

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

PhD scientist seeks position in a challenging industrial/academic environment. Extensive postdoc experience in surface analysis, thin-film growth, and characterization of MBE. Background includes growth of III-V heterostructures, analysis of metal-semiconductor interfaces and oxidation; electron diffraction (RHEED, LEED), AES, XPS, XRD, SEM, and UHV/MBE systems. Good computer and communication skills. **Employers—Please reply to Box 301.**

Mineralogist. PhD in materials science seeks an industrial/academic research position. Specialized in high-temperature x-ray diffraction, properties-structures-relations, characterization. Experience in coating techniques, crystal growth, micro-hardness, strengthening of ceramics, SEM, DTA, EPMA, IR-spectroscopy and optical microscopy. Four years of industrial experience, including industrial testing. Fluent English, German, and Hebrew. **Employers—Please reply to Box 302.**

PhD in materials science and engineering, recent graduate, seeks industrial R&D or institutional research position. Substantial experience with thin-film materials in academic and industrial settings: mechanical properties, processing, force microscopy; silicon, silicates, platinum, PZT; microelectronic applications. Excellent communication skills. U.S. citizen. **Employers—Please reply to Box 303.**

Ad Closings

May issue—April 1
June issue—May 2
July issue—June 1
August issue—July 1

*Call Mary E. Kaufold at
(412) 367-3036 today!*

Positions Available

**POSTDOCTORAL
CANDIDATES**

The Materials Division and Manuel Lujan, Jr. Neutron Scattering Center (LANSCE), at Los Alamos National Laboratory (LANL), have an opening for a postdoctoral candidate to provide support to Laboratory research programs in the area of x-ray measurement of stress. Programs include measurements in a variety of composites, primarily metal matrix, as well as support of a Cooperative Research and Development Agreement in which automobile manufacturers, including Ford and GM, are working with the Department of Energy to develop predictive models of heat treatment distortion effects. Responsibilities consist of independent research using x-rays and neutrons, setting up and performing x-ray diffraction stress measurements using an 18kW rotating anode device. A PhD completed within the last 3 years or soon to be completed, in Materials Science, Mechanical Engineering, or a related field, experience in x-ray diffraction measurement of stress and demonstrated effective interpersonal, written and verbal skills, and the ability to work in a team environment required. Experience in finite element analysis and/or texture analysis and a background in solid mechanics advantageous. Willingness to interact with other LANL groups on material modeling preferred. Annual starting salaries range from \$39,660 to \$42,860, plus a generous and comprehensive benefit package. For consideration: submit **TWO COPIES** of a curriculum vitae and publication list to Postdoctoral Programs, **PD-94-142**, MS P290, Los Alamos, NM 87545. For technical questions contact (505) 667-3629 or jag@lanl.gov. Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A Teletype Device for the Deaf (TDD) is available by calling (505) 665-5357. Los Alamos National Laboratory is operated by the University of California for the US Department of Energy.

Los Alamos
NATIONAL LABORATORY

**RESEARCH FELLOW/SENIOR RESEARCH FELLOW
MATERIALS SCIENTIST**
School of Physics

The Microanalytical Research Centre has a position available for a person to participate in a major project on innovations in the synthesis and annealing of diamond. The project involves research into the growth and nucleation of diamond thin films and the focused laser annealing of ion implanted, radiation damaged diamond. Several sophisticated analytical instruments are available in-house, including a micro Raman spectrometer and a nuclear microprobe.

You should have a PhD in physics, or a related discipline, and extensive experience of modern techniques of the synthesis and characterization of advanced materials.

The position requires the ability to manage a large-scale, complex project, involving the interaction of a multidisciplinary team of scientists, students, and technical support staff. Good communication skills are essential. Experience with designing and troubleshooting both hardware and software would also be an advantage.

The position is available for one year.
Salary: \$41,000–\$48,688 p.a. (Research Fellow Grade 2, Level B); \$50,225–\$57,913 p.a. (Senior Research Fellow, Level C) depending on experience.

Further information and a position description: Dr. Steven Prawer, School of Physics (03) 344 5460, Fax (03) 347 4783, e-mail sdp@taun.ph.unimelb.edu.au.

Applications close: **April 6, 1994**
Reference number: Y9627023

Applications should be sent in duplicate, quoting reference number and three referees (including facsimile numbers) to: Director, Personnel Services, The University of Melbourne, Parkville, Victoria 3052; fax (03) 344 4694.

