

Government and High-Tech Industry Representatives Debate U.S. Technology Policy at BRIE Summit

Organizers of the 1993 Technology Summit are gratified with their efforts to foster an exchange of views on U.S. technology policy between government and high-tech industry representatives. The Summit was organized by the University of California's Berkeley Roundtable on the International Economy (BRIE) and the UC-Berkeley Extension. Official endorsements came from MRS and 16 other professional organizations.

The Summit was held November 4-5, on the eve of NAFTA, and the presence of the press and anti-NAFTA demonstrators added an air of spectacle to the event. Many speakers referred to NAFTA, most expressing their support.

Participants agreed that the conference represented the inauguration of a new relationship between commercial technology industries and the federal government. According to BRIE's post-Summit report, both sides showed "an obvious willingness to work together to define the appropriate agenda, to detail and execute it, and even to be held accountable for measurable results and to a timetable." To reinforce the idea of better communications, Department of Commerce (DOC) Secretary Ronald H. Brown even gave out his e-mail address. The report finds it especially significant that participants agreed to continue the dialogue through several fora to be established between

industry and government.

Following brief welcoming statements by BRIE Co-Director Michael Borrus, by John L. Heilbron, vice chancellor of the University of California at Berkeley, and by DOC Secretary Brown, Vice President Gore addressed the Summit via live satellite. He unveiled the Administration's report on technology policy, *Technology for Economic Growth*. Brown then reiterated the Administration's themes in his keynote address.

Subsequent speakers included 25 other senior Administration officials, although DOC representation was dominant, with Secretary Brown, Deputy Secretary David J. Barram, Under Secretary for Technology Mary L. Good, and NIST Director Arati Prabhakar all participating. Speaking for industry were nearly 50 CEOs from U.S. high-tech companies. Approximately 600 members of the high-tech community attended the event.

Sessions on the first day examined the Administration's new commercial technology priorities, its high-tech trade strategy, the continuing commercial impact of defense spending, and the National Information Infrastructure (NII). John Gage, director of the Science Office, Sun Microsystems, put on a real-time NII technology demonstration using Xerox LiveBoards—large, interactive, white boardlike screens that display information simultaneously linked across networks. Discussion of the NII raised complex issues involving access, standards and security.

The second day explored how the goals of economic growth and a clean environment can be reconciled, and examined the needs of different high-tech industries in breakout sessions with audience participation. The seven breakout sessions focused on developing new civilian aerospace technologies, breakthrough drugs and biomedical technologies, and new electronics technology; on sustaining domestic manufacturing; on building a domestic flat panel display industry; on achieving leadership in advanced transportation industries; and on maintaining leadership in software.

BRIE's post-Summit analysis characterizes the conference as follows:

"The Summit pointed out the potential tensions evident between industry's technology priorities and American society's domestic needs—for example between the pursuit of trade access abroad and the need for job creation at home, or between the desire to push NII technology forward fast and the need to ensure its universal usefulness for the least technically sophisticated and poorest citizens. But the Summit emphasized that such tensions could be creatively resolved through public-private cooperation to create win-win scenarios: The pursuit of access abroad could be anchored with reinvestment and job creation at home; the NII could be moved forward by experimenting with ways to involve local communities and engage the disenfranchised."

A detailed 93-page analytic summary is available for \$10.00. For information, please circle Reader Service Card No. 99. □

CLASSIFIED

Positions Available

FACULTY POSITION

University of California, Los Angeles

The Department of Materials Science and Engineering at the University of California, Los Angeles, invites applications for two faculty positions in the following areas of materials science and engineering:

Ceramics and ceramic processing, Composite materials, Electronic materials.

Candidates for tenure-track positions must have demonstrated outstanding originality, ability, and breadth through graduate work or postdoctoral research. Senior-level appointments will also be considered for individuals with an exceptional record of accomplishment. Qualified minority and female candidates are encouraged to apply. Please send curriculum vitae with a list of publications, names of three references, and information on research and career interests to:

The Faculty Search Committee
Department of Materials Science and Engineering
5731 Boelter Hall
University of California, Los Angeles
Los Angeles, CA 90024-1595

UCLA is an equal opportunity/affirmative action employer.

GRADUATE RESEARCH APPTS IN MATERIALS SCIENCE

Appointments are available in photo-voltaics, superconducting films, corrosion in metals and ceramics, advanced materials for automobiles, and other areas. Students carry out studies at WSU Tri-Cities. Research is done at WSU or Battelle Laboratories. Contact Prof. Larry Olsen, Washington State University, 100 Sprout Road, Richland, WA 99352. (509) 375-9221

WSU is an equal opportunity educator & employer.

