

physics within the past ten years may apply. The applicant should have a good academic record with demonstrated ability in physics research, a willingness to change fields, and a strong interest in applying physics to the needs of the host industry.

The Fellowship stipend will be about \$20 000 for a recent PhD and up to \$25 000 for a physicist with five or more years postdoctoral experience. The Fellowships will be awarded for a period of twelve months, to start before 31 October.

Applicants should submit a resume, a letter of intent which states why the applicant wants a postdoctoral appointment in industry, and arrange to have three letters of reference sent to the program administrator. The letters of recommendation should discuss the candidate's competence as a physicist and the characteristics that particularly qualify the candidate to apply physics to problems in an industrial setting.

Fellows are expected to assign patent rights to the host company and to sign an agreement on the protection of proprietary information. They should plan to participate in existing programs of the host company.

A Selection Committee, appointed by Lewis M. Branscomb, APS president in 1979, will review all of the completed applications received by the 16 March deadline and invite some applicants for interviews. The "finalists," chosen after the interviews, will be invited to visit several industrial organizations during May. After the visits, the finalists and the firms will each declare whether or not there is a mutual interest in a specific Fellowship arrangement and will outline a general plan of work. Fellows will be named in June.

For further information, contact J. A. Burton, Administrator, Industrial Postdoctoral Fellowship Program, The American Physical Society, 335 East 45th Street, New York, N.Y. 10017. Telephone: (212) 682-7341.

APS to try industrial graduate internships

The Council of The American Physical Society has approved for trial in 1979 a proposal from the Committee on Education for an Industrial Graduate Intern Program. This program, developed under the direction of Werner P. Wolf (Yale), supports the Society's efforts to improve the coupling between the academic and industrial segments of the physics community.

The program, expected to be highly competitive, will provide about fifty internship opportunities at some thirty industrial sites during the summer of 1979. Well-qualified students in physics, applied physics, and astrophysics—senior

and graduate students—at a limited number of departments were encouraged to file applications. The students are required to seek the endorsement of their department chairman, obtain letters of reference, and provide information about their academic performance to date.

After the deadline, 2 February, files of applicants will be screened by a selection committee appointed by APS president Norman F. Ramsey (Harvard University). The most promising applications will be distributed to representatives of the industrial laboratories. The research managers will then contact the students directly: the Society will not participate in the negotiations for any particular internship. It is expected that all negotiations will be completed by 1 April.

Summaries of the reports which the students will write at the close of their internships will be widely circulated and thus will return information about current needs and practices in nonacademic institutions to the colleges and universities.

The interns' summaries, evaluation reports from the review committee, and commentary from the research managers will be organized into a report to be returned to the Committee on Education and the APS Council together with recommendations for continuation of the program in future years.

Industrial representatives and department chairmen who have not already been contacted and who would be interested in participating in this program are encouraged to contact the program administrator, Mary L. Shoaf at the APS headquarters in New York.

Polymer-science course to precede March meeting

The fourth annual polymer short course, "Scattering Methods in Polymer Science," will be offered on 17–18 March 1979, the weekend before the March general meeting of the Society in the Marriott Hotel in Chicago.

The course, sponsored by the Division of High Polymer Physics, has been organized by R. S. Stein (University of Massachusetts). Other members of the faculty are B. L. Crist Jr (Northwestern University), E. W. Fischer (University of Mainz), R. Ullman (Ford Scientific Laboratory), G. C. Berry (Carnegie-Mellon University), and G. L. Patterson (Bell Laboratories).

The course is designed for the working polymer scientist who needs a refresher course. For those who are not active in this area, a bachelor's degree or its equivalent in a physical science or engineering program is necessary preparation for this course.

Subjects to be discussed include:

- ▶ general theory of scattering
- ▶ small angle x-ray scattering (SAXS)

—theory and experimental techniques

- ▶ SAXS—applications
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- ▶ SANS—applications
- ▶ light scattering from solutions
- ▶ light scattering—solid amorphous polymers
- ▶ small angle Rayleigh light scattering (SALS) for solids—crystalline polymers and blends.

Lecture notes will be provided for the course, which will meet from 8:30 am to 12:00 noon and from 1:30 pm to 5:00 pm. Tuition for the course is \$125.

Enrollment forms and housing information are printed in current issues of the *Bulletin of the APS*. Enrollment forms and tuition payments are due in the New York office of the APS by 9 March 1979.

For further information about the course itself, please write or call R. S. Stein, Polymer Research Institute, Polymer Science and Engineering Department, University of Massachusetts, Amherst, Mass. 01003. Telephone: (413) 545-2727.

Metallurgy short course to be given in March

The Division of Condensed Matter Physics will offer its first short course, "An Introduction to Metallurgy: Microstructures and Mechanical Properties of Metals," on 17–18 March, the weekend before the March general meeting of the Society in Chicago. The Course has been organized and will be taught by Kenneth Eckelmeyer (Sandia). The sessions will be held in the Chicago Marriott Hotel.

Topics to be discussed include: mechanical characterization, microstructure and mechanical property relationships, control of microstructure and mechanical properties in single phase metals, control of microstructure and mechanical properties in multiphase metals, and structural metals. Lecture notes will be provided and the course will meet from 8:30 am to 12:00 noon and from 1:30 pm to 5:00 pm. Tuition for the course is \$100.

This course has been designed especially for physicists who want to know more about metallurgy; a bachelor's degree in the physical sciences or its equivalent is suitable preparation for the course.

A registration form and housing information can be found in current issues of the *Bulletin of the APS*.

For further information about the course itself, please write or call Kenneth Eckelmeyer, Org. 5832, Sandia Laboratories, Albuquerque, N.M. 87185. Telephone: (505) 264-7775.

Enrollment forms and tuition payments must reach the APS New York office by 9 March 1979. □