The University of Melbourne is an equal opportunity employer and has a smoke-free workplace policy.

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.

**ASSISTANT PROFESSOR
Materials Science and Engineering**

The Department of Materials Science and Engineering at the University of Cincinnati invites applications for a tenure-track position in polymer processing at the assistant professor level, although exceptional candidates can be considered for higher rank. The successful candidate will hold a PhD degree in polymer science and engineering, materials science and engineering, or related materials field, with a record of scholarly publication and significant practical experience in the polymer industry. Candidates with experience in the engineering applications and processing of high-performance polymers, including biopolymers, will receive favorable consideration. A strong commitment to excellence in teaching at all levels and the ability to develop and sustain a vigorous externally funded research program are also required. Review of applications will begin on **March 15, 1994**, and continue until the position is filled. Candidates should send a resume, description of research accomplishments, plans for future research, and a list of three references to: Dr. Ray Lin, Department of Materials Science and Engineering, Mail Location #12, University of Cincinnati, Cincinnati, OH 45221-0012.

The University of Cincinnati is an affirmative action/equal opportunity employer. Women, minorities, disabled persons, Vietnam era, and disabled veterans are encouraged to apply.

**POSTDOC RESEARCHER
SILICIDES**

Interuniversity Micro-Electronics Center (IMEC)

The research to be carried out will be on silicadation and on the implementation of silicides in submicron processes. The job will deal with basic research of silicide formation (Co and Ti), i.e., materials characterization, process optimization, etc., based on analysis with RBS, SIMS, sheet resistance, etc.

In addition to the more fundamental work, there will be an emphasis on process integration: formation of local interconnects, optimization of cleaning procedures before metal deposition, yield and thermal stability of narrow runners, and electrical characterization on the device level.

Interested candidates can send their resume to: Dr. K. Maex, IMEC vzw, Kapeldreef 75, 3001 Leuven, Belgium; phone 00 32 16 28 13 58; fax 00 32 16 22 94 00.

**FACULTY OPENINGS
School of Materials Engineering
Purdue University**

The School of Materials Engineering expects to have tenure-track faculty openings for the 1994-95 academic year. Starting rank is expected to be at the assistant professor level with higher rank possible for exceptional cases. Candidates must have a PhD in some area of materials science and engineering. Successful candidates will be expected to conduct effective teaching at undergraduate and graduate levels. A strong interest in both teaching and research is vital. Several opportunities exist to interact and collaborate with various materials programs on campus and to utilize central facilities. Areas of expertise are open with special consideration given to aspects of polymers, materials processing, electro-ceramics, and materials theory.

All applications received by **April 1994** are assured full consideration but the search will continue until the positions are filled. Starting dates will be after July 1994.

Resumes and the names and addresses of three references should be sent to:

Prof. G.L. Liedl, Head
School of Materials Engineering
Purdue University
1289-MSEE Building
West Lafayette, IN 47907-1289

Editorial Calendar Update

May Focus: Mesoscopic Disorder •
Ad Closing: April 1

June Focus: Materials Science in the Electron Microscope • Ad Closing: May 2

Other upcoming topics: Superconductors and Related Oxides, Corrosion and Coating, Fullerenes, Materials Science Issues in Nuclear Waste Disposal, Functionally Gradient Materials, Silicon-Based Ceramics

For information, contact Mary E. Kaufold at (412) 367-3036; fax (412) 367-4373

(classified continued on page 104)

FACULTY POSITION
Mechanical Behavior of Materials

The Division of Engineering of Brown University announces the opening of a tenured faculty position, available September 1, 1994. The appointment will be made at the level of associate professor or (full) professor depending on the experience and qualifications of the candidate. Applications are sought from candidates who have a PhD or equivalent degree in materials science or a related discipline and research experience at the interface between materials science and solid mechanics. Applicants should be effective teachers of undergraduate and graduate courses in materials science and in the mechanical behavior of materials. The appointee is expected to have a distinguished record in research, having demonstrated an ability to develop research programs and to obtain results of major importance. The position is especially well suited to candidates who can make effective use of the excellent laboratory facilities for mechanical testing and electron microscopy. Interested persons should send a complete resume with the names and addresses of at least five references to: Prof. R. Clifton, Co-Chair, Search Committee, Division of Engineering, Box D, Brown University, Providence, RI 02912. Applications should be received by **March 31, 1994**.

