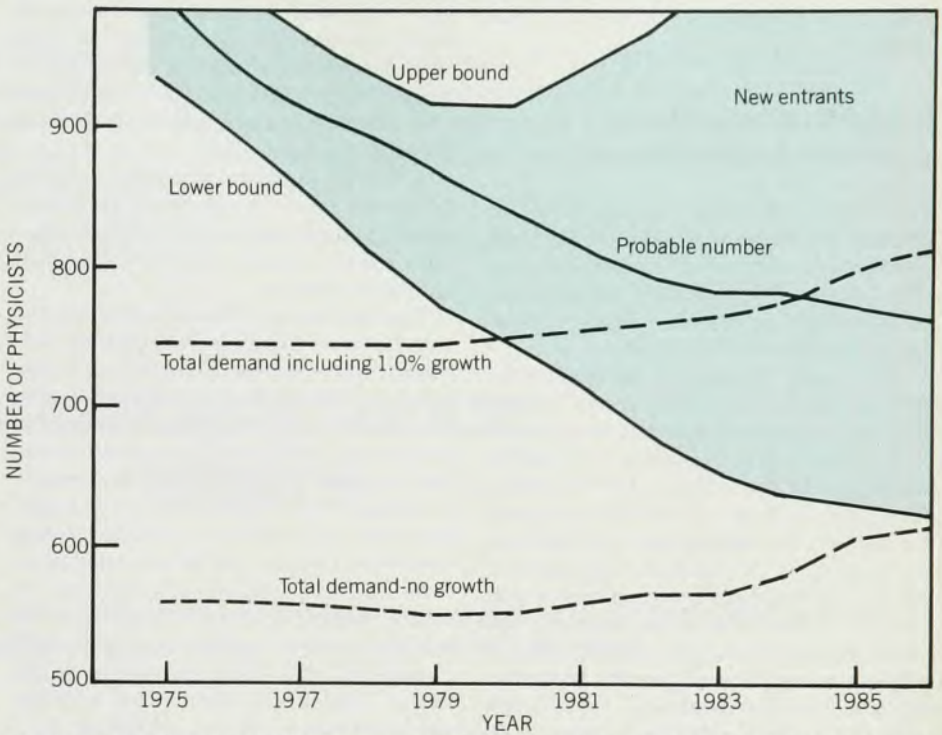
Manpower panel believes job outlook is improving

The APS has published the report of the Physics Manpower Panel entitled "The Transition in Physics Doctoral Employment 1960–1990," and copies of it are available from the Society's office in New York. The result of three year's work by the Panel, the 350-page report contains an executive summary of the studies and conclusions, written by the Panel chairman, Milan Fiske (General Electric Corporate Research and Development), along with detailed reports of the projects carried out by the Panel. Principal among these are:

- "Mobile Young Faculty," by Beverly Fearn Porter (American Institute of Physics), a follow-up study of the career paths and reactions of nearly 300 untenured assistant professors who left a sample of top US physics departments between 1962 and 1975;
- "Transition—A Follow-up Study of 1973 Postdoctorals," also by Porter, similarly pursued the career history of nearly 1000 physicists who held temporary postdoctoral appointments in 1973, and sought their views of the postdoctoral experience during these years of instability and change;
- "A Statistical Study of the PhD Physicist Employed in Industry," by Ralph A. Alpher (General Electric), Fiske, Frank S. Ham (General Electric) and Peter B. Kahn (State University of New York, Stony Brook), the first extensive study of this little-known group, presents the response of some 1600 of such physicists to a questionnaire seeking their experiences and views on how they came to industry, what they do, and what they think of their lot;



Employment outlook for physicists is summarized by the above graph and the following statement from the report of the Physics Manpower Panel: "We conclude that the physics community, taken as a whole, has passed through its gravest hour. The job market is beginning to look healthier for new entrants into the field primarily because there are so few of them . . . but . . . there will continue to be imbalances between many components of supply and demand . . ."

- "Supply and Demand for PhD Physicists," by Lee Grodzins (MIT), examines this topic both retrospectively from 1959 to 1978 and prospectively from 1977 to 1986. Special emphasis is placed on the change of the age composition of doctorate-granting physics departments projected to 1990, and the implications this composition has for the vitality of physics.

The complete report is available from the APS office for $5.00. Each of the separate chapters and the executive summary are available for $2.00. The executive summary will also be published in a future issue of the APS *Bulletin*.

Industrial Graduate Intern Program will continue

The Industrial Graduate Intern Program is now a year old and has been evaluated by the Committee on Education, which will continue the program. The internships were initiated on a trial basis last year to provide an opportunity for qualified physics students to broaden their training by spending some time in an industrial environment during the summer months. Werner Wolf (Yale University) originated and directed the program. Bernard Silbernagel (Exxon Research and Engineering Co.) is this year's director.

Six graduate students were selected from 27 candidates to participate in the three-month internships. Stipends, which averaged about $1200 per month, were paid by the industrial laboratories. The students, schools and corporations participating were: **Richard DeFreez** (Sonoma State University), with Bethlehem Steel; **James Eggert** (Rice University), with General Electric; **Raymond Friesenhahn** (Pennsylvania State University), with Chevron; **Ralph Jameson** (Ohio University), with McDonnell Douglas; **David Terry** (Purdue University), with Phillips Petroleum, and **Alan Wolf** (University of Texas, Austin), with Schlumberger-Doll. In addition to the six host institutions about 30 other industrial laboratories expressed interest in the program and received student resumes. Eight of these

made contact with students and four students declined offers of internships in favor of other summer activities.

The Committee is now inviting applications for the 1980 program and expects that many more students and laboratories will participate this year. Senior undergraduates and graduate students are eligible.

