

NEWS

and Notes

W. E. Martin, formerly professor of zoology at De Pauw University, has been appointed professor and head of the Department of Zoology at the University of Southern California.

Guy J. Goble, of Cornell University, was recently appointed a research assistant professor of entomology at the University of Illinois. He will assist **Gottfried Fraenckel**, formerly of the Imperial Institute of Technology of London, in a new program of research in insect physiology.

Albert B. Sample has resigned as head of the Research Analytical Section of Smith, Kline & French Laboratories, Philadelphia, and is now biochemist with the Laboratory of Clinical Pathology and the John S. Sharpe Research Foundation of the Bryn Mawr Hospital, Bryn Mawr, Pennsylvania.

Norman C. Baenzinger, formerly of the Chemistry Department, Iowa State College, has joined the staff of Mellon Institute's Department of Research in Chemical Physics as a fellow in X-ray diffraction.

Hugh J. McDonald was recently appointed professor of physical chemistry and chairman of the Chemistry Department, Loyola University School of Medicine, Chicago. He was formerly professor of chemistry and director of the Corrosion Research Laboratory at Illinois Institute of Technology.

Earl E. Lackey, Department of Geography, University of Nebraska, will serve as a visiting professor in the Department of Geology and Geography at the University of Tennessee during the forthcoming winter quarter.

Donal Sheehan, formerly director of the Commonwealth Fund, has been appointed chairman of the Scientific Committee of the New York University-Bellevue Medical Center. The full-time post, which will combine with it the duties of professor and chairman

of the Department of Anatomy in the College of Medicine, will involve direction of the over-all program of teaching and research at the Center.

Francis Hemming, secretary to the International Commission on Zoological Nomenclature, has announced that his new address is 28 Park Village East, Regent's Park, London, N. W. 1.

The Utah Academy of Sciences, Arts, and Letters has bestowed on Clarence Cottam, assistant director of the Fish and Wildlife Service, an honorary award in recognition of his efforts toward the advancement of science in the field of conservation. This represents only the third such award to be presented to an individual by the Academy.

Liberty Hyde Bailey, of Cornell University, 90-year-old horticulturist and past president of the AAAS, was nominated by the florists of the Nation to be the first recipient of the Women's International Exposition bronze medal for "outstanding contributions to the advancement of horticulture in America." Presentation of the medal to Dr. Bailey early this month in New York City marked the opening of the fourth annual National Flower Week as well as the close of the Exposition.

Fellowships

Northwestern University has received from oil companies two renewed gifts making possible 5 research fellowships in the Department of Chemistry. The Universal Oil Products Company, Chicago, gave \$5,000 to continue its support of four predoctoral fellows engaged in catalytic chemistry research in the Ipatieff Laboratory in the Technological Institute. The Texas Company likewise renewed its grant of \$1,500 to continue a fellowship in thiophene chemistry.

The first fellowships to be awarded in the field of health physics by the Atomic Energy Commission under its present broad program have gone to 18 student scientists from 12 states. Ten of the fellows are studying at Oak Ridge under the direction of Karl Z. Morgan, director of the

Department of Health Physics, and 8 are at the University of Rochester School of Medicine and Dentistry, working under Henry A. Blair, director of the AEC Project there. The postgraduate-level courses began November 1.

These fellowships, plus 23 newly awarded predoctoral fellowships in the biological sciences, bring to 247 the total number of students participating in the program during the current academic year.

Colleges and Universities

Ecological field studies were conducted this past summer by a University of Colorado Botanical Expedition to Ungava Bay, in northern Quebec. The expedition, organized and led by John W. Marr, professor of biology, was financed by research grants from the Arctic Institute of North America, the American Philosophical Society, and the National Academy of Sciences. Dr. Marr, assisted by Mrs. Marr, Erik Bonde, and Archie Roach, carried out intensive field work near the Fort Chimo Air Base in Quebec, which is only 30 miles from tree-limit, and along 80 miles of the Leaf River, which parallels tree-limit within a few miles of the northernmost trees. Reconnaissance studies were made along the Koksook River, which cuts across 100 miles of the northern part of the forest tundra transition region.

Observations and collections were made for ecological studies of tree growth, tundra and forest communities, and pollen analysis. Tree sections, soil samples, quadrat data, and past samples were brought back for intensive study in the laboratory. Small collections of ferns and flowering plants, mammals, and human ecology materials were collected for the University of Colorado Museum.

All chemistry graduates of the City College (New York) are invited to attend the annual dinner of the Chemistry Alumni Association on Monday evening, December 27, at Hotel New Yorker (North Ballroom), 34th Street and 8th Avenue, at 6:30. Reservations (\$5.00) may be made through Frank Brescia or Sidney Liebgold, of the Department of Chemistry, City College, Convent Avenue and 139th Street, New York City 31.

