Positions Available

PROCESS ENGINEERS MATERIALS SCIENTIST

BANDGAP TECHNOLOGY CORPORATION, a leading producer of advanced semiconductor materials and chemicals, has openings at its state-of-the-art facility near Boulder, Colorado.

Vacuum/Deposition Process Engineer
Develop GaAs vacuum deposition processes including metallizations and dielectric depositions. Requires B.S. in EE, Chemistry, Chemical Engineering, Physics or Materials Science.

Materials Process/ Implant Engineer
Develop GaAs implantation processing including active and isolating implants. Requires B.S. as above; M.S. strongly preferred.

Sr. Materials/Process/ Test Scientist
Implementation of new GaAs fabrication technologies to be used for the analysis of advanced epitaxial structures. Requires Ph.D. in EE, Physics or Materials Science.

We are proud of our position in the industry and offer selected candidates excellent benefits and compensation commensurate with experience. For consideration, please send your resume and cover letter, in confidence, to: **Bandgap Technology Corporation, 325 Interlocken Parkway, Broomfield, CO 80021.** Equal Opportunity Employer.

BANDGAP
Technology Corporation

POSTDOCTORAL POSITIONS, ACCELERATOR TECHNICIAN, GRADUATE ASSISTANTSHIPS
Ion Beam Modification and Analysis Laboratory and Atomic Physics
Department of Physics, University of North Texas

Applications are invited for three postdoctoral positions, an accelerator engineer/technician, and graduate student assistantships in the areas of accelerator-based materials modification and analysis and atomic physics. Laboratory facilities include a NEC 3 MV tandem, a 2.5 MV HVEC, a 200 kV Cockcroft-Walton accelerator, and a 200 kV Nova ion implanter. Sample preparation, high temperature annealing furnaces, transmission and scanning electron microscopy, scanning tunneling microscopy, and Auger/ESCA facilities are available in nearby laboratories. Laboratory personnel research interests include ion-atom collision physics; stable-isotope accelerator mass spectrometry impurity detection at parts-per-trillion sensitivities, nuclear reaction analysis, Rutherford backscattering spectrometry, hydrogen forward scattering, particle induced x-ray emission, ion implantation, surface analysis, and ion microbeam analysis. Graduate student applicants please write or call for application materials. Postdoctoral and accelerator engineer/technician applicants please send resume and have three letters of recommendation sent to: Prof. Floyd D. McDaniel, Department of Physics, University of North Texas, Denton, Texas 76203; phone 817-565-3251. The University of North Texas is located in northeast Texas, 35 miles from both Dallas and Ft. Worth, Texas.

The University of North Texas is an Equal Opportunity/Affirmative Action Employer.

Chemist, Physical and Solid State Chemistry

The Office of Naval Research (ONR) is seeking a highly qualified individual to plan and manage an external grants research program in physical and solid state chemistry. The research sponsored is conducted principally at universities and government laboratories. This is a Civil Service position at the GM-13/14/15 level ($44,348 to $80,138), depending on qualifications. In addition to salary, the selectee is eligible to compete for performance awards.

This position offers a unique opportunity for managing the emerging science and exciting developments in the fundamental areas of the synthesis, physical/chemical characterization and processing of new compounds, solid state reactions, nanoscale and surface structures, and the chemistry of these materials. The responsibilities for managing the program include conceiving, organizing and directing the R&D programs, identifying new research opportunities, communicating ONR interest to the scientific community, evaluating and selecting research proposals for funding, managing available resources, and representing the program to Navy management. This position provides the opportunity to have a creative and significant impact on the direction and quality of research conducted at the national level. Additionally, the opportunity exists to establish or maintain an individual research program.

Applicants must have at least one year of specialized experience although a Ph.D. or equivalent doctoral degree in chemistry and one year of specialized experience is preferred. To be qualifying, this experience must be at a level of difficulty and responsibility equivalent to that of the next lower grade level in the Federal Service. Demonstrated research experience in physical and solid state chemistry and the ability to interact with scientific and managerial officials is preferred.

Interested persons should submit a resume, a list of publications and a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to :

Office of the Chief Of Naval Research
Civilian Personnel Division, Code 01242
Attn: Announcement #90-24-A (MRS)
800 North Quincy Street Arlington, VA 22217-5000

Applications will be accepted through 8 May 1991 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information, a copy of the detailed vacancy announcement and the supplemental forms, please call (703) 696-4705.

