News and Notes

The American Society for Horticultural Science

THE American Society for Horticultural Science celebrated its fiftieth anniversary at the annual meeting held at Madison, Wisconsin, September 7–9. On September 9, 1903, 30 men met in the library of the Massachusetts Horticultural Society in Boston to approve the constitution and bylaws of the new society. On September 9, 1953, over 400 people were registered for the annual meeting, and the membership of the society had already passed the 1700 mark. This figure includes 200 members from 44 foreign countries. International recognition is a source of satisfaction, not merely from the organizational viewpoint, but as the slight contribution of American horticulture to the stockpile of international goodwill which science, art, and education continuously manufacture as a welcome by-product.

The original and continuing purpose of the society is to set up more scientific standards for the profession, to facilitate the publication of scientific findings, and to provide a common ground as well as a common meeting place for members of the profession. The status of horticulture at the beginning of the century required some such move. Even a rapid perusal of the horticultural literature of that period reveals a curious mixture of field notes, random observations, and grower experiences intermingled with reports of simple but effective experiments. According to Liberty Hyde Bailey, the first president of the Society, "There was (in 1903) no meeting ground within the framework of state or local horticultural societies for the scientist. This society was formed of necessity."

The success of the undertaking, is shown by the fact that this organization is now the largest society of professional horticulturists in the world. It is subdivided into five regional groups, the fifth is located in the Caribbean. For purposes of specialization, four sections have been constituted: Fruits, Vegetables, Ornamentals, and the relatively new section devoted to processing.

The *Proceedings* of the Society, of which 61 volumes have so far been published, are issued twice annually and include the majority of the papers presented at the annual meeting. The membership fee covers the cost of these volumes which are sent to both active and associate members. Accepted more or less laconically by the American memberships, the *Proceedings* are received with pride and gratitude in the remote and limited libraries of some of the foreign members.

The evening lecture, entitled "Significance of Growth Regulating Substances in Agricultural Practice," was under the sponsorship of Sigma XI and the American Institute of Biological Sciences. It was delivered by E. J. Kraus who for many years was Chairman, Department of Botany, University of Chicago, and was one of the scientists responsible for new and productive trends in horticultural research.

At the annual banquet, celebrating the fiftieth anniversary of the society, two of the eight surviving charter members, A. T. Erwin and V. H. Davis, were recognized as the honored guests of the society.

The scientific program which was made up of 207 papers included a symposium with the American Society of Plant Physiologists and the physiological section of the Botanical Society of America on the subject of Photoperiodism. The programs of recent years indicate an ever-increasing interest in the effect of hormone treatments on the various plant processes. In addition, reports on the breeding of horticultural crops together with such related aspects as polyploidy, have also been presented. One of the major aspects of present studies seems to be the use of leaf analysis as a diagnostic method of approach to the determination of mineral deficiencies and the problems of plant nutrition. The chemical approach to production problems represents a major trend. There is also evident emphasis on studies concerned with postharvest physiology, including storage of the various horticultural plants.

Anniversary celebrations are for the most part an arbitrary emphasis on the passing of time, but they do serve as the occasion for a backward and forward look. And so from the top of a fifty-year rise, the American Society for Horticultural Science looks back over the territory successfully traversed and forward toward an increasingly fundamental approach to the practical horticultural problem.

FREEMAN S. HOWLETT
American Society of Horticultural Science

Science News

A comprehensive **review of science in the United States,** covering the year ending June, 1952, has recently been published in London and will go on sale in this country shortly. The booklet was prepared by the British Commonwealth Scientific Office in Washington, successor to the original British Technical Mission that was set up during World War II to facilitate the exchange of technical and scientific information between Britain and the U.S. Such a report is prepared annually by the B.C.S.O., but this is the first one to be published and distributed. Among its findings, the review notes:

That research and development expenditure in the U.S. has increased by 270% during the last decade;

That most of the increase is due to military projects;

That $2,930 million was to have been spent on these activities in the year 1952–53;

That more than half of this sum was supplied by the U.S. Government;

That industrial research and development employs

some 71,000 persons with university degrees or equivalent; and

That of 2,800 industrial laboratories in the U.S., only 7 have staffs of more than 1,000, while more than half employ less than 10 people.

