

Hopkins University laboratory emphasized that the carbon arc offers a highly satisfactory source for infrared spectroscopy since it exhibits a considerable brightness increase over the Globar and can be held constant in emission to about two percent. R. E. Hopkins and Brian O'Brien of the University of Rochester reported the successful use of optical elements made of artificial sapphire in a special photographic objective of large aperture.

At the annual dinner of the Society the Frederic Ives Medal was presented to Dean George R. Harrison of the Massachusetts Institute of Technology. In the speech of the evening Dean Harrison reviewed the highlights of his thirty years in experimental spectroscopy. His audience was made well aware of the strong thread of continuity that stretches from his early work at Stanford University to his recent development of the new, high resolving power, echelle grating, and was shown the first spectrograms taken with an echelle grating, which was crossed with a conventional quartz spectrograph. At the close of this meeting the presidential chair was relinquished by Rudolf Kingslake of the Eastman Kodak Company to W. F. Meggers of the National Bureau of Standards.

—Stanley S. Ballard

ONE SCIENTIFIC WORLD

INTERNATIONAL LABORATORIES PROPOSED

Specific recommendations to Unesco for establishing international research laboratories have been made both by the National Research Council's Committee on Unesco and by a committee of experts in various scientific fields, which met at Unesco House in Paris last August. The laboratories would be under the United Nations. Both bodies have suggested strongly that an international computation center be founded, and the NRC committee has issued a report containing excerpts from a subcommittee's more detailed memorandum on the subject.

This proposes specifically that an international computing center (the authors prefer calling it an international mathematical and statistical consulting center) be considered as a serious international enterprise, and suggests further that it be located in a university city of one of the smaller countries of Europe, naming Switzerland, Denmark, Holland, or Belgium as possibilities. To make it clearly international, the writers believe the center should not be located in America, nor should it be in one of the larger countries of Europe.

It is probable, the report continues, that several existing international organizations now concerned with statistical problems would take an active interest in the proposed center because it would provide hitherto unavailable opportunities for European scientists who have no effective computing laboratory in continental Europe to which they may turn.

SCIENCE FELLOWSHIPS

OFFERED BY ROCKEFELLER FOUNDATION AND RCA

The National Research Council has announced that national research fellowships in the natural sciences will be continued in 1950. The awards are supported by the Rockefeller Foundation to promote fundamental research

in mathematics, astronomy, physics, chemistry, geology, geophysics, biophysics, biochemistry, and other fields in the natural sciences. Citizenship in either the United States or Canada is required, and the fellowships are generally awarded only to persons under 35 years of age who have completed work for the doctorate prior to assuming the fellowship. Applications should be filed on or before January 1, 1950.

The National Research Council has also announced that applications are being accepted for RCA predoctoral fellowships in electronics for 1950. These must be filed on or before January 10, 1950. The fellowships, supported by the Radio Corporation of America, are designed to give special graduate training and experience in research to graduate students who have demonstrated marked ability in electronics, either as a branch of electrical or radio engineering, or in that field of physics which treats the behavior of electrons in conductance phenomena.

Candidates must be citizens of the United States and must have training in electronics equivalent to that represented by one year beyond the bachelor's degree in a university of recognized merit in the field. The awards will be made at a regular meeting of the RCA Fellowship Board of the NRC next March.

Further information concerning both the Rockefeller Foundation fellowships and the RCA predoctoral fellowships in electronics may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

OFFERED BY GENERAL ELECTRIC

Applications for General Electric Company fellowships for the 1950-51 academic year are now being accepted and must be filed before January 1, 1950 according to a GE announcement. The fellowships will be awarded to graduates of colleges, universities, and technical schools in the United States who need financial assistance, and who have shown that they could, with advantage, undertake or continue research work in educational institutions either in this country or abroad. Awards to an annual maximum of \$1,500 for each fellowship will be made, the amount depending upon the needs of the student. Application forms have been distributed to deans and department heads; they may also be obtained from A. D. Marshall, Secretary, General Electric Educational Fund, Schenectady, N. Y.

COURSES

ATOMIC ENERGY EDUCATION

The Argonne National Laboratory, in cooperation with the Chicago public schools and the Museum of Science and Industry, is presenting a nuclear energy institute for Chicago teachers and school administrators. The Institute held its first meeting on October 15, and will continue to meet each Saturday until April 15, 1950.