Positions Available

POSTDOCTORAL POSITION

Plasma Diagnostics for Processing Systems

The Engineering Research Center for Plasma-Aided Manufacturing at the University of Wisconsin-Madison invites applications for a postdoctoral research position specifically for diagnostics of plasma processing systems. Applicants should have a PhD degree in a related field and a proven record of diagnostic skills pertaining to plasma processing systems. These skills should include laser spectroscopy or laser-induced fluorescence LIF (thermal or low pressure plasmas); knowledge of IR absorption (laser or FTIR), Langmuir probes, energy and mass analyzers, microwave systems, and optical emission spectroscopy (OES) would be useful. Ongoing projects include LIF measurements of (1) pulsed sheaths in a low pressure discharge and (2) OH radical temperature profiles in a thermal (atmospheric pressure) plasma, and FTIR absorption measurements of CF₄ concentrations in ECR and inductive plasmas. Candidates for this position must have excellent verbal and written communication skills and be able to work effectively as a part of a team, in the role of a consultant or project leader depending on the nature of the project. Some travel is required to Center activities at the University of Minnesota and other Center locations. The Engineering Research Center for Plasma-Aided Manufacturing is a cross-disciplinary center funded by the National Science Foundation and a consortium of industrial partners. Applications or nominations should be sent to: Prof. J. Leon Shohet, Director, Engineering Research Center for Plasma-Aided Manufacturing, Department D, University of Wisconsin-Madison, 1410 Johnson Drive, Room 101, Madison, WI 53706.

The University of Wisconsin-Madison is an EO/AA employer.

TEMPORARY POSITIONS
University of California

A limited number of temporary positions (research engineers, postdoctoral scholars, lecturers, visiting faculty) may be available in the following areas: materials science, ceramics, composite materials metallurgy, PhD or equivalent experience. Send resume to: Department of Materials Science and Engineering, 5731 Boelter Hall, University of California, Los Angeles, CA 90024-1595.

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Plasma Etching for Microelectronics

The Engineering Research Center for Plasma-Aided Manufacturing at the University of Wisconsin-Madison invites applications for a postdoctoral research position in the area of plasma etching for microelectronics. Applicants should be experimentalists and have a PhD degree in a related field and previous experience in plasma processing and etching in particular. Duties of the position include but are not limited to assistance with experimental studies aimed at real time control of semiconductor etching with advanced high plasma density and low pressure plasma tools (ECR, Inductive, Helicon). Candidates for this position must have excellent verbal and written communication skills and be able to work effectively as part of a team, in the role of a consultant and/or project leader depending on the nature of the various projects. The Engineering Research Center for Plasma-Aided Manufacturing is a cross-disciplinary center funded by the National Science Foundation and a consortium of industrial partners. Applications or nominations should be sent to: Prof. J. Leon Shohet, Director, Engineering Research Center for Plasma-Aided Manufacturing, Department 1, University of Wisconsin-Madison, 1410 Johnson Drive, Room 101, Madison, WI 53706.

The University of Wisconsin-Madison is an EO/AA employer.

平成7年度
基礎科学特別研究員
の公募について

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7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名程度
2. 受入機関/理化学研究所
3. 募集分野/物理学、化学、生物学(生物科学・医科学)、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/平成7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50万円程度(社会保険料、税込)
 - ②通勤費/実費(上限4万円/月)
 - ③住宅費/家賃の一部支給
 以上のほか、研究費として138万円/年程度
6. 契約期間/連続して最長3年間を限度とし、毎年度所要の評価により契約更新
7. 応募願書の提出締切/平成6年6月15日(水)【必着】
応募したい方は下記に平成6年5月31日(火)迄に問い合わせのこと
【応募書類の頒布締切:平成6年6月1日(水)】
理化学研究所研究業務部・基礎科学特別研究員制度担当
〒351-01 埼玉県和光市広沢2番1号
電話 048-462-1111 内線 2461~2463
FAX. 048-462-4608 (直通☎:fax:048-463-3687)
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えますので、その旨御承知お下さいます。

EXPERIMENTAL
CONDENSED MATTER PHYSICIST
Tufts University

The Department of Physics and Astronomy at Tufts University is announcing an opening for a tenure-track senior faculty position (rank to be commensurate with qualifications) in experimental condensed matter physics as of September 1, 1994.

Applications are sought from candidates who have a PhD or equivalent degree. We are particularly interested in candidates whose research experiences are in nonlinear optics, optical properties of materials, magnetic properties of materials or other areas of materials science. The appointee will be expected to teach both undergraduate (including introductory physics) and graduate students, and to conduct significant experimental research. We are looking for an appointee who has demonstrated ability to develop a research program that leads to results of major significance. The appointee will be expected to seek and obtain outside funding for such research.

Interested persons should send a resume and names and addresses of three persons who are willing to supply letters of reference. We will begin interviewing candidates after May 1, 1994. Applications should be addressed to: Condensed Matter Search Committee, Department of Physics and Astronomy, Tufts University, Medford, MA 02155.

Tufts University is an Affirmative Action Equal Opportunity Employer, and encourages minorities and women to apply.

Ad closing for
the June issue
is May 2, 1994!