The report goes on to cover a dozen or more phases of U.S. scientific development, including nuclear physics, metallurgy, fuel and power, and mechanical and production engineering. In the section headed "Conservation of Materials," the review notes: "The problem of shortages of raw materials is receiving considerable attention in the U.S.," and states that by 1975 the U.S. demand for minerals will have risen by about 90%. America, formerly one of the world's biggest suppliers of raw materials, is now importing more than she exports.

Expansion of the program for producing "fissionable material" is to cost $4,200 million between 1952 and 1957, the B.S.C.O. booklet observes. It adds, "These figures are large, but should be compared with the vast Defense Department budget which accounts in *one year* for $46,000 million." Of this $4.2 billion earmarked for atomic energy, one billion dollars is to be used to provide a gaseous diffusion plant for the production of uranium, and a further $125 million is to be spent in extending the T.V.A. power plants.

In 1975 the U.S. is expected to consume about double the energy used in 1950. The report notes that today coal provides less than half the energy requirements of this country, and that there is "little pessimism" at present about an immediate shortage of oil, since the discovery of new supplies has more than kept pace with increasing consumption. Work on fuel technology in the U.S. includes investigation of the Fischer-Tropsch process for getting oil from coal, the construction of a coal hydrogenation plant for the production of aromatic hydrocarbons, and experiments in underground gasification.

The authors of the booklet also observed, with some indications of shock, that in some parts of the U.S. water is used at the rate of over 200 gallons a day per person, despite the obvious need for water conservation. Important developments in this field include the perfection of methods of purifying sea and brackish waters to provide water suitable for consumption and for use in industry.

Among other research activities in the U.S., the report lists a new building-construction method of casting concrete slabs for roofs or upper floors of buildings and jacking them into position; the "rapidly increasing" use of antibiotics in the feeding of farm animals; and the "phenomenal rate" of expansion of the chemical industry during 1951.

Tribute is paid to the help received from American scientists and officials all over the country, and in every type of institution. "The courtesy and cooperation encountered," the introduction states, "are however so universal that only the newcomer to the U.S.A. is surprised."

The report is available for 65¢ at the British Information Services office, Rockefeller Plaza, N.Y.C.

Scientists in the News

Floyd S. Daft, Acting Director of the National Institute of Arthritis and Metabolic Diseases, National Institutes of Health since the resignation of Russell M. Wilder last June, has been appointed Director. Dr. Daft, a specialist in nutrition, has been associated with NIH since 1937.

Last year the Duke Endowment provided funds for the establishment of James B. Duke professorships at Duke University. Recently the first group of scholars to receive the special appointments was announced. The following scientists were among those named: **W. C. Davison,** pediatrics; **Fritz London,** chemical physics; **Joseph E. Markee,** anatomy; **Walter M. Nielsen,** physics; **Walter J. Seeley,** electrical engineering; and **Frederick A. Wolf,** botany. The men who received these new chairs have served the university an average of 23 years each.

Maurice C. Fishler, Head of the Biological and Medical Sciences Division of the U.S. Naval Radiological Defense Laboratory, San Francisco, has been ordered to military duty as a 1st lieutenant in the Medical Corps, U.S. Army. Dr. Fishler has served the laboratory since 1948.

Otto Hans Gauer has been appointed Associate Professor of Physiology in the Duke University School of Medicine.

Joel H. Hildebrand, Emeritus Professor of Chemistry and former dean of the College of Arts and Sciences at the University of California, is spending 2 months at the Argonne National Laboratory giving a series of lectures and consulting with the chemistry staff members. Dr. Hildebrand's stay is in accordance with the laboratory's plan to bring outstanding scientists for short visits to stimulate work in various fields.

