

GENERAL SCIENCE

Professions in Russia

► SCIENTISTS, EDUCATORS, engineers and technicians have increased in the Soviet population during the period from 1940 to 1953 by 138%, compared with a 42% increase in the number of all workers.

Dr. Nicholas DeWitt of Harvard's Russian Research Center predicts in *Science* (July 2) that this expansion of U.S.S.R. professional and scientific personnel will continue into the future.

By 1956, annual graduations from higher educational establishments should be about double those of 1950, or 330,000 to 370,000 annually, Dr. DeWitt has determined from announced Russian plans. By 1956, there will be about 50% more Soviet engineers graduated annually than in 1950, or somewhat more than 45,000.

Scientists in research establishments should also double to about 120,000 by 1956. Because there has been a rapid expansion in the Soviet secondary school enrollment, Dr. DeWitt believes there is a substantially sound foundation for even further expansion of Soviet higher education after 1956.

This Soviet technical and educational advance "permits no complacency on our part," Dr. DeWitt warns.

There have been notable postwar shifts in the occupational distribution of Soviet

professionals. Proportionately more teachers and professors and medical professionals are trained. The production of engineers has, nevertheless, continued to remain at a high level.

Of the 1,785,000 Soviet professionals with completed higher education in 1952, 467,000, or 26.2%, were engineers; 748,000, or 41.9%, were teachers and professors; 300,000, or 16.8%, were medical; 161,000, or 9%, were agricultural specialists, and 109,000, or 6.1%, were socioeconomic professionals. In 1940, there was a total of 848,000 such professionals.

The number of women among Soviet professionals has increased to about half in 1952, compared with about a third in 1940. There were large increases in the number of women in the fields of medicine and education.

In 1952, the Soviet Union had 2,900 research establishments, compared with 1,560 in 1940, employing twice as many research scientists, or about 68,000, about a third of whom are engaged in applied and technical research.

There were 3,715,000 semiprofessionals with completed secondary specialized education in the U.S.S.R. in 1952.

Science News Letter, July 17, 1954

GENERAL SCIENCE

Shun Government Work

► THE FEDERAL government needs a strong recruitment program if it is to attract sufficient scientific talent to meet manpower needs.

Even with this, it may be difficult to induce college graduates to enter government employment.

This is the conclusion reached from a study made by Drs. Lowell H. Hattery and Charles M. Hersh of American University, Washington, on the attitudes of senior students, faculty and placement officers in five colleges and universities.

The study was conducted in the spring of 1952, before the Oppenheimer decision, which might be expected to influence science students against accepting government employment.

Institutions studied included Johns Hopkins University, Oberlin College, Purdue University, Syracuse University and West Virginia University, Drs. Hattery and Hersh report in *Science* (July 2).

Although 38% of the 660 seniors questioned had already accepted jobs in late April and early May when the study was made, only one out of 20, or 5.2%, had chosen federal employment. Three out of four had taken jobs in industry.

At one institution, 45 students had been signed up for jobs. Of these, none had chosen federal employment.

Science majors were the least likely of the students studied to go into government employment. About four percent of the science majors, five percent of the engineering majors and 14% of the social science majors decided to take their employment with the government.

Faculty members were slightly less favorable to industrial employment than were their students, but nevertheless were much more favorable to industrial employment than to government jobs.

Students who had picked industrial jobs and also those who had signed up for government employment were asked to give their reasons.

Those who picked industrial jobs liked the higher pay, said that students with the greatest ability were more likely to enter industry, thought that there was a greater incentive to work and that the pay was more dependent upon the ability of the employee in industry than in government.

Those who had chosen government employment had done so because they liked the more liberal vacation and sick leave policy, because the government provided better equipment for technical work, and because they felt that the employment was more likely to be permanent than industrial employment.

Science News Letter, July 17, 1954

Questions

ANIMAL NUTRITION—How does sulfur affect sheep's wool? p. 38.

ASTRONOMY—What "first" have Yerkes astronomers scored? p. 37.

What is a coronagraph? p. 42.

MEDICINE—How does the palm indicate anemia? p. 38.

PHYSICS—What is an antiproton? p. 39.

TECHNOLOGY—Why do high-speed aircraft need special paint? p. 41.

Photographs: Cover, Fremont Davis; p. 35, U. S. Air Force; p. 37, General Electric Company; p. 38, Walter R. Fleischer-Harvard University; p. 39, Marcel Schein-University of Chicago; p. 42, American Airlines-Hayden Planetarium Eclipse Expedition; p. 48, Kaywoodie Co.

STATISTICS

Brides and Grooms Are Now Closer to Same Age

► AN INCREASING tendency for American men to marry girls or women near their own age is noted by statisticians of the Metropolitan Life Insurance Company in New York.

This may be due to the current trend toward early marriages, when the difference between the groom's age and that of his bride is at a minimum.

Figures on ages at marriage in Massachusetts, which may or may not closely reflect the national pattern, show that during 1947-1951 men in the age group from 20 through 24 years—averaging about 22½ years—married women whose average age was 21½ years, a difference of about one year.

Grooms in their 30's took brides about five years their junior, on an average. The difference increased to eight years if the man was marrying in his middle 50's. In the relatively few marriages where the groom was past 70, the average age of the bride was about 10 years less than his.

Whether or not a groom had been previously married has little influence on the age of the bride he chooses. Bachelors 20 to 24 years of age took brides whose average age was 21.5 years, which compares with 21.9 years for brides of the men who had been wed before.

The average age of brides, however, varies appreciably with their prior marital status. For example, spinsters who married bachelors in the age group 20 to 24 years were 21.4 years old, on an average, whereas the corresponding divorcees and widows were 25.1 years of age.

Science News Letter, July 17, 1954