amount, $200 000 will be used to purchase an experimental, water-moderated reactor, and the remainder will be spent on equipment for the handling of radioactive materials.

The reactor, which will have a continuous rating of ten kilowatts and the capability of "flashing" for a few milliseconds to a relatively higher power level, will be installed in the basement of the University's new Engineering Center in New York City, now under construction at 120th Street and Amsterdam Avenue. It will be the fourth nuclear reactor system on the Morningside Heights campus, the previous three being subcritical assemblies employed in nuclear training programs. The new reactor is intended to serve primarily as a research tool for faculty members and graduate students at Columbia, although on occasion it is expected to be available for use by qualified personnel from other institutions in the New York area.

It was also announced that for the first time Columbia will offer the "degree of Nuclear Engineer" for persons who continue their studies for one year beyond the master's degree but do not intend to complete a full doctoral program.

The New York City Board of Estimate authorized a $35 000 bond issue in December to provide facilities for the installation of an 800-kev cyclotron in the basement of Stuyvesant High School in Manhattan. The school's Cyclotron Club, with a membership of some two dozen students working under the direction of Alfred Bender, an electronics teacher, has been meeting before school hours to assemble the proton accelerator. The project has been aided by a grant of $10 000 provided by the Hebrew Technical Institute of New York. Alexander Efron, head of the Physics Department, has indicated that efforts will be made to establish a separate nuclear physics course at the high school when the cyclotron is completed.

NSTA Programs

The National Science Teachers Association has commenced a study of school science facilities to determine the physical setting and tools necessary to a good science program from kindergarten through junior college. The principal investigator is Fred R. Schlessinger, associate professor of education at The Ohio State University at Columbus, who will have the assistance of an eight-man steering committee.

Supported by a grant from the Laboratory Equipment Section of the Scientific Apparatus Makers Association, the NSTA study is based on three major hypotheses: that laboratory experience is the central method of science teaching at all grade levels, that science will have an increasingly important place in the curriculum, and that secondary-school science programs will develop into "multi-track patterns with homogeneous grouping".

A new organization for science-interested high-school students, "Future Scientists of America", has

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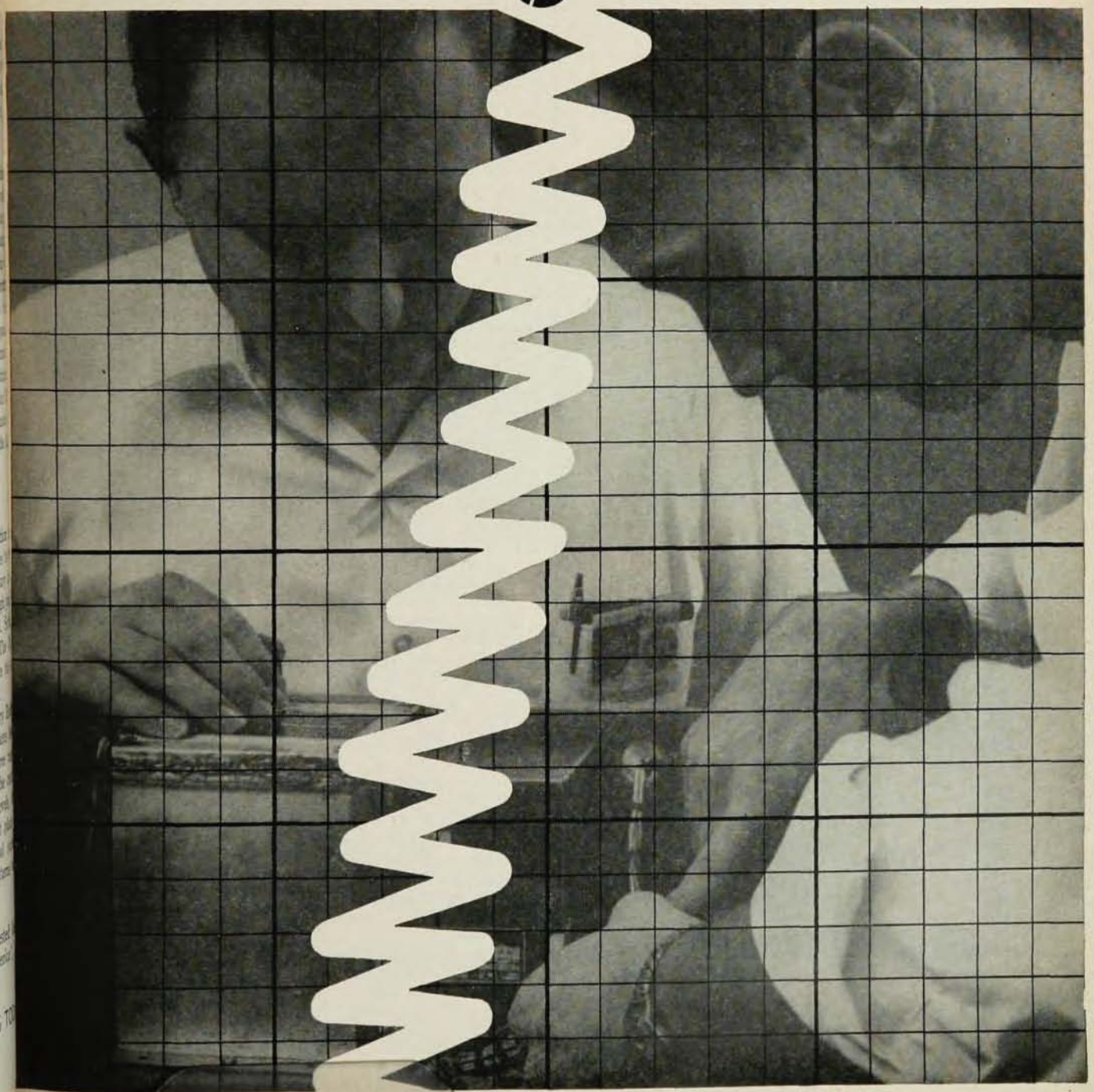