Elizabeth S. Russell, a geneticist who has been associated with the Roscoe B. Jackson Memorial Laboratory since 1937, has been elected Staff Scientific Director of the laboratory.

The Camille and Henry Dreyfus Foundation of New York City has established a chair in chemistry at Mount Holyoke College for a 5-year period. **Mary Lura Sherrill,** a member of the college faculty since 1921 and Chairman of the Chemistry Department since 1946, has been appointed to the new chair.

The Office of International Relations, National Academy of Sciences—National Research Council, has provided the following information concerning the travel plans of scientific **visitors to the United States:**

Karl Roessel-Majdan, Director, Radio Institution, University of Vienna. Arrived Aug. 21 for 90-day stay on International Educational Exchange Service program. c/o Miss Elizabeth Jorzick, Programs Branch, Leaders Div., Dept. of State.

Allen Sadler, Engineer, Research Laboratory, S.

Smith and Sons, Ltd., Cheltenham, England. Has arrived for a year's study at the Massachusetts Institute of Technology.

J. W. G. Porter, National Institute for Research in Dairying, Agricultural Research Council, England. Arrived end of August for a 4-month stay. c/o Prof. Carl Hoglund, Michigan State College.

V. A. Bailey, Professor of Physics, University of Sydney, Australia. Will serve as a Visiting Professor of Engineering Research at the Ionosphere Research Laboratory, Pennsylvania State College, until June 30, 1954.

Ranan B. Banerji, Honorary Lecturer, University of Calcutta, India. Arrived in October for at least a year's research at the Ionosphere Research Laboratory, Pennsylvania State College.

J. W. Dungey, Research Fellow, University of Sydney, Australia. Will arrive in November for research in solar physics at the Ionosphere Research Laboratory, Pennsylvania State College.

Ashesh P. Mitra, Council of Scientific and Industrial Research, Calcutta. Arrived in September, 1952, for work at the Ionosphere Research Laboratory, Pennsylvania State College, until June 1954.

Marcel Nicolet, Royal Institute of Meteorology, Brussels, Belgium. Arrived Sept. 15 for at least six months' research at the Ionosphere Laboratory, Pennsylvania State College.

Andrew Davidson, Chief Medical Officer, Dept. of Health, St. Andrew's House, Edinburgh, Scotland. Here Nov. 5 to Dec. 12 to attend American Public Health Assoc. meetings. c/o Josiah Macy, Jr. Foundation.

Bjorn Folkow, Associate Professor of Physiology, University of Gothenburg, Sweden. Arrived Sept. 6 for indefinite stay. c/o Josiah Macy, Jr. Foundation.

Jacques Henriet, Surgeon, Hospital and Maternity Center of Pontarlier, France. Arrived Aug. 28 for 120-day Dept. of Health, Education and Welfare program. c/o Miss Elizabeth Jorzick, Programs Branch, Dept. of State.

H. W. Kosterlitz, Senior Lecturer in Physiology, University of Aberdeen, Scotland. Arrived Sept. 7 for stay until February. c/o Dr. O. Krayer, Pharmacology Dept., Harvard Medical School.

C. B. McKerrow, National Institute for Medical Research, England. Arrived Aug. 28 for about a year's work with Dr. Otis of Johns Hopkins University.

J. G. Millichap, Medical Research Council, England. Arrived Oct. 6 for about one year. c/o Prof. Randolph Byers, Dept. of Neurology, Boston Children's Hospital.

Bror Rexed, Secretary, Swedish Medical Research Council. Arrived Sept. 2 for 90-day stay on an International Educational Exchange Service program. c/o Dr. Keith Cannan, Div. of Medical Sciences, National Academy of Sciences, 2101 Constitution Ave., Washington 25, D.C.

Dr. Sloane-Stanley, Medical Research Council. England. Arrived Oct. 9 for a year's travel on an Eli Lilly fellowship c/o Prof. J. Folch-Pi, McLean Hospital, Waverly, Mass.