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

Positions Available

STAFF ENGINEER
Solar Energy Research Institute
Golden, Colorado

Solar Energy Research Institute in Golden, Colorado seeks staff engineer to develop analytical and numerical models which accurately predict the performance of ventilation systems in energy-efficient building design and cold air diffusion, using experimental techniques, including thermal imaging systems, digital image analysis, and mathematical modeling of free and forced convection in enclosures. Coordinate and oversee component and system models and evaluate results of parametric studies and comparisons with data. Document and present results of experimental and analytical studies. Requires PhD in mechanical engineering, chemical engineering, or physics; one year experience in experimental and analytical studies using thermal imaging systems, digital image analysis, and mathematical and numerical modeling of free and forced convection in enclosures. Experience may be gained in employment or educational program. $38,000/year; 8:00 a.m.-5:00 p.m., M-F. Respond by resume to:

Colorado Department of Labor
& Employment
Division of Employment & Training
600 Grant, Suite 900
Denver, CO 80203
ATT: James Shimada

and refer to Job Order No. CO3195406.

POSTDOCTORAL RESEARCH ASSOCIATE
Department of Materials Science and Engineering
Stanford University

A postdoctoral research position is available for one to two years in the Department of Materials Science and Engineering, Stanford University. The work involves fabrication and structure-property correlations of magnetooptic thin films. Experience with magnetic properties, sputter-deposition techniques and microstructural characterization is required, with a PhD in materials science, applied physics, physics, or a closely related discipline.

Please send applications or enquiries to: Prof. R. Sinclair or Prof. B.M. Clemens, Department of Materials Science and Engineering, Building 550, Stanford, CA 94305-2205.

Stanford University is an equal opportunity employer and encourages applications from female and minority candidates.

RESEARCH ASSISTANT PROFESSOR

Conduct research in thin film growth of semiconductor, superconductor and insulator materials with focus on device applications through etching and patterning of thin films. Write proposals for support of research by federal, state and private agencies in thin film growth, modification and application. Interact and collaborate with scientific and technical personnel at industrial, academic and government research laboratories. Requires PhD degree in physics. One year experience as Research Associate. $46,000/yr. 40 hrs./wk. Apply at Texas Employment Commission, Houston, Texas, or send resume to Texas Employment Commission, TEC Building, Austin, Texas 78778, J.O.# 6122962.

Ad Paid by an Equal Employment Opportunity Employer.

RESEARCH POSITIONS
University of Missouri-Rolla

Applications are sought for openings that are anticipated in the next six months for postdoctoral fellows, research assistant professors, and research engineers/aides. Applicants should possess a PhD degree in materials science/engineering or related disciplines such as physics, chemistry, ceramic, civil, metallurgical, or chemical engineering. Preference will be given to persons with relevant materials research experience. A postdoctoral fellow opening is presently available (with Prof. Jay A. Switzer) to study the electrochemical processing and optical properties of nanoscale ceramic superlattices. Applicants should send a current resume and a list of at least three references to:

Director
Graduate Center for Materials Research
University of Missouri-Rolla
Rolla, Missouri 65401 (USA)

UMR is an Equal Opportunity Affirmative Action Employer.

ASSISTANT PROFESSOR
Materials Science and Engineering
Pennsylvania State University

The Ceramics Program in the Materials Science and Engineering Department and the Materials Research Laboratory at Penn State invite applications for a joint, tenure-track, assistant professor position effective in the 1991-92 academic year.

Preference will be given to candidates who have expertise in the fundamental sciences of ceramic materials, such as solid state crystal chemistry, transport, kinetics, and thermodynamics. The position involves teaching undergraduate and graduate level courses and developing an independent research program.

A PhD in ceramics, materials science, materials chemistry or related fields is a requirement.

Curriculum vita and references should be submitted by **June 1, 1991** to:

Prof. Karl E. Spear
Chairman of the Search Committee
Pennsylvania State University
201 Steidle Bldg.
University Park, PA 16802

Penn State is an equal opportunity/affirmative action employer.

平成4年度基礎科学特別研究員制度の案内について

科学技術庁と理化学研究所とは、連携して我が国の基礎研究を強力に推進するため、平成4年度の基礎科学特別研究員を募集します。斬新な研究課題を自主的に遂行できる若い在外の我が国研究者の応募を期待します。

1. 採用予定人員／25名
2. 受入機関／理化学研究所
3. 募集分野／物理学、化学、生物学、工学の各分野で、理化学研究所で実施可能な研究
4. 応募資格：原則として平成4年4月1日現在35歳未満の健康な者で、博士号取得者又はこれと同等の研究能力を有すると認められる者
5. 待遇等：
   (1) 謝　金：月額485千円程度(社会保険料、税込)
   2 通勤費：実費(上限30千円／月)
   3 住宅費：家賃の一部支給
   以上のほか、研究費として1,370千円／年程度
6. 契約期間　通算3年間を限度とし、毎年度所要の評価により契約更新
7. 応募書類の受付は平成3年6月28日(金)です。応募したい方は平成3年6月7日(金)に下記にお問い合わせ下さい。
   (1) 科学技術庁科学技術振興局研究振興課
   〒100 東京都千代田区霞が関二丁目2番1号
   ☎ 03-3581-5271　内線532(直通03-3503-0013)
   FAX 03-3581-7033
   2. 理化学研究所研究業務部基礎科学特別研究員担当
   〒351-01 埼玉県和光市広沢2番1号
   ☎ 0484-62-1111　内線2451、2452
   (直通 0484-63-3687) FAX 0484-62-1554
8. その他：本件は関係予算の成立を前提としており、その事情により変更があり得ますので、その旨御承知おき下さい。

