin-Madison
1509 University Avenue
Madison, Wisconsin 53706

*The University of Wisconsin is an equal opportunity
employer. The Department is actively seeking minority
and women candidates.*

Advertising Contact

Mary E. Kaufold
MRS BULLETIN
Materials Research Society
9800 McKnight Road, Suite 327
Pittsburgh, PA 15237
(412) 367-3036
Fax: (412) 367-4373



**SENIOR RESEARCH
FACULTY POSITIONS
University of Southern California
School of Dentistry**

- Biomaterials/Bioengineering
- Craniofacial Growth & Development
- Epidemiology
- Immunology/Microbiology

The University of Southern California School of Dentistry has opened searches to

identify up to four experienced research scientists in the above disciplines. Tenured or tenure-track appointments will be made at the Associate Professor or Professor level, as appropriate. Individuals must have demonstrated the ability to successfully compete for external research funding and have well-established programs that could link with the research interests of the clinical faculty. Individuals would also be expected to maintain an involvement in the teaching programs of the school. The University of Southern California is an AAU member and offers many exciting opportunities for interdisciplinary collaborative efforts.

For further information or for consideration, contact Howard M. Landesman, D.D.S., M.Ed., Executive Associate Dean, USC School of Dentistry, University Park, Los Angeles, Ca 90089-0641.

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

Positions Available



Technical Staff Opportunities

USG Corporation is a Fortune 200 company and leader in the development of engineered materials and systems, primarily for the construction industry. Responding to rapidly changing needs of the company as well as the industry, our dynamic technical team serves USG's core businesses and is based at our Research Center located 40 miles north of Chicago. We are currently seeking the following individuals to contribute to our technical growth:

MATERIAL SCIENTISTS/ENGINEERS- Knowledge of cementitious materials and composites and an interest in computer modeling of material structures is desired. Industrial experience including hands-on composite testing and material characterization would be a plus. Scientists or engineers with advanced degrees are encouraged to apply.

The company offers a competitive salary and benefits package commensurate with your education and experience. We are an equal employment opportunity employer.

Human Resources Manager

USG Research Center
700 N. Highway 45
Libertyville, IL 60048

MATERIALS SCIENCE FACULTY

MIT Department of Materials Science and Engineering has searches for tenure track assistant professorships available involving teaching and research in the areas noted below:

- Electronic Materials
- Physical Ceramics
- Chemical Synthesis/Processing of Materials
- Materials Science and Engineering

Doctorate required and experience desirable. Salaries and benefits competitive. Positions will be filled only if exceptional candidates are found. Appointment to a more senior position is possible based on experience and accomplishments. **Send resume (including citizenship and/or visa status), publications list and references to Professor Merton C. Flemings, Head, Department of Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA 02142. MIT is a non-smoking environment.**

MIT is an equal opportunity/affirmative action employer

A COMMUNITY AT WORK.



CHAIRMAN, MATERIALS SCIENCE AND ENGINEERING
University of Pittsburgh

Nominations and applications are invited for the position of Professor and Chairman, Department of Materials Science and Engineering, at the University of Pittsburgh. Candidates should possess a clear vision of the future directions for Materials Science and Engineering and have the leadership and managerial skills to promote and implement that vision. The successful candidate must have a demonstrated commitment to excellence in both teaching and research. An earned doctorate is required.

The Materials Science and Engineering Department has 22 tenure stream and research faculty spanning the areas of metallurgy, ceramics, and polymers. The department offers BS degrees in both Materials Science and Engineering and Metallurgical Engineering, and MS and PhD degrees with ceramics, polymers, and metals specialties.

The University of Pittsburgh, entering its third century, has established a strong tradition of education, research and service and is a member of the select American Association of Universities. This position will be filled by September 1, 1989. Nominations or applications, including resume and references (with telephone numbers) should be sent before **February 15, 1989** to:

Prof. Larry J. Shuman
Associate Dean of Engineering
Chairman of Materials Science
Search Committee
University of Pittsburgh
Pittsburgh, PA 15261
Telephone: 412-624-9814

The University is an affirmative action and equal opportunity employer.

RESEARCH ASSOCIATE OR POSTDOCTORAL POSITION
Department of Materials Engineering

The candidate will play a leading role in research and development of Chemical Vapor Deposited (CVD) thin films for optical, structural, and electronic applications. The successful candidate will have a PhD in Materials Science, Chemical Engineering, or related field and have some hands-on experience with vacuum systems for thin film deposition. Experience in CVD is preferred.