Frank G. Young, Professor of Biochemistry, University of Cambridge, England. Arrives in early November for indefinite stay. Will attend Conference on Adrenal Cortex. c/o Josiah Macy, Jr. Foundation.

Education

James Hillier will give the 2nd annual **Edsel B. Ford Lecture** at the Edsel B. Ford Institute for Medical Research, The Henry Ford Hospital, Detroit, Dec. 8. His subject will be "Some Results of the Application of Electron Microscopy to Medicine." The lecture will describe two of Dr. Hillier's latest contributions in the field, (1) the ultrastructure of the plasma membrane of human erythrocytes, and (2) the division of bacterial cells as revealed by ultrathin sectioning techniques.

During the Spring quarter of 1954 (March 24 to June 4) the **Institute of Statistics of the University of North Carolina** will sponsor a special program of course work, lectures and seminars on statistics for research engineers, physicists, and chemists. The primary objective of this program is to provide an opportunity for industrial research workers to acquire a working knowledge of modern statistical concepts and techniques. Emphasis will be on the efficient design of experiments and the analysis of data therefrom. Informal seminars on statistical problems submitted by the participating students will be held. Guest lecturers will include W. J. Youden and M. G. Kendall. Regular college credit will be granted for course work satisfactorily completed. For further information write to Institute of Statistics, North Carolina State College, Box 5457, Raleigh.

Grants, Fellowships, and Awards

The American Journal of Surgery, an internationally known, independent monthly publication established in 1891, has been honored as recipient of the first **Honor Award for Distinguished Service in Medical Journalism** to be given by the American Medical Writers' Association. The award, consisting of a plaque, was presented to the Editor of *The American Journal of Surgery,* Thurston Scott Welton of Brooklyn, N. Y., Emeritus Professor of Clinical Obstetrics and Gynecology, State University of New York. The award is presented annually "for accuracy, clarity, conciseness and newness of information in articles, editorials and other material; for excellence of design, printing and illustrations, and for distinguished service to the medical profession," rendered by a United States or Canadian medical periodical.

Shulton, Inc., manufacturers of toiletries and fine-chemicals, announces that a **Shulton Fellowship Fund** has been placed in the Department of Chemistry at the University of Rhode Island, College of Arts and

Sciences, for the purpose of sponsoring a graduate student, during 1953–54, to do research work relative to the production of chemicals by means of vapor phase methods.

The **University of Delaware** has been awarded a contract by the **RCA Victor Division, Radio Corporation of America** under which the university's Department of Psychology will conduct a research program in the field of psychoacoustics. The contract provides for the construction of a special soundproof laboratory to be added to the present facilities of the psychology department. F. Loren Smith, Assistant Professor of Psychology, is chief investigator for the project, and will be assisted by scientists and engineers of the RCA Engineering Products Department and members of the university's staff.

The purpose of the research program is to provide basic information concerning the factors which contribute to understanding speech, and to develop reliable techniques for evaluating the difficulty of speech reception under various conditions. By awarding the contract, RCA Victor becomes a pioneer among industries in giving support for university research in speech intelligibility.

Sigma Delta Epsilon, graduate women's scientific fraternity, has announced a predoctoral fellowship of $1400. *Applications for the year 1954–1955 should be submitted before Feb. 1, 1954,* to the Fellowship Board authorized to make the award of the fifth **Sigma Delta Epsilon Fellowship.**

Women with the equivalent of a master's degree, carrying on research in the mathematical, physical, or biological sciences, who need financial assistance to complete work for the doctorate and who give evidence of high ability and promise, are eligible. During the term of her appointment the appointee must devote the major part of her time to the approved research project, and not engage in other work for remuneration (unless such work shall have received the written approval of the Board before the award of the fellowship).

Application blanks may be secured from Dr. Esther S. Anderson, Geography Department, University of Nebraska, Lincoln 8, Neb. Announcement of the award will be made early in March.

Meetings and Elections

The **American Board of Psychiatry and Neurology** is holding its annual meeting and examination Dec. 14–15, following the meeting of the Association for Research in Nervous and Mental Disease. The examinations will be held at the New York Psychiatric Institute and the Neurological Institute.

