

Positions Available



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

FACULTY RESEARCH POSITIONS
Center for Materials Research and Analysis
University of Nebraska-Lincoln

Seek applicants for two faculty positions to be associated with the Center for Materials Research and Analysis, effective Fall 1989. Funded by a new State Research Initiative which is expected to grow to \$20 million per year in five years, the Center is an interdisciplinary effort which includes physicists, chemists, and electrical, materials, and chemical engineers.

The positions may be at any level from assistant to full or distinguished professor; each is a regular tenure-track or tenured position with an appointment in one of the participating departments. The general areas of research are materials for information and communication technologies, molecular design of advanced materials, and industrial materials research and analysis. Specific research areas of interest include deliberately structured materials; thin films; disorder and phase transitions in novel microstructures; particle-solid interactions; and new superconducting, magnetic, semiconducting, or ceramic materials. Experimental areas of interest include analytical electron microscopy, x-ray and neutron diffraction, crystallography, synthesis of polymeric and other new materials, surface analysis, and others. Substantial setup funds are available and excellent opportunities exist for collaborative research with ongoing programs. Requires teaching at the undergraduate and graduate levels and the development of a vigorous and productive research program.

Send curriculum vita, list of publications, statement of research interests and plans, and the names and addresses of three references to:

Prof. D.J. Sellmyer
 Center for Materials Research
 and Analysis
 Behlen Laboratory of Physics
 University of Nebraska-Lincoln
 Lincoln, Nebraska 68588-0111
 Telephone: (402) 472-2770

The selection process will begin February 1, and will continue until offers have been made and accepted. Women and minority candidates are encouraged to apply.

*Affirmative action/equal
 opportunity employer.
 M/F/H.*

Editorial Contact

Gail A. Oare
 MRS BULLETIN
 Materials Research Society
 9800 McKnight Road, Suite 327
 Pittsburgh, PA 15237
 (412) 367-3036
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POST DOCTORAL RESEARCH ASSOCIATE
University of Illinois at Urbana-Champaign

The Coordinated Science Laboratory at the University of Illinois seeks a Postdoctoral Research Associate with experience in the areas of solid state physics, optics, or gas-surface interactions. The candidate would join a growing and well-equipped program to investigate the physical and chemical mechanisms which control the growth and structure of hydrogenated amorphous silicon (a:Si:H) and its alloys. A three-chamber UHV system has been designed around a variety of *in situ* analytical tools and equipped with plasma and sputtering deposition sources. The techniques under development include Modulated Beam Mass Spectrometry, Reflection Absorption Infra-Red Spectrometry, Spectroscopic Ellipsometry, Kelvin Probe, and Time-Resolved Photoconductivity. The project includes a solid-state characterization lab. State-of-the-art optical, electrical, structural and surface science characterization techniques are available at the Materials Research Laboratory. Applications, including a resume and three letters of recommendation, are sought by **March 1, 1989**. Salary will be commensurate with experience; travel and equipment development funds are available. Please contact Prof. John R. Abelson, University of Illinois at Urbana-Champaign, Coordinated Science Laboratory, 1101 W. Springfield Ave., Urbana, IL 61801.

*The University of Illinois is an
 affirmative action/equal
 opportunity employer.
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Due to rapid growth, this leading manufacturer of high temperature ceramic superconductors has the following exciting and challenging position immediately available:

**Sol-Gel Ceramist
 (Ph.D.)**

Successful candidate must have experience in the chemical processing of ceramics as well as experience in standard materials characterization methods (x-ray diffraction, SEM, etc.)

Responsibilities will include conducting and directing programs in the area of solution-chemistry-based synthesis of high temperature superconducting oxides as well as having program management responsibilities in other ceramics processing areas that the company is exploring in its pursuit to develop high temperature superconducting oxides in usable forms. A strong background in organic chemistry is a definite PLUS. Expertise in the area of superconductivity is not necessary.

We offer a competitive starting salary and an excellent comprehensive benefits package.

Interested applicants are invited to forward resume with salary history and requirements, in strict confidence, to: Mr. William Doyle, American Superconductor Corporation, 21 Erie Street, Cambridge, MA 02130. Equal Opportunity Employer M/F



Positions Available

**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.



**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.

**UNIVERSITY OF ILLINOIS
AT CHICAGO**

The University of Illinois at Chicago is seeking applications, preferably at the assistant professor level, for a tenure-track faculty position in the field of physical metallurgy and mechanical processing of metals. Applicants are expected to teach undergraduate and graduate courses in the deformation and mechanical properties of metals and to develop an independent research program. In this regard, the applicant would be expected to seek external support and direct graduate students in preparation for MS and PhD degrees. Send a resume with the names of three references to: Prof. Steven Danyluk, Chairman, Search Committee, Department of Civil Engineering, Mechanics, and Metallurgy, (M/C 246), University of Illinois at Chicago, P.O. Box 4348, Chicago, IL 60680. Phone: (312) 996-2437. Applicants must be citizens or permanent residents of the United States. Applications will be accepted until **March 1, 1989.**

The University of Illinois at Chicago is an affirmative action/equal opportunity employer. M/F/H.