The position is open January 1, 1989. The initial appointment is for two years, but the intention is to extend this to a third year subject to funds being available.

Send current resume and three letters of reference to:

Prof. Seshu B. Desu
Department of Materials Engineering
210 Holden Hall
Virginia Tech
Blacksburg, VA 24061
(703) 961-6820

Positions Available



DIRECTOR
Center for Applied Energy Research

The University of Kentucky has been assigned responsibility for the Commonwealth of Kentucky's energy research laboratory. The laboratory consists of a 60,000 sq. ft. facility containing research equipment valued at approximately \$10 million. It is currently supported by a recurring university appropriation of approximately \$3 million per year. The Center for Applied Energy Research has been established by the University to operate the lab and to organize collaborative faculty research.

Programs of the Center are to be interdisciplinary, encompassing the expertise of a wide range of research scientists. The mission of the Center is to conduct research in fields related to energy resource development and utilization in its broadest sense. Current research programs at the lab include projects on liquefaction, oil shale, clean coal, coal geosciences and atmospheric fluidized bed combustion. An extension program is planned that will offer technical assistance to the state's energy industries. Current related on-campus programs include research on mine health and safety, environmental aspects of mining including acid deposition, resource evaluation, solar energy and biomass utilization, mined land reclamation and energy conservation. Also present on campus are the Kentucky Geological Survey and the Institute for Mining and Minerals Research which operates the Bureau of Mines Title III program, a \$1.2 million coal liquefaction consortium, the Behavioral Research Aspects of Safety and Health working group and a continuing education program.

Applications and nominations are invited for the position of Director of the Center. The Director will be responsible for providing the research leadership and will play the key role in the development of extramural funding to supplement the annual state appropriation. The Director must have significant experience in energy-related research and academic credentials sufficient to qualify for a senior faculty position at the University of Kentucky. The successful candidate must have experience in the organization and direction of major research programs and must have the leadership and administrative talents necessary to manage a complex technical organization.

Applications, nominations and questions about the Center should be directed to: Dr. Billy J. Barfield, Professor of Agricultural Engineering, Department of Agricultural Engineering, University of Kentucky, Lexington, KY 40506-0075, (606) 257-8803. Letters of application should include a resume and a list of five references. The deadline for receipt of applications is January 31, 1989, or until an acceptable candidate is found. The position is available beginning July 1, 1989.

An Equal Opportunity/Affirmative Action Institution

**UNIVERSITY OF MINNESOTA
MINNEAPOLIS**

**Chair of Materials Science
(Advanced Materials Synthesis, Characterization and Processing)**

Applications are invited for appointment to the 3M Harry Heltzer Multidisciplinary Chair in Materials Science. It is anticipated that this tenured professorship appointment will be as early as Winter 1989 but no later than Fall 1989.

The appointment will be made in a field of advanced materials science. This includes such areas as materials synthesis, characterization and processing. Scientists and engineers with outstanding records of research excellence are invited to apply. The new professor will be expected to provide leadership in research, postgraduate supervision, teaching in materials science, and as a link between the university, advanced engineering centers, and 3M.

The Department of Chemical Engineering and Materials Science has excellent facilities for materials research and a growing effort in Materials Science and Engineering. Currently, the Department has about 150 graduate students, mostly PhD candidates,

and nearly one half of those are in various aspects of materials research. Additional resources include the Supercomputer Institute, the Surface Science Center, and the Microelectronics and Information Sciences Center (MEIS). Salary and research funds are commensurate with the \$2M endowment.

Applications should be made by **December 31, 1988** to:

Prof. William Gerberich
Chairman of 3M Chair
Search Committee
Department of Chemical Engineering and Materials Science
151 Amundson Hall
University of Minnesota
421 Washington Avenue S.E.
Minneapolis, MN 55455
Telephone: (612) 625-8548

Please include curriculum vitae and the names and addresses of three references.

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

**PROFESSOR OF CERAMICS
Swiss Federal Institute of
Technology at Lausanne**

The Swiss Federal Institute of Technology announces the availability of a tenured position as Professor of Ceramics, responsible for the direction of the Ceramics Laboratory of the Department of Materials Science and Engineering.

Applications deadline: **January 31, 1989**

Beginning of activity: Open

For additional information contact:

S cretariat g n ral de l'Ecole Polytechnique F d rale de Lausanne, CE, Ecublens, 1015, Lausanne, Switzerland.

