

More foreign students enroll, but only some stay to work

For several years the enrollments of foreign students in US graduate physics programs have been climbing. The latest *Graduate Student Survey* of the AIP Manpower Statistics Division might quell anxiety about foreign competition in a declining job market. A new table demonstrates that many foreign students are not competing for jobs with US PhDs.

Each succeeding cohort of graduate students includes more foreign citizens. They comprised 40% of the 2630 first-year physics graduate students in the US in 1982-83, up from 37% the previous year. Noncitizens were over 30% of all (10 173) physics graduate students. They were almost one-quarter of the 912 new PhDs. They obtained, however, 14% of the 249 potentially permanent jobs reported in the US. Many foreign PhDs did not compete for positions in the US. Among them, 7% accepted foreign postdoctoral positions and 20% got permanent jobs with employers outside the US.

Employment opportunities for new PhDs dipped slightly. More graduates received no job offers: 3% in 1980-81, 5% in 1981-82. (In 1981-82, 4% of experimenters and 7% of theorists received no offers.) There was also a decline in the number of PhDs receiving two or more job offers. The proportion fell to 52% from 55% in one year. The subfield of the doctorate made a difference. The picture was brighter in optics and in mathematical physics, more gloomy in high-energy physics, astrophysics and atomic physics. Overall, starting salaries rose 7%. The monthly median for postdocs rose to \$1550, that for potentially permanent positions went up to \$2670.

The master's degree is becoming more desirable for both students and employers. More (637) were granted in 1981-82 than in the previous year (577). The proportion of masters receiving no job offers fell. Beginning median monthly salaries rose 12% to \$2140 over the last-year median of \$1900. The employment category that pays least, high-school teaching, attracted fewer master's graduates: 2%,



Foreign physics graduate students Luis Orozco (left) of Mexico and Ling An Wu of the People's Republic of China, working in the quantum optics lab at the University of Texas, Austin, illustrate a ten-year trend at US universities of increasing foreign enrollments in physics (up from 23% to 40%). Data from the AIP Manpower Statistics Division.

down from 3% the year before, and down from 5% two years past.

The Division's *Survey of Physics and Astronomy Bachelor's Degree Recipients*, also available now, likewise shows a decline in the job market for its respondents. In summer 1982, of new physics bachelors, 13% had no job offers, up from 10% the year before. The proportion with two or more offers meanwhile fell, from 35% to 30%. With the decline in civilian employment opportunities came a continuation in the increase in the proportion

of bachelors who took military jobs. It rose to 24%, double the 1976 percentage. Because military salaries are comparatively low, the median monthly salary for men rose only 2%, to \$1680. Women's salaries, scarcely affected by military employment, rose 12% in the elapsed year to a median of \$1860.

Both surveys are available, free, from their author, Susanne D. Ellis, Manpower Statistics Division, AIP, 335 East 45th Street, New York, N.Y. 10017.

East Coast gets summer physics center

Separated by an inlet from Lewes, Delaware, Beach Plum Island served as a home away from home this summer for more than 70 physicists, who gathered there to discuss theoretical physics. For the second summer, the University of Delaware ran the Lewes

Center for Physics, using facilities at its Marine Studies Complex, renovated especially for this purpose.

According to Arthur Halprin, director of the Center and a prime mover in getting it established, the Center was designed to promote collaboration