The curriculum was carefully compiled from data supplied by university consultants, advanced engineering schools that had built their own subcritical reactors in the past, and from experiments in the manufacturer's own laboratories.

Wide Open Field

Professional opportunities for graduates in atomic energy are wide open, AEC officials say, and are not confined to the nuclear physics field. Not every student will go into industry to run a reactor. But graduates with a background of nuclear training will find open doors as chemists, biochemists, physicists, medical technicians, and many other positions where their knowledge of nuclear techniques is necessary to their working with radioactive materials.

Industry has been slow to make full use of radioactive isotopes. This hesitation is due to two factors: industrial executives have been reluctant to allow radioactive materials to enter their plants, fearing radiation injury to their workers; and, except in the largest plants, industrial firms lack personnel trained in the effective use of such materials.

Manufacturers, however, can save money and make better products through the use of radioisotopes in analytical procedures by trained men who are familiar with such materials and their use.

Medicine, on the other hand, is advanced in isotope use.

Doctors can educate themselves in the techniques involved in isotope use through the reading of detailed published accounts of the results of experiments in laboratories all over the world. Through their associations with hospitals and clinics they have been practicing radioactive diagnostic and therapeutic techniques for many years.

Needed: Personnel

The need today is for trained personnel in industrial research laboratories, both large and small. Because of the opportunities for unlimited research, university chemists and physicists usually tend to stay put, except to go with large corporations at substantial salary increases with equal research opportunities.

Well-paid industrial nuclear engineering personnel can seldom be lured away from lucrative positions by smaller companies. The small business, therefore, must rely on the engineering graduate, of which there are all too few, or do without.

The starting salaries for the graduate accepting a position as a nuclear technician have been estimated at \$5,000 to \$6,000 per year, with advancement strictly a matter of personal accomplishment.

Through its progressive program of help to the school and encouragement to the student, the Atomic Energy Commission is pursuing its "program of conducting, assisting, and fostering research and development in order to encourage maximum scientific and industrial progress" as charged by the Congress in the Atomic Energy Act of

Science News Letter, August 9, 1958

NUTRITION

Surplus Food, Surplus Fat Problem to U.S. Alone

A "LUXURY nutrition problem" faces the United States while most other nations have an "essential nutrition problem."

One aspect of our national nutrition problem, a form of malnutrition very different from that facing other nations, is that we have surplus food on the farms and surplus fat on the individual.

The malnourished American eats virtually no breakfast, has a light lunch and

gorges on his evening meal.

In much of the world, however, antiquated agricultural practices, lack of technology for transporting and preserving foods, and social and religious customs keep millions more malnourished, Dr. Arnold E. Schaefer of the National Institutes of Health, Bethesda, Md., has said.

Goiter from lack of iodine in the food has been prevalent so long in some areas of the world that it is considered a natural part of the anatomy.

Dr. Schaefer explained that these countries are eager for assistance. Home economists are among the scientists who can continue to contribute greatly to world nutrition improvement programs.

Dr. Schaefer is executive director of NIH's interdepartmental committee on nutrition for national defense.

Science News Letter, August 9, 1958

ASTRONAUTICS

New Space Board Charts Man's Space Penetration

➤ A SCIENCE SPACE board to survey problems, opportunities, and implications of man's advance into space has been formed by the National Academy of Sciences and the National Research Council.

Under the chairmanship of Dr. Lloyd V. Berkner, president of Associated Universities, committees will be headed by Dr. Harold C. Urey, University of California; Dr. Harrison S. Brown, California Institute of Technology; Dr. Leo Goldberg, University of Michigan; Dr. Donald F. Hornig, Princeton University; Dr. W. A. Noyes, University of Rochester; Dr. R. W. Porter, General Electric Company; Dr. Bruno B. Rossi, Massachusetts Institute of Technology; A. H. Shapley, National Bureau of Standards; Dr. John A. Simpson, University of Chicago; Dr. James A. Van Allen, Iowa State University; Dr. O. G. Villard Jr., Stanford University; Dr. Harry Wexler, U. S. Weather Bureau; Dr. H. Keffer Hartline, Rockefeller Institute for Medical Research; and Dr. S. S. Stevens, Harvard University.

Fields to be explored include: moon and planets, geochemistry of space, radio astronomy, space stations and interplanetary vehicles, international relations, space laboratories and satellites, long-range planning, ionosphere, fields and particles in space, telecommunications, telemetry, guidance, meteorology of space, psychological and biological research, geodesy.

Science News Letter, August 9, 1958

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