

tope in approximately 3 milliliters of dilute carrier solution. The exact disintegration rate per milliliter as of the zero date is noted and is roughly  $10^5$ dps/ml. Because of their low activity, the standards are exempt from Federal regulations regarding the possession, use, and transfer of radioactive materials.

Other NBS standards include radium gamma ray solution standards, radium solution for radon calibrations, radium D + E beta ray standards, calibrated radioactive ore samples, cobalt-60 beta and gamma ray solution standards, carbon-14 beta ray solution standards, and neutron flux standards. A complete price list, with directions for ordering, can be obtained upon request from the Radioactivity Section, National Bureau of Standards, Washington 25, D. C.

## Deadline in April

### Cenco Offers Two Scholarships

Central Scientific Company has announced that it will award two graduate scholarships in the physical and engineering sciences for the academic year 1952-53. A scholarship at the master's level will carry a stipend of \$1000, and the second, at the doctor's level, will provide \$1500. Students who are citizens of the United States may apply in writing, giving college records and other personal data, the name of the school where work will be done, and details concerning courses to be taken and research problems contemplated. Applications and letters of recommendation should be addressed to the Scholarship Committee, Central Scientific Company, 1700 Irving Park Road, Chicago 13, Illinois. They should be mailed not later than April 15, 1952. Successful candidates will be notified before June 1.

## Sylvania Center

### New Laboratory Planned

Sylvania Electric Products Inc. has announced plans for a new metallurgical laboratory at Sylvania Center, the company's 57-acre research site at Bayside, Long Island, New York. The new laboratory will be devoted largely to metallurgical research for the Atomic Energy Commission and to other government work. The building, second new research facility to be built at the Bayside tract, will be of brick and steel construction and will follow closely the design of the 35,000-square-foot physics laboratory opened at Sylvania Center in 1949.

## New Accelerator

### Carnegie Tech's Synchrocyclotron

After nearly four years spent on construction, the Carnegie Institute of Technology has announced the completion of its two and one-half million dollar synchrocyclotron. The machine is now in operation and has produced protons at the 400 Mev level for which it was designed. Originally intended to operate at about half of its present energy, the accelerator was enlarged during the design state when it was discovered that

higher energies would be required for meson production experiments. Financial support was provided in part by a gift from the Buhl Foundation and the remainder through contracts with the Office of Naval Research and the Atomic Energy Commission. The instrument will serve the research needs of scientists connected with Carnegie Tech's Nuclear Research Center at Saxonburg, Pennsylvania.

## Radiological Physics

### AEC Fellowships for 1952-53

The Oak Ridge Institute of Nuclear Studies is currently receiving applications for Atomic Energy Commission graduate fellowships in radiological physics for the 1952-53 school year. The fellowships, the final three months of which will be spent at Oak Ridge National Laboratory, are awarded for study at two training centers: one at the University of Rochester in cooperation with Brookhaven National Laboratory, and the other at Vanderbilt University in cooperation with ORNL. An annual basic stipend of \$1500 is provided, with an additional \$500 for a wife and \$250 for each of two dependent children, making a maximum of \$2500 annually. University tuition and fees will be paid by the Institute of Nuclear Studies. Applicants must hold an undergraduate degree at the start of the fellowship period, preferably with a major in physics, chemistry, or engineering and a minor in mathematics, biophysics, or similar field. Fellows must be citizens of the United States and must receive security clearance in accordance with existing laws. Application blanks and additional information may be obtained from the heads of science and engineering departments of colleges and universities or from the University Relations Division, Oak Ridge Institute of Nuclear Studies, P.O. Box 117, Oak Ridge, Tennessee. Applications must be in the hands of the Institute by March 1, 1952.

## Noise—Wanted and Unwanted

### Michigan Offers Special Course

An inservice training course on the acoustical spectrum is to be offered by the University of Michigan School of Public Health, in collaboration with the Institute of Industrial Health, from February 5th to 8th. Designed particularly to serve public and industrial health and safety personnel as well as others interested in both the desirable and undesirable effects of noise in the human environment, the intensive four-day course will cover sound and its behavior, the measurement of sound, ultrasonics, mechanical vibration, biophysics of sound perception, the pathological and emotional effects of sound, and the principles and methods of sound control. The Acoustical Society of America is well represented on the list of speakers. An enrollment fee of \$10 has been set and applications should be submitted to H. E. Miller, School of Public Health, the University of Michigan, Ann Arbor, Michigan.