Positions Available

ASSISTANT PROFESSOR
University of California at Berkeley

The University of California at Berkeley, Department of Materials Science & Mineral Engineering, invites applicants for a tenure-track position at the assistant professor level in any one of three fields: computational materials science, functional ceramics, or novel materials processing. Desirable areas of expertise in these fields include: atomistics of materials design and properties; ceramics for electronic, magnetic, or optical applications; fundamental phenomena and modeling of materials synthesis and processing, emphasizing modern methods of materials production.

The successful candidate will be responsible for teaching undergraduate and graduate courses in the department, and must show potential for high quality research. A doctoral degree in an appropriate field is required. The position is available **July 1, 1994**.

Interested persons should send a letter of application, a curriculum vitae, and the names of at least three references by **May 31, 1994** to:

Prof. Ronald Gronsky, Chair
Department of Materials Science
and Mineral Engineering
210 Hearst Memorial
Mining Building
University of California
Berkeley, CA 94720



The University of California is an Equal Opportunity, Affirmative Action Employer.



The Department of Materials and Nuclear Engineering at the University of Maryland has tenure track faculty positions available in the following areas:

RELIABILITY ENGINEERING

As a member of the Reliability Engineering Program, this individual will conduct research in the area of advanced product reliability with emphasis on the physics of failure approach at the component and system level. Individual will also teach courses in Reliability Engineering, Quality and Reliability in Manufacturing, and Product Reliability. A strong interaction will be required along with the ability to address industrial reliability problems using state-of-the-art diagnostic and simulation techniques. The successful applicant should be prepared to conduct an independent research program and must show evidence of ability to attract outside funding for research projects. Applicants should have an earned doctorate in Engineering or an appropriately related discipline.

ELECTRONIC MATERIALS, THIN FILMS

We are seeking an Assistant Professor in the area of Electronic Materials, emphasizing thin films, superconductivity, and metal oxide films and devices to begin in July, 1994. Individual must have expertise in thin film deposition, characterization (including RBS), and device processing. A joint appointment with the Center of Superconductivity is envisioned.

Applicants should indicate their area of interest and send their CV, a statement of research interest, and three letters of reference by May 15, 1994, to: Professor Aris Christou, Chairman, Department of Materials and Nuclear Engineering, University of Maryland, College Park, MD 20742-2115. Women and minorities are encouraged to apply. EOE/AA.

Positions Wanted

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

PROSPECTIVE EMPLOYERS—

To correspond confidentially with the applicant,

REPLY TO THE APPROPRIATE BOX NUMBER, AS FOLLOWS:

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

Innovative Materials Processing Professional. Flair for providing creative solutions to materials synthesis and processing problems. Proven track record—patents, publications. Expertise with carbides, silicides, metal, inter-metallic, ceramic composites. Hands-on with analytical TEM, microprobe, SEM, Auger. Knowledgeable in powder processing (including mechanical alloying, RSP), brittle fracture, high temperature testing, finite elements. Materials market research, patenting experience. PhD (materials) exp. June 1994. MS and BS in mechanical engineering. **Employers—Please reply to Box XIX, 406.**

Metallurgical/Materials Engineer, PhD with two years postdoctoral experience in plasma assisted processing, five years experience in vacuum technology and extractive metallurgy R&D, four years experience in heat treatment, fatigue test, and failure analysis. Proficient with computers, XRD, SEM, and TEM. Knowledge in SPC and TQM. Location/salary open. **Employers—Please reply to Box XIX, 404.**

Postdoc in Electrical Engineering seeks position in company or university. PhD in electrical engineering (1993), MS in physics. Four years experience in teaching. Five years experience in materials characterization and device fabrication. Background includes LPE growth, electric and optic characterization (CV, IV, DLTS, PL, PR, etc.), numerical simulation, x-ray diffraction, etc. **Employers—Please reply to Box XIX, 401.**

Senior Postdoc in Experimental Materials Science seeks a position in academic/industrial R&D. Experienced in DTA, TGA, XRA, and metallographical analyses of inorganic systems (PhD in physical chemistry); growth and optical, mechanical, and electrical characterization of single crystals of decomposing refractory compounds (DSc in technology of semiconductors). **Employers—Please reply to Box XIX, 403.**

PhD Inorganic Chemist with experience in ceramics and catalysis seeks senior position in multidisciplinary materials group. Skilled in the synthesis, characterization and processing of powders for microelectronic, structural and catalytic applications. Experience in spray-drying, sol-gel, inorganic coatings, homogeneous and heterogeneous catalysis. Excellent interactions with business units. **Employers—Please reply to Box XIX, 402.**

Marketing/Sales Engineering Position sought with a semiconductor manufacturer or a company that services the semiconductor manufacturers. Degrees include MSMS (May 1994) - emphasis in semiconductors, Master of International Management—emphasis in marketing, and AB in chemistry. Strengths: (1) experience with and knowledge of advanced materials; semiconductors, polymers and others, and (2) four years of technical sales experience. **Employers—Please reply to Box XIX, 405.**

To place an ad, call Mary E. Kaufold, at 412-367-3036 today!