been launched by NSTA, which will issue charters for the FSA chapters upon applications of individual schools or groups of schools in the same area. Each local chapter will be supplied with suggested materials, services, and a sponsor's guidebook outlining proposed activities and operation of an FSA group during the course of the school year.

Among the projected activities of the FSA are distribution of a quarterly newsletter and publication of a series of paperback books under the general title of "Vistas of Science". FSA membership is open to all secondary schools throughout the United States. Interested persons should contact FSA director William P. Ladson, National Science Teachers Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.

Fellowships and Aids to Education

Fellowship awards for 1961 have been announced for two National Science Foundation programs designed to support advanced research and to improve science teaching in colleges and universities. The Foundation stated on December 16 that senior postdoctoral fellowships have been awarded to 91 scientists, sixteen of whom will study and do advanced research in physics. Under the second program, 285 college and university science teachers (including 27 physics teachers) have been selected to receive NSF science faculty fellowships. The 376 recipients under the two programs were chosen from a total of more than one thousand applicants. The names of 1961 physics fellows in both categories, together with their present institution (in parentheses) and the institution where they plan to pursue advanced study or research, are listed below:

Senior Postdoctoral Fellows

Norman Austern (U. of Pittsburgh), Nordic Inst. for Theoretical Physics, Copenhagen
Michel Baranger (Carnegie Inst. of Technology), Centre d'Etudes Nucléaires de Saclay
John S. Blair (U. of Washington), Nordic Inst. for Theoretical Physics
Winston H. Bostick (Stevens Inst. of Technology), French Atomic Energy Commission and British Atomic Energy Establishment
Philip J. Bray (Brown U.), Sheffield U.
Richard E. Cutkosky (Carnegie Inst. of Technology), Nordic Inst. for Theoretical Physics
Kenneth W. Ford (Brandeis U.), CERN
Erwin L. Hahn (U. of California, Berkeley), Oxford U.
Lawrence H. Johnston (U. of Minnesota), CERN
Abraham Klein (U. of Pennsylvania), Ecole Normale Supérieure
John O. Rasmussen, Jr. (Lawrence Radiation Lab.), Inst. for Theoretical Physics, Copenhagen
Robert L. Scott (U. of California, Los Angeles), U. of Brussels
George A. Snow (U. of Maryland), CERN
Nathan S. Wall (Massachusetts Inst. of Technology), Inst. for Theoretical Physics, Copenhagen
Lawrence Wilets (U. of Washington), Weizmann Inst. of Science
Dudley Williams (Ohio State U.), Liége U.