The **4th annual meeting of the Animal Care Panel,** sponsored by the University of Chicago and the Argonne National Laboratory, will be held Dec. 2–3 in the Billings Hospital, Chicago. The Panel has just been incorporated and will be fully organized at the business session of this meeting. Robert J. Flynn, Box 299, Lemont, Ill., is secretary-treasurer of the Panel.

The **3rd Annual Wayne University Symposium on Blood** will be held on Jan. 9, 1954, in the College of Medicine auditorium, Detroit. The session is to be opened by Sir Lionel Whitby of Cambridge. Papers by Benjamin Alexander, Shirley Johnson, Koloman Laki, G. J. Millar, Frank C. Monkhouse, Sol Sherry, L. M. Tocantins, and other active investigators are on the program. Inquiries may be addressed to Dr. Robert I. McClaughry, Assistant Dean, Wayne University College of Medicine.

The **Springfield Chapter of the AAAS** will hold a meeting on Dec. 3 in the auditorium of the Springfield Natural History Museum. Omar T. Pace and Alphonso Palermo, surgeons, and William Kaufman, pathologist, will discuss the following aspects of cancer: (a) etiologic factors; (b) current means of diagnosis and treatment; (c) newer aspects of treatment. A question period will follow. Walter W. Williams, chairman of the chapter, will preside as moderator.

Any person wishing to join the Springfield Chapter should communicate with Philip H. Cinis, 73 Melha Ave., Springfield 4, Mass.

Distinguished physicians and dentists from England, Canada, and many parts of the United States will take part in **symposia at the University of Buffalo** Dec. 11–12. The symposia will be held in connection with dedication exercises for Samuel P. Capen Hall, the new building for the Medical and Dental Schools of the University of Buffalo. The building was recently completed at a cost of $4,500,000. The University of Buffalo is a private institution, and the funds were given by individuals and corporations.

Participants in the symposia will include: Charles H. Best, co-discoverer of insulin, Professor of Physiology and Director of the Banting-Best Institute at the University of Toronto; Robin R. A. Coombs, Assistant Director of Research, Institute of Pathology, University of Cambridge, England, who is well-known for the "Coombs Test" for the detection of Rh sensitization in new-born babies; Stanley E. Dorst, President of the Association of American Medical Colleges and Dean of the University of Cincinnati College of Medicine; and Maynard K. Hine, President of the American Association of Dental Schools and Dean of the University of Indiana School of Dentistry. Samuel P. Capen, after whom the new building is named, will be guest of honor. He is Chancellor Emeritus of the University of Buffalo, and served as Chancellor from 1922 to 1950. Separate symposia have been designed for those interested primarily in research, in education, or in practice.

The Biochemical Institute, The University of Texas, is sponsoring a **Symposium on B-Vitamins** to be held Dec. 3–5. The program follows:

G. M. Brown and E. E. Snell, The University of

Texas, "Microbiological Activity and Biosynthesis of Pantethine and Related Compounds."

M. Calvin, The University of California, "Some Observations on the Chemical and Photochemical Behavior of the Trimethylene Disulfide Ring Which Appears as a Structural Element of Lipoic Acid."

R. E. Eakin, The University of Texas, "*In Vitro* Studies on B_{12} Binding Proteins."

K. Folkers, Merck and Co., "Synthesis of Pantetheine and S-Acetylpantetheine."

D. E. Green, The University of Wisconsin, "Acyl Coenzyme A and Fatty Acid Oxidation."

S. M. Hauge, Purdue University, "Vitamin B_{13}."

B. L. Horecker, The National Institutes of Health, "The Role of Thiamin Pyrophosphate in the Transformation of Sugars."

B. L. Hutchings, Lederle Laboratories, "Some Chemical and Biological Properties of Coprogen."

E. M. Lansford, J. M. Weaver, and W. Shive, The University of Texas, "Studies on Thymidine Function and Distribution."

H. A. Lardy, The University of Wisconsin, "The Relation Between Biotin and Carbon Dioxide Fixing Reactions in Animals and Bacteria."