**SAN JOSE STATE UNIVERSITY
Department of Materials Engineering**

The Department of Materials Engineering is seeking qualified applicants for *tenure-track faculty position*. Earned doctorate in materials science or engineering is required. Strong background in materials analysis techniques, ceramics, electronic materials, and structure-property-processing relations of materials. Laboratory development experience essential, in addition to the ability to teach in other traditional areas. Strong interest in both teaching and research is also essential. Industrial and/or research experience is highly desirable. U.S. citizenship or permanent resident status is required.

Send detailed resume including three references to: Dr. K.S. Sree Harsha, Chair, Materials Engineering Department, San Jose State University, San Jose, CA 95192-0086.

San Jose State University is an affirmative action/equal opportunity employer. M/F/H.

**STANFORD UNIVERSITY
Department of Applied Physics**

The Department of Applied Physics at Stanford University seeks candidates for a faculty position in the general area of experimental materials physics. The position could be tenure or tenure-track, depending on the qualifications of the candidate. We seek candidates with both potential for distinction in research and a strong interest in teaching. While the specific research area of the candidate is not specified, an ability to couple to both the condensed matter physics community and the broader materials research community at Stanford is desirable. Stanford University is an equal opportunity employer and welcomes nominations of and applications from women and minority group members.

Interested applicants should send a curriculum vitae, list of publications and the names of three suitable references by **March 15, 1989** to Prof. M.R. Beasley, Department of Applied Physics, Stanford University, Stanford, California 94305-4090.

An equal opportunity employer. M/F/H.

Positions Available

**FACULTY POSITION
University of Florida**

The Department of Materials Science and Engineering is seeking applicants for two tenure-track positions at the assistant, associate or full professor level. Applicants should have a PhD in materials science or a closely related field with an expertise in microelectronic, optoelectronic and/or dielectric materials. Candidates with expertise and experience in the following areas are of particular interest: (a) growth of semiconductor single crystals, (b) growth and properties of thin film dielectrics, optical and electro-optical materials and devices, (c) electrically active defects in semiconductors, (d) theory of electronic materials. The positions involve teaching undergraduate and graduate courses and conducting a strong sponsored research program. A curriculum vitae, list of publications, three personal references and a statement of research interests must be submitted for the first position by **March 22, 1989**, and for the second position by **May 9, 1989** to:

Dr. Paul H. Holloway
Chairman of the Search Committee
Department of Materials Science
and Engineering
University of Florida
Gainesville, FL 32611

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Advertising Contact

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MRS BULLETIN
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9800 McKnight Road, Suite 327
Pittsburgh, PA 15237
Telephone: (412) 367-3036
Fax: (412) 367-4373

FACULTY POSITION

Arizona State University seeks to fill a tenure-track faculty position in materials science with a research specialty in the area of novel processing of composite materials. Applicants must hold the PhD degree in an engineering discipline with a materials emphasis or have had extended research experience with microchemical, microstructural and mechanical analysis and/or synthesis of materials. Strong potential for directing graduate thesis and initiating sponsored research is required. The applicant must also have an interest in teaching basic undergraduate engineering courses as well as graduate-level specialty courses.

This position is one of four positions being filled with a strong emphasis to strengthen the Science & Engineering of Materials at Arizona State University. Appointees will join a group of 20 scientists working on materials-related areas, and will have access to the excellent facilities of Center for Solid State Sciences and Center for Solid State Electronics Research.

Rank and salary are open dependent on experience and qualifications with preference for an Assistant Professor. Application deadline is **February 15, 1989** or until filled. To be considered, a current resume listing educational background, experience, publications and three references must be received before the application deadline. Address applications to:

Dr. Imre Zwiebel
Search Committee Chair
Chemical, Bio & Materials
Engineering Department
Engineering Center COB-B210
Arizona State University
Tempe, AZ 85287-6006

After initial screening, remaining applicants will be required to submit an official application form and transcripts.

Arizona State University is an affirmative action/equal opportunity employer.