Positions Available

SENIOR ACADEMIC TENURE-TRACK POSITION
Virginia Polytechnic Institute and State University
Department of Materials Engineering

The Department of Materials Engineering of Virginia Polytechnic Institute and State University invites applications for a senior academic tenure-track position. Academic rank and salary will be commensurate with previous experience and qualifications. In addition to academic activities in the Materials Engineering Department, the position involves significant research and administrative responsibilities in the Center for Advanced Ceramic Materials at Virginia Tech. The candidate appointed to this position will be a regular member of the academic faculty of the Materials Engineering Department.

The Department of Materials Engineering consists of 12 faculty and approximately 90 undergraduate and more than 40 graduate students. The curriculum includes the disciplines of ceramic, metallic, polymeric, electronic and composite materials. Current research funding is approximately $1.4 million annually. Many opportunities exist for interdisciplinary materials research with several centers on campus performing related research in the Engineering Science and Mechanics, Chemical Engineering, Electrical Engineering and Chemistry Departments.

The individual appointed to this faculty position will be expected, either by educational background or relevant experience, to teach at the undergraduate and graduate levels in a broad-based and generic materials science and engineering curriculum. The candidate selected for this appointment will also be expected to be a productive and currently active research scientist in some aspect of ceramic science and technology with a proven record of accomplishment in sponsored research with government and industry. Preference will be given to candidates with a significant record of teaching, research, scholarship, and research management.

The College of Engineering is composed of 10 departments and divisions offering undergraduate and graduate programs. The College has 285 full-time faculty and enrolls 4,800 undergraduate students and 1,200 graduate students. The college has recently been ranked among the top 20 in national reputation for its undergraduate program and level of research expenditures. The College works closely with Virginia's Center for Innovative Technology in developing research programs which benefit industry. Virginia Tech is Virginia's land grant university offering degrees through the PhD.

Letters of application with accompanying vita and references should be sent to Dr. Ronald S. Gordon (703-231-6640), Head, Department of Materials Engineering, 213 Holden Hall, VPI&SU, Blacksburg, VA 24061. Applications from members of minority groups and women are encouraged. Applications will be accepted until **June 30, 1991** or until acceptable candidates are selected.

VPI&SU is an Equal Opportunity, Affirmative Action Employer.

UNIVERSITY OF FLORIDA
Department of Materials Science and Engineering

Four tenure-track faculty positions are available for qualified individuals with expertise in one or more of the following areas:

A. Synthesis, processing, and characterization of composite materials.

B. Processing of bulk crystals and thin films of semiconductors; electrically and optically active point defects in semiconductors; optical and nonlinear optical materials; reliability and packaging.

C. Environmental stability of materials (e.g., corrosion, oxidation, etc.).

D. Materials characterization with strong emphasis on transmission electron microscopy and microanalysis techniques.

Candidates will be expected to teach graduate and undergraduate courses and to initiate and sustain a vigorous sponsored research program in their area of expertise. Positions may be offered at the level of assistant, associate, or full professor depending on the qualifications of the individual candidate. A doctoral degree in materials science and engineering or related disciplines is required for consideration.

The Department currently has 26 faculty, 160 upper division undergraduate, and 130 graduate students, with substantial and sustained research funding and academic programs in biomaterials, ceramics, composites, electronic materials, metals, minerals processing, and polymers.

The deadlines for submission of applications are **April 1, 1991, May 1, 1991, and June 1, 1991.** Applicants should submit a cover letter specifying area of interest (A, B, C, or D) together with curriculum vitae and three letters of recommendation to:

Prof. M.D. Sacks
Search Committee Chairman
157A Rhines Hall
University of Florida
Gainesville, FL 32611-2066

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

MRS
MATERIALS RESEARCH SOCIETY

MATERIALS LABORATORY DIRECTOR

The Georgia Tech Research Institute is seeking a dynamic professional with demonstrated ability to develop sponsored research and manage extensive R&D programs in ceramics, metals, polymers, and composites. Prerequisites include a master's degree (Ph.D. preferred), with at least 10 years related experience. Must have broad knowledge of materials, and be familiar with Federal agency and industrial materials sponsors.

GTRI offers competitive salaries, outstanding benefits, 21 days vacation, and 12 paid holidays each year. Send a resume to: **Russ Cappello, Technical Recruiter, Human Resources Department, Code: MRS-45, Georgia Tech Research Institute, GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, GA 30332-0800.**

AN EQUAL EDUCATION/EMPLOYMENT OPPORTUNITY INSTITUTION

1991 MRS Fall Meeting
Boston, Massachusetts ▪ December 2 - 6, 1991

For information, call (412) 367-3003 today!