Three new structures for agricultural research are to be built immediately at Iowa State College at a total cost of \$77,620. A large swine building, to be erected at the research farm of the Experiment Station, will provide facilities for work on swine nutrition, as will also a swine farrowing house to be built at the veterinary research farm. The third unit will be at the rear of the present genetics laboratory and will be used for studies on the effect of inheritance on resistance to disease in poultry.

A new Department of Engineering Materials at Cornell University represents a consolidation of parallel departments in the Schools of Civil Engineering and Mechanical Engineering. The new department, although now occupying various laboratories in the College, will eventually be housed in the projected Materials and Metallurgy Laboratory. D. F. Gunder, professor of mechanics, has been named acting head.

Meetings and Elections

The Section of Biology, New York Academy of Sciences, is sponsoring a Conference on the Ground Substance of the Mesenchyme and Hyaluronidase on Friday and Saturday, December 3-4, in the Roosevelt Memorial Building of the American Museum of Natural History. The conference chairman will be F. Duran-Reynals, of the Yale School of Medicine. Some 30 papers on various aspects of the subject will be presented during the two-day session by authorities from both U. S. and Canadian institutions.

The Mathematical Association of America, which is holding its 32nd annual meeting at Ohio State University on Friday, December 31, has scheduled the following program: morning session—R. S. Burington, Bureau of Ordnance, Navy Department, "On the Nature of Applied Mathematics"; M. E. Shanks, Purdue University, "Mathematical Aspects of the Theory of Viscous Fluids"; E. T. Welmers, Bell Aircraft Corporation, "Mathematical Aspects of Aero-Elasticity"; afternoon session—annual business meeting; J. R. Britton, Universities of Colorado and Michigan, "Modern Operational Calculus for Undergraduates"; H. W. Brink-

mann, Swarthmore College, "Theory of Differential Equations"; E. H. C. Hildebrandt, Northwestern University, "Instructional Aids in the Teaching of Junior College Mathematics."

The Southern Weed Control Conference will be held in connection with the meeting of the Southern Agricultural Workers, January 31-February 2, on the campus of Louisiana State University, Baton Rouge. Those desiring to exhibit weed-killing chemicals and equipment should contact Dr. Clair A. Brown, president of the Conference, who is located at LSU.

CNRS (Centre National de la Recherche Scientifique), which, with the aid of the Rockefeller Foundation, organized a series of international symposia during 1948, has announced that the symposium on Electrophysiology will be held in Paris from March 31 to April 9, 1949, instead of early in December, as originally expected (see *Science*, August 27, p. 203). Another symposium scheduled for Paris around Easter of 1949 will be that on Polarization of Matter, which is being organized by Prof. Pascal.

Summary reports on most of this year's meetings have appeared in the *Revue Scientifique*, and publication of full proceedings is planned for a later date. These include: Physiology and Biochemistry of Lipids, Paris, January; Isotopic Exchange and Molecular Structure, Paris, April; Diffusion of Radiation by Molecules and Crystals (Raman Effect), Bordeaux, April; Methods of Calculation in Mechanics of Fluids, Paris, April; The Chemical Bond, Paris, April; Kinetics and Mechanism of Ignition and Combustion Reactions in the Gas Phase, Paris, April-May; Probability Theory and Mathematical Statistics, Lyons, June-July; Unités Biologiques Douées de Continuité Génétique, Paris, June-July; Vitamins and Antivitamins, Lyons, September-October; and Reactions in the Solid State, Paris, October.

The American Society of Photogrammetry will hold its 15th annual meeting on January 12-14 at the Shoreham Hotel, Washington, D. C. The meeting will demonstrate the latest developments in photogrammetry,

surveying, and mapping with exhibits from commercial and governmental establishments and by presentation of papers and discussions on specialized technical subjects. Isaiah Bowman, retiring president of Johns Hopkins University, will present the opening address: "Geographical Objectives in the Polar Regions." Nonmembers of the Society are invited to attend the meeting.

The Fourth Conference on Iroquois Research was held at Red House, New York, October 8-10. The Conference owes its attractive place of meeting, the Administration Building on Red House Lake, to the continued interest of the Hon. Charles E. Congdon, chairman of the Allegany State Park Commission, who, with M. H. Deardorff of Warren, Pennsylvania, issued the invitations and acted as hosts. W. N. Fenton, of the Smithsonian Institution, continued as general chairman of the Conference.