H. R. Mahler, The University of Wisconsin, "Metallo-flavoproteins."

W. Prusoff and A. D. Welch, Yale University, "The Intrinsic Factor."

L. J. Reed and B. G. DeBusk, The University of Texas, "Enzymes and Co-factors Functioning in Oxidative Decarboxylation."

D. Rogers, T. E. King, and V. H. Cheldelin, Oregon State College, "Glucosylglycine and Related Factors Produced by Heating Growth Media."

E. E. Snell, D. E. Metzler, and M. Ikawa, The University of Texas, "Reactions of Pyridoxal with Amino Acids."

J. B. Walker, The University of Texas, "Metabolism of Arginosuccinic and Canavanosuccinic Acid."

R. J. Williams, The University of Texas, "Biochemistry Moves Toward Human Understanding."

L. D. Wright, Sharp and Dohme, "*AN* Factor: Description, Isolation, and Characterization."

The program for **The William Pyle Philips Lecture Series** on nuclear science at Haverford College is as follows:

Oct. 14. Glenn T. Seaborg, Professor of Chemistry, University of California, Berkeley; 1951 recipient of the Nobel Prize in Chemistry. "The Transuranium Elements—Recent Developments."

Nov. 18. Enrico Fermi, Charles H. Swift Distinguished Service Professor of Physics, University of Chicago; 1938 recipient of the Nobel Prize in Physics. "Recent Results in High Energy Physics."

Dec. 9. Raymond E. Zirkle, Professor of Radiobiology, Institute of Radiobiology and Biophysics, University of Chicago. "Effects of Radiations on Living Cells."

Jan. 6. Harrison Brown, Professor of Geochemistry, California Institute of Technology, Pasadena. "The Age of the Earth."

Feb. 24. Walter H. Zinn, Director, Argonne National Laboratory, Chicago. "Nuclear Power Development."

March 24. Martin Schwarzschild, Eugene Higgins Professor Astronomy, Princeton University. "Stellar Evolution."

April 14. The Hon. W. Sterling Cole, Chairman, The Joint Committe on Atomic Energy of the House and Senate. "The Role of Government in Nuclear Development."

Miscellaneous

The **Chemical-Biological Coordination Center** of the National Research Council is searching for samples of additional organic compounds for their screening program. One of the objectives of the Center is to obtain a broad general screening of as many compounds as possible. To date approximately 6300 compounds have been tested in this manner. Samples are accepted from industrial, governmental, university, and other research laboratories. Forms are provided for the name, structure, and physical properties of the compounds to be submitted. On the basis of this information, some 35 screening agencies cooperating with the Center select the chemicals they wish to test. After these selections have been made, the total amounts of the samples needed are requested from the submitters of the compounds and redistributed to the screeners.

These screening agencies are all governmental, university, or other non-profit laboratories and conduct about 25 different types of tests against a variety of microorganisms, plants, and animals. Copies of the results from this screening are returned promptly to the submitter. Also, after 3 months these data are incorporated into the Center's punched card files, making them available for the use of scientists requesting information and for correlation studies. When a compound is found to be of interest after the preliminary tests, the Center assists in establishing contact between the submitter and the screening agency. In cases where practical uses are found for compounds, the Center itself does not file patent applications. Inquiries may be addressed to Miss Estaleta Dale, Research Assistant, Chemical-Biological Coordination Center, National Research Council, 2101 Constitution Avenue, Washington 25, D.C.

A grant by the Louis W. & Maud Hill Foundation of St. Paul has made possible the formation of the **Minnesota Center for Philosophy of Science,** which is administratively a department of the University of Minnesota in Minneapolis. The present research staff includes: Herbert Feigl, Director; Wilfrid Sellars (Chairman of the Philosophy Department); Paul Meehl (Chairman of the Psychology Department); and Michael Scriven (M.A., Melbourne, Instructor in Philosophy).