world, and the maintenance of an up-to-date calendar of national and international neurologic meetings.

The federation is composed of national neurological societies in about 40 countries, which together have approximately 10,000 members. Ludo van Bogaert of the Institut Bunge, Antwerp, is president of the new organization. The other officers are as follows: vice presidents, Macdonald Critchley (Great Britain) and August Tournay (France); secretary-treasurer general, Pearce Bailey (United States); and chairman of the Committee on the Constitution and Bylaws, G. Schaltenbrand (Germany).

Problem Commissions Formed

The WFN has organized several problem commissions to review and evaluate the status of research and research opportunities in specialized areas. These commissions will also study the efficacy of international pooling of scientific talent and facilities for a more effective approach to a given research problem. Ten commissions have already been founded, in the following areas: neuropathology, neurochemistry, comparative neuroanatomy, history of neurology, tropical neurology, child neurology, and neuroanesthesia.

The Neurochemistry Commission is the most recently formed. It met for the first time 29-30 September in Antwerp. Those present were Derek Richter, John Cumings, and Everson Pearse (England); Armand Lowenthal (Belgium); Lars Svennerholm and Gunnar Brante (Sweden); Hans Bauer (Germany); George Edgar (Netherlands); Saul Korey, Jordi Folch-Pi, and Wallace Tourtelotte (U.S.); Judah Quastel (Canada); and Ludo van Bogaert and Charles M. Poser (ex-officio).

Biological Sciences Curriculum Study Formed

The Biological Sciences Curriculum Study, which has headquarters at the University of Colorado, was recently organized by the American Institute of Biological Sciences, with support from the National Science Foundation, to make a broad study of education in the biological sciences at all levels of instruction from elementary grades through the university. In the initial phases of the work, attention will be focused on the secondary school, perhaps the pivotal area in American education today.

The major objectives of the study group, which is made up essentially of an autonomous body of biologists and educators, is to design a coordinated and modern life-sciences curriculum; to recommend a sequence of courses in other subjects of study; and to explore the possibility of designing special courses for exceptional students at all levels. Projects are already being carried out by committees that have been formed in the following areas: course content, innovations in laboratory instruction, teacher preparation, publications, and the gifted student.

Consultants for the curriculum study are engaged in assembling case-histories of a representative group of teachers who are generally recognized to be exceptionally effective, to determine what factors made them successful and to discover any common denominator. The consultants are also preparing a digest of published information on biological science education. In addition, a number of units of course material in biology, teachers' manuals, and laboratory exercises that were prepared during team-coordinated summer writing conferences will be tested and revised for publication. As an aid to in-service teachers, to students, and to laymen interested in biological science, a series of review pamphlets will be issued. A newsletter on the activities of the Biological Sciences Curriculum Study may be obtained by writing to The Director, BSCS, University of Colorado, Boulder.

Science Equipment Purchase Guide

School officials, teachers, and consultants in elementary and secondary schools will find valuable information and direction in the *Purchase Guide for Programs in Science, Mathematics, and Modern Foreign Languages*, recently published by the Council of Chief State School Officers. The 336-page volume contains descriptions of approximately 1000 items of equipment used for instruction in elementary science, mathematics, general science, modern foreign languages, biology, chemistry, and physics. Each description includes an item number, the accepted name of the equipment, a short statement about its possible uses in instruction, and brief specifications as to function, which assist the purchaser in making a selection from among various commercial offerings. A "coding" is also provided for each item to suggest the areas of instruction and the type of course—basic, standard, or advanced—in which the item will be found useful.

Lists of equipment for each of the subjects covered are included in the book to assist purchasers in reviewing their present stocks of equipment. The book also contains "guidelines," short essays on special problems of instruction, and a select list of books and films for each area.

Edgar Fuller, executive secretary of the council, assisted by a seven-member advisory committee, was in charge of the project. The Educational Facilities Laboratories, Inc., provided a major share of the funds.

The *Purchase Guide* may be obtained for $3.95 from Ginn and Company, Statler Building, Boston 17, Mass.

Plant Material Exchange Program Reopened between U.S. and U.S.S.R.

A program for the exchange of plant research materials between the U.S. and the U.S.S.R. has been reactivated this year after 15 years in which there was no official exchange, according to the U.S. Department of Agriculture. The program was revived at the instigation of plant breeders in both countries, some of whom have participated in exchange visits. International exchange of plant materials was begun in 1898 by USDA's Plant Introduction Section, but exchange with Soviet Russia was discontinued about 1944.

Cooperative exchange of new and indigenous varieties of plants between the United States and the U.S.S.R. has proved to be highly beneficial to both countries because of similarities in climate, agricultural interests, and crop problems. Before 1944, U.S. plant breeders received several important types of grasses and alfalfa from Russia; from U.S. contributions under the program, Russia now raises 10 million acres of sunflowers of American origin—a major source of vegetable oil in that country.

Since last March, 577 shipments of forage (grass, legume), oilseed, and small-grain and cereal-crop seeds have been exchanged. Future exchanges this year will include tobacco stock and varieties of fruit, according to H. L. Hyland, supervisor of the exchange program in the United States and head of the Plant Introduction Section of

USDA's Agricultural Research Service.

Requests for foreign plant materials by U.S. research agencies and corresponding requests for U.S. seed from abroad are cleared at USDA's Plant Industry Station, Beltsville, Md. In the U.S.S.R., all exchange of seed is through the All-Union Institute of Plant Industry, Leningrad.