TRACER COURSES ANNOUNCED

The special training division of the Oak Ridge Institute of Nuclear Studies announces that three additional basic courses in the techniques of using radioisotopes as tracers

will be held this winter. The courses, with laboratory work, lectures, and seminars, will be a continuation of a series offered at Oak Ridge and will run from January 2-27, January 30 to February 25, and March 6-31, 1950. Thirty-two participants will be accepted for each course, and there will be a registration fee of \$25.00 for each. Application forms and additional information on the courses may be obtained from Dr. Ralph T. Overman, Chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

ESTABLISHED

RADIO PROPAGATION LABORATORY

A new laboratory group, known as the Radio Propagation Laboratory, has been formed at the Pennsylvania State College. The seventeen members of the laboratory are directing their primary attention to studies of the effect of the ionosphere on frequencies below five hundred kilocycles. Two field stations are maintained in the State College area.

CENCO

Central Scientific Company has announced the opening of a new office in New York City to facilitate service in that area on scientific instruments, laboratory supplies, and chemical reagents.

TIN RESEARCH INSTITUTE

Tin Research Institute, Incorporated, a corporation providing free technical consultation service and assistance to users of tin in the United States, has established offices at 492 West Sixth Avenue, Columbus 1, Ohio according to a recent announcement. R. J. Nekervis and R. M. MacIntosh, both formerly members of the non-ferrous division staff of Battelle Memorial Institute, have been appointed supervisors for the new organization.

NEW GULF LABORATORY

A large and carefully designed laboratory building, intended to be the center for all geophysical research activities of the Gulf Oil Corporation, was dedicated in October at Harmarville, Pennsylvania. The new building is to be known as the Leovy Laboratory of Geophysics, in memory of the late Frank Adair Leovy and in tribute to his role in the scientific development of the oil industry.

NEW EQUIPMENT

BARTOL VAN DE GRAAFF

A new high voltage Van de Graaff generator, similar to those under construction at MIT and at Los Alamos, is to be added to the physics equipment of the Bartol Research Foundation of the Franklin Institute. Ground was broken early in October for a building to house the accelerator. According to W. F. G. Swann, director of the Foundation, it will take more than two years to complete the Van de Graaff and put it in operation.

HARVARD'S MARK III

Over six hundred physicists, mathematicians, economists, engineers, and industrialists from all parts of the

country and abroad attended a four-day symposium on large-scale digital calculating machines at the Harvard Computation Laboratory on September 13. The occasion marked the first public demonstration of Harvard University's new Mark III calculating machine, which will be used by the U. S. Navy Bureau of Ordnance.

IOWA SYNCHROTRON

Preliminary tests have been made of the new eighty million volt synchrotron now nearing completion at the Iowa State College Institute for Atomic Research at Ames. Built in Schenectady by the General Electric Company, the accelerator has been assembled in Iowa by members of the physics department and is housed in a specially designed building near the campus. The synchrotron should be ready for operation within the next few months, it has been announced.

HONORS AND AWARDS

AID TO RESEARCH

Grants in aid of scientific research amounting to \$235,000 have been announced by Research Corporation, New York City, a nonprofit organization which distributes its total net income in grants. They will be used to initiate or continue sixty-four research projects (mostly in physics, chemistry, mathematics, and engineering) administered by American colleges, universities, and scientific institutions in twenty-eight states. The latest grants bring to about \$650,000 the total distributed by Research Corporation this year for scientific research.

IES GOLD MEDAL

Ward Harrison, retired director of the engineering division of General Electric Lamp Department, has been awarded the 1949 Illuminating Engineering Society's Gold Medal, the highest award of the Society. The medal is awarded each year "for meritorious achievement conspicuously furthering the profession, art, and knowledge of illuminating engineering."

DISTINGUISHED SERVICE AWARD

Grote Reber, radio physicist in charge of the U. S. government radio observatory at Sterling, Virginia, has been given the annual distinguished service award of the Alumni Association of Illinois Institute of Technology for outstanding professional achievement.

NATURAL SCIENCE FELLOWSHIPS

National Research Fellowships for 1949 have been awarded to Edwin E. Moise of the Institute for Advanced Study, Charles M. Stein of the Institut Henri Poincaré in Paris, Carl B. Seligman of Physikalisches Institut der Eidgenössische Technische Hochschule in Zurich, Marshal H. Wrubel of the Princeton University Observatory, and Sydney C. Wright of the Institute of Nuclear Studies at the University of Chicago. Norman M. Kroll of the Institute for Theoretical Physics in Copenhagen received a renewal of his present fellowship for an additional year. The above fellowships were awarded in the fields of physics, mathematics, and astronomy;