The Conference, attended by anthropologists from the northeastern states and Canada, opened Friday night with an informal address by C. E. Congdon on "The Allegany Country and Its Settlement," which he concluded by reiterating a hope that the Allegany State Park might again become a center of studies. An impromptu contest in singing Indian folk songs from l'Ancienne Lorette was set off by Marius Barbeau and F. G. Speck; and the spirit of whimsey carried over to the report of the Committee on Museum Studies in which Ernest Dodge assessed museum collections awaiting the student of Iroquois material culture and disclosed certain archival sources previously overlooked by ethnohistorians. Discussion pointed to the obvious need of putting a student on the trail of this material, testing his findings in the field, and producing a series of topical reports.

The outstanding accomplishment in Iroquoian studies during 1948, however, was in the field of linguistics, as manifest in the presentation Saturday morning of Comparative Iroquoian by Floyd Lounsbury. Barbeau led the discussion and appraised the sources for the study of Huron-Wyandot.

A seminar led by James Griffin paraded substantial achievement in archaeology on sites scattered from

Maine to Georgian Bay and from the Bay of Quinte south to the Maryland border. Of less interest to archaeologists, perhaps, than Byer's report on his excavations in Maine and those by which Ritchie extended his New York prehistrogram to Ontario, but of greater interest to ethnologists, were the reports by Ritchie on large Seneca cemeteries from which Schoff and Wray have taken several hundred human skeletons, Kidd's report on excavating a historic Huron ossuary, and Emerson's account of excavating a Huron longhouse. Carpenter and Witthoft gave parallel reports on New Jersey and Pennsylvania.

The above discussion left but an hour for the seminar on Locality and Kin in Iroquois Culture, which was originally scheduled to set the theme for the Conference. Fenton developed the theme of local differences, drawing materials from community studies at Coldspring, Tonawanda, and Six Nations, after which Anthony Wallace, reporting on new field work at Tuscarora, and Augustus F. Brown, on Onondaga, New York, brought new points of view to the field, stressing personality and culture more than structure of society. For the first time it appears likely that the Iroquois, like the Navaho, are becoming a social science laboratory.

The Seneca Indians of Coldspring Longhouse have virtually included the Conference in their yearly round of activities. Led by Albert Jones, a larger number in costume and more besides turned out with enthusiasm for the annual Indian party in honor of F. G. Speck. They afforded abundant materials for illustrating G. Kurath's discussion of structural types of Seneca dances. They proceeded to manage their part in traditional manner, insisting on their own sequence of numbers and choosing their own speakers and interpreter. To our amazement the Johnny Johns performed the dance of the False-faces, and the Hawk Clan gave a name to Dr. George Snyderman.

Discussion turned Sunday morning to the need of a check list of manuscript materials relating to the Iroquois; second, to the applications of research and its techniques to general education; and third, to the need of enlisting a physical anthropologist to

work up the expanding series of crania from the area.—W. N. FENTON.

The International Scientific Film Congress organized by the Scientific Film Association of Great Britain with the assistance of the British Film Institute met in London October 4–11. Delegates and observers from 25 countries and UNESCO accepted the invitation to be present. The program of work for the coming year is expected to go far toward establishing the International Scientific Film Association as the central international clearing house of information on all aspects of the scientific film.

Some of the problems to be dealt with by subcommittees are: (1) establishment of an international data card for compiling a master index of scientific films available throughout the world and formulation of methods of appraisal of these films; (2) joint production, by a number of countries, of films of common interest; (3) exchange and distribution on the widest scale of scientific films and the customs regulations affecting such exchange; (4) the setting up of a Scientific Film Reference Library; and (5) exchange of information between nations by means of a regular journal. It is reported that the London Congress made encouraging progress in the preliminary study of these various topics.

Officers elected by members of the Association for the coming year are: Jean Korngold (Poland), president; John Maddison (Great Britain) and C. A. Burmester (Australia), vice-presidents; Jean Painleve (France), honorary secretary; and Luc Haesaerts (Belgium), honorary treasurer.

NRC News

The National Research Council (Prevention of Deterioration Center, Room 204), 2101 Constitution Avenue, N.W., Washington 25, D. C., is offering the "Prevention of Deterioration Abstracts" on a yearly subscription basis. These are classified under the following headings: Biological Agents; Electrical and Electronic Equipment; Fungicides and Other Toxic Compounds; Lacquers, Paints, and Varnishes; Leather; Lubricants; Metals; Miscellaneous; Optical Instruments and Photographic Equipment; Packaging and Storage; Plastics, Resins, Rubbers, and Waxes;

Textiles and Cordage; Wood and Paper. Cross references are included in each issue, and author and subject indexes are compiled at the conclusion of each volume. Material for the Abstracts is obtained from journal articles, patents, and unpublished reports from government, university, and industrial research groups both here and abroad.