Bibliography Service for Biological Photography

The Medical Group of the Royal Photographic Society of Great Britain has announced the establishment of a bibliography service for papers on photographic techniques with applications in the medical and biological sciences. Such papers are published in a very large number of journals, and it is therefore difficult to use the existing literature for solving both theoretical and practical problems.

The bibliography consists of punch cards, each of which carries an abstract of an original article. Almost 400 new cards are added annually. The present total of such classified abstracts is more than 2000. The cards are grouped under "Kinematography," "Photography," "Administration," and "Microscopy" before they are subdivided further. The librarian is therefore able to cite references of papers which have a bearing on any problem concerned with photography in medicine or biology.

The service is extended, free of charge, to all bona fide inquirers. Detailed requests for references to the literature should be addressed to: J. A. Fairfax-Fozzard, School of Anatomy, University, Cambridge, Great Britain.

Grants, Fellowships, and Awards

Atomic energy. The Atomic Energy Commission is accepting applications for 237 graduate fellowships for 1960–61 in nuclear science and engineering, health physics, and industrial hygiene. All 237 are for U.S. citizens. Information about the three programs may be obtained from the Fellowship Office, University Relations Division, Oak Ridge Institute of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn. A description of each program follows.

1) Nuclear science and engineering: 150 fellowships are available for first, intermediate, and final years of graduate school. The prerequisites are a bachelor's degree in engineering or physical science, and mathematics through differential equations. The fellowships are for 12 months of study at 49 participating universities. The basic stipend is $1800 for the first year, $2000 for the intermediate year, and $2200 for the final year, with additional allowances for dependents. The fellowships are awarded on a 1-year basis, but renewals are available. The deadline for filing aplications is *1 January 1960.*

2) Health physics: 75 fellowships, five leading to the Ph.D. degree and 70 for 1 year of graduate study, are being offered in this program. The five fellowships for advanced training in health physics, leading to a doctorate in disciplines closely related to health protection, will be available each year. Applicants must be actively engaged in health-physics work and have a minimum of 2 years of productive experience in the field. Fellows may choose their graduate school, subject to the concurrence of the ORINS Fellowship Board. The stipend is $4000 per year plus $400 for each dependent. Up to $2500 per year is allowed to the graduate school selected, to cover tuition and extraordinary costs. The deadline for applications is *1 February 1960.*

To be eligible for any of the other 70 fellowships, the applicant must have a bachelor degree in biology, chemistry, engineering, or physics, with adequate preparation in related fields, and must have completed mathematics through calculus. Participants must be under age 35. These fellowships provide for an academic year of formal work at an assigned university, followed by three summer months of training at an AEC installation. Participating institutions are Harvard and Vanderbilt and the universities of California, Kansas, Michigan, Rochester, and Washington. Commission installations cooperating in the program are Argonne, Brookhaven, and Oak Ridge national laboratories, Lawrence Radiation Laboratory, National Reactor Testing Station, and Hanford Atomic Products Operation. A limited number of extensions are available for additional work to complete the master's degree. The stipend is $2500 for 12 months, with an additional allowance for dependents. The deadline for applications is *1 February 1960.*

3) Industrial hygiene: 12 fellowships are available in this program, which leads to the master's degree. An applicant must be under 35 years of age and must have a bachelor's degree, with a major in physics, chemistry, or engineering. Additional academic training or industrial experience is desirable. The fellowship is for one academic year, and the stipend is $2500. There are additional allowances for dependents and for industrial experience. The participating institutions are Harvard and the universities of Cincinnati, Michigan, and Pittsburgh. The deadline for applications is *1 March 1960.*

Biological sciences. Applications are invited for the third annual Turtox Scholarship established by General Biological Supply House, Inc. The $5000 award is open to any U.S. citizen who is currently, or who has been, enrolled in a graduate school and who is, or is contemplating, continuing study for the doctorate degree in botany, zoology, or biology. The award will be based upon evidence bearing upon the promise of the applicant as a prospective teacher and research scholar. Application blanks may be obtained from the chairman of the award committee, Professor Frank A. Brown, Jr., Department of Biological Sciences, Northwestern University, Evanston, Ill. Completed forms must be returned by *1 February 1960.*

General Atomic. The Oak Ridge Institute of Nuclear Studies has issued a 24-page illustrated brochure describing the research-participation opportunities for college and university faculty members that exist at Oak Ridge. This program provides faculty members with appointments of from 3 months to a year on research staffs of Oak Ridge laboratories. The laboratories in which research opportunities exist touch virtually every field of scientific endeavor. Copies of the new brochure and application blanks are available from the ORINS University Relations Division, P.O. Box 117, Oak Ridge, Tenn. Applications for summer appointments (of 3 months' minimum duration) should be submitted to ORINS, with letters of recommendation, by *15 December.*

Physics. The Organization of American States and the National Atomic Energy Commission of Argentina have announced cosponsorship of an 8-week Summer Institute of Physics to be held at San Carlos de Bariloche, Argentina, beginning about 18 January 1960. The major purpose of the institute is to give intensive graduate-level training in solid-state physics, nuclear physics, and electronics to university physics professors and instructors throughout the hemisphere.

Approximately 15 fellowships, which will provide funds for international