Further information and applications are available from many physics department offices or by writing Sidney Millman, Administrator, APS Graduate Intern Program, 335 East 45th Street, New York, N.Y. 10017. The deadline for receipt of completed applications is 30 November.

Panel on Public Affairs considers future studies

The Panel on Public Affairs (POPA), chaired by Harvey Brooks of Harvard University, met 20 July to consider possible future APS studies and the activities of the APS Committee on the International Freedom of Scientists.

The study proposal that progressed farthest was "coal utilization," which POPA unanimously voted to recommend to APS Council at the latter's November meeting. In the interim, POPA authorized the drafting of a detailed proposal for use in fund raising and the development of a list of possible study participants. As originally proposed by Bernard Cooper of West Virginia University, the study would focus on the opportunities for physics research and physics contributions in coal development. POPA felt that the study should be broadened to examine all important issues and problems concerning coal fuel-cycle technology to which physicists might bring a fresh perspective. The majority of the study participants would be physicists, with outside consultants providing specific expertise on coal technology. The proposed study would also be able to take advantage of an APS topical conference on the physics and chemistry of coal utilization scheduled at West Virginia University in May, 1980. Any APS member interested in more information on the proposed study or in being considered as a possible participant should contact Bernard Cooper.

A study on "soft energy paths and renewable energy sources," proposed by Vern Ehlers of Calvin College, Grand Rapids, Michigan, was approved for further development and funding exploration in order to be considered at the October POPA meeting for possible recommendation to the APS Council. The purpose of the proposed study would be to illuminate the issues surrounding comparisons of renewable and decentralized energy systems with other energy sources. POPA felt that such a general study might also raise specific technical questions and issues which could be explored in more detail in follow-up studies. One candidate second-generation study is "energy storage technology," which some members of POPA gave a higher priority than the general study.

A proposed study to examine "the causes and remedies of the widespread ignorance of basic physics among the public" was discussed, with POPA recommending that the proposer, Gertrude Goldhaber of Brookhaven National Laboratory, develop and refine her suggestion further by consulting with the APS Committee on Education. POPA also expressed interest and requested more information on a study of "the safety issues associated with the liquid metal fast breeder reactor," which was introduced by Louis Rosen of Los Alamos Scientific Laboratory.

Any APS member interested in more details on any of the proposed studies or in being considered as a possible participant should contact either the proposer or Harvey Brooks.

The chairman of the Committee on the International Freedom of Scientists, Edward Gerjuoy of the University of Pittsburgh, reviewed his committee's activities, which have included: drafting letters for the APS President to send on behalf of persecuted scientists, and recommending to the Committee on Complimentary Subscriptions scientists being deprived of human rights who should receive free APS journal subscriptions. A recent example of the first activity is the telegram sent by Lewis Branscomb, APS President to President Alexandrov of the Soviet Academy of Sciences on behalf of the imprisoned Soviet physicist Yuri Orlov. Also, the committee successfully encouraged several Congressmen to visit dissident and "refusnik" scientists on a recent trip to the Soviet Union. In addition, Bernard Cooper and Richard Wilson of POPA have combined scientific visits to the USSR with evening visits to refusnik scientists. Efforts on behalf of persecuted scientists have not been confined to the Soviet Union, as indicated by several letters on behalf of two scientists, Daniel Bendersky and Alfredo Giorgi, who have mysteriously disappeared in Argentina.

New application deadline for Congressional fellows

The eighth annual competition for the two 1980 Congressional Scientist Fellowships has been rescheduled. The new deadline for completion of applications is 7 December 1979, with selection of finalists to take place later in that month. Interviews and the award of fellowships will occur in January 1980.

This schedule change was recommended by both the ad hoc committee to review the Congressional Scientist Fellowship Program (headed by Solomon J. Buchsbaum, Bell Labs) and the 1979 selection committee (headed by Arthur Schawlow, Stanford University). The two committees felt that if the results of the competition are announced further in advance of the date of appointment, candidates will be better able to arrange for sabbatical leave or leave of absence from their institutions.

The APS Council has also increased the fellowship stipend to $25 000 for the appointment, which runs from 1 September 1980 through 31 August 1981. The maximum relocation and travel allowances for vouchered expenses incurred in conjunction with the fellowship appointment remain at $1000 per Fellow.

Applicants are expected to show exceptional competence in some area of physics, to have a broad background in science and technology, and to have a strong interest and some experience in applying scientific knowledge toward the solution of social problems. The choice of appointment is, as in the past, unrestricted and reserved to the Fellow.

More information about the program and application procedures appears in the October issue of the *Bulletin of the APS*. For further information, contact Mary L. Shoaf, Administrator, APS Congressional Scientist Fellowship Program, 335 East 45th Street, New York, N.Y. 10017. Telephone (212) 682-7341 or (609) 683-2615.

Council establishes new prize for spectroscopy

The Herbert P. Broida Prize in Atomic and Molecular Spectroscopy or Chemical Physics has recently been established by Council (PHYSICS TODAY, August, page 71). The prize was established earlier this year as a memorial to and in recognition of the accomplishments of Herbert P. Broida, late Professor of Physics at the University of California, Santa Barbara.

Sponsored by Broida's friends and the Office of Naval Research, the prize was established "to recognize and enhance outstanding experimental advancements in the fields of atomic and molecular spectroscopy or chemical physics."

The prize consists of a $5000 stipend and a certificate citing the contributions made by the recipient. The first prize will be awarded in 1980 and thereafter will be awarded from 1981 to 1987 in odd-numbered years. An allowance will be provided for travel expenses of the recipient to the general meeting of the Society at which the prize is bestowed.

The prize will be awarded to one individual at a time, and emphasis will be given to work done within the five years prior to the award. Preference will be granted to an individual whose contributions have displayed a high degree of breadth, originality and creativity. □