Brown University is an Affirmative Action/Equal Opportunity employer. Women and minorities are strongly encouraged to submit applications.

POSTERMINARIES

Staying Power

Conference planning is fraught with organizational challenges. Take, for example, physical facility foibles like walls transparent to noise, rooms too big or too small and too hot or too cold, lights that won't turn off, and mikes that won't turn on. Or take communications conundra like late meeting announcements, typos in the program, abstracts without authors, registration fees without forms, and outstanding invitations to the most outstanding speakers. One could go on and on, but these problems have all been solved in one way or another through calm methodical or crisis maniacal means.

The answer to one vexing question, however, has eluded even the most clever and thorough organizers. *How does one arrange the program to ensure that the last day, the last session, the very last talk of the meeting draws a respectable audience?*

Many apparently sensible ploys have been tried. Most common among them is the *early ending gambit*. Schedule the last session on the morning of the last day, the rationale being that attendees can then easily make their afternoon flights home without having to miss any talks. The unfortunate result—most attendees leave the night before. Another common scheme is known in the vernacular of news broadcasting simply as the *tease*. Place one or a few important invited talks

on the last day, even in the final session. Some have taken the extreme step of *contributed/invited inversion*, putting invited lectures (not merely the perfunctory but sage conference summary talk) at the final session's end. Usually this results in embarrassment for very prestigious speakers addressing mostly empty rooms. Of course, the red-faced chairpersons add a certain warm glow to the proceedings. Misguided programmers of meetings not large enough to fill a whole week often feel that a Monday through Thursday schedule would guarantee a well-attended Thursday, since it is not until Friday that everyone heads home for the weekend. They soon discover that one day is as good as any other on which to bail out before the end.

It is time for more creative and drastic solutions to this perennial dilemma. We offer a few here, hoping the more courageous organizers among our readers will try them on for size. To escalate the *tease* algorithm, we must appeal to the attendees' baser instincts. Greed or, if you prefer, frugality is a good one. Some kind of reward for staying to the end, collectable only in person after the last talk, is required. *The bribes* might be a free last meal, a free last night in the hotel, a rebate of a significant fraction of the registration fee (which you have, of course, artificially inflated to anticipate this expense), or a free ticket home on the airline of your choice (with frequent flyer bonus miles to boot). This approach may

be more effective on participants feeling the pinch of puny travel budgets than on CEOs of Fortune 500 companies.

If greed doesn't appeal to you and you believe that the whole truth is sometimes a dangerous thing, try the *prevarication ploy*. It's simple. Just ensure that all published programs list a full complement of talks on a variety of important and interesting topics on the last day, but with one minor additional precaution. Don't invite anyone to speak at or to chair those sessions. In fact, you can use entirely fictitious names and titles throughout. Most participants who don't stay for the last day will never know the difference and still experience the emotional rush attendant to early departure. For the true-blue dedicated stalwarts who show up on the chimerical last day, offering an exotic excursion to a nearby attraction would serve to assuage the annoyance for most. We have not thought through the ramifications of this procedure, once tried, on the attendance pattern at the next meeting you run.

If you are saddled with an exaggerated sense of personal integrity and fair play, the *phoney day deception* is not for you. The last, and perhaps best, solution is borrowed from the criminal justice system. It is in its least threatening incarnation, sequestration. At the other extreme, it bears some resemblance to *incarceration*. We are not referring to the well-known Gordon Research Conferences—they are linked to civilization throughout the week. We mean "do whatever it takes to control egress." Eliminate private cars (or the roads they would use); lock up the keys to the buses; anchor the boats far from the pier; tell the local taxi service that the meeting venue is under quarantine (think up some really nasty plague-like disease); disconnect phones; lock outside doors; and buy those newfangled meeting room chairs that not only can be latched to each other but come equipped with leg irons. This alternative offers the added benefit of hanging on to the most luminous invited speakers, who usually arrive and leave within microseconds of the beginning and end of their talks. They may now interact with other conference inmates.

It is unlikely that MRS will adopt any of these ideas until they have been tested and proven elsewhere. Let us know if your experiments confirm our theories—and meanwhile—our hearts go out to all those nonfictitious speakers who discover their names printed at 4:30 on Friday afternoon just above the word "adjourn."

E.N. KAUFMANN