Approximately 2,000 pages are published a year, in two volumes of 6 issues each. The individual abstracts are in loose-leaf form so that they may be arranged in any manner desired by the individual receiving them. Comments are added to many of the abstracts to correlate relevant information, to evaluate reports, or to make suggestions for further research.

The yearly subscription rate, which includes two sturdy binders and index guides, is currently \$37.50. The rate will be \$50.00 for requests received after July 1, 1949. All subscriptions run from July 1 to June 30. Back issues are available from April 1946, when the series was started.

An "Advance List," a monthly bibliography of all the reports received in this field by the Prevention of Deterioration Center, is also available for an additional \$10.00 per year.

Deaths

Frederick Gardner Cottrell, 71, eminent scientist and inventor, died suddenly of a heart attack while attending the National Academy of Sciences in Berkeley, California, November 16. While an assistant professor of chemistry at the University of California, in 1906–09, Dr. Cottrell perfected the Cottrell electrical precipitator. Later, through his generous altruism, a large part of the funds from sales of the precipitator resulted in the formation of the Research Corporation of New York for stimulation of scientific research (see *Science*, October 15, p. 408.)

Rheinart P. Cowles, 76, professor emeritus of zoology at Johns Hopkins University, died November 16 in Union Memorial Hospital, Baltimore, Maryland. Dr. Cowles had spent his entire teaching period on the Johns Hopkins staff, with the exception of the period from 1912 to 1919, when he headed the Zoology Department, University of the Philippines.

College enrollment figures for this fall, just released by the U. S. Office of Education, reveal that 20 universities enroll 20% of all college students in the United States. This year's total enrollment (2,410,000), the peak in higher education history, represents an increase of 72,000 students over last year, even with a drop of 100,000 in number of veterans enrolled. New York University has the highest enrollment with 47,647, the University of California being a close second with 43,469. The other 18 institutions are: City College of New York (28,567), Columbia University (28,000), Minnesota (27,243), Illinois, (25,920), Ohio State (23,929), Northwestern (23,788), Indiana (23,131), Southern California (22,740), Wisconsin (22,353), Michigan (21,002), Syracuse (19,698), Texas (19,676), Pittsburgh (19,526), Pennsylvania (18,644), Boston (18,617), Wayne (18,455), Temple (17,212), and Washington (16,650).

A list of all National Bureau of Standards publications from 1901 to June 30, 1947, has just become available. Brief abstracts for the publications issued from January 1, 1942, to June 30, 1947, are also included. Circular 460, *Publications of the National Bureau of Standards* (375 pp.), may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at a cost of \$.75 a copy.

UNESCO has appointed the Columbia University Press as its official agent in this country for the distribution and sale of its publications. Hitherto, to obtain the books, pamphlets, and documents published by UNESCO, Americans have had to deal directly with the Paris headquarters. Now, through its International Documents Service, the Press will not only be able to supply the dozen books and pamphlets and three periodicals already available, but will issue new publications whenever UNESCO has material to offer. The periodicals are *Museum*, an illustrated quarterly art review; *Bulletin for Libraries*; and *UNESCO Courier*, a monthly Journal of news of the organization and its work. Other organizations for which the Press serves as agent are the UN, the FAO, WHO, International Court

of Justice, and the Caribbean Commission.

An Army research unit is returning this month to the Federation of Malay States to continue studies on the treatment and prevention of scrub typhus. The American group is sponsored by the Army Medical Department Research and Graduate School, the Commission on Immunization of the Army Epidemiological Board, and the University of Maryland. The group has been invited by the Malayan Government and will again work at the Institute for Medical Research, Kuala Lumpur, in collaboration with scientists of that institution. Members of the group will remain there about four months.

The Economic and Scientific Section, SCAP, announced on November 17 that a scientific mission composed of 5 distinguished American scientists selected by the National Academy of Sciences is scheduled to arrive in Japan this week. The group, which is expected to remain in Japan until the middle of December, includes Detlev W. Bronk, chairman of the National Research Council, foreign secretary of the Academy, and president-elect of Johns Hopkins University; E. C. Stakman, chief of the Division of Plant Pathology and Botany, University of Minnesota, and president-elect of the AAAS; Zay Jeffries, vice-president of the General Electric Company and general manager of its Chemical Department; I. I. Rabi, professor of physics at Columbia University, consultant for the Research and Development Board, and Nobel laureate; and Roger Adams, head of the Department of Chemistry at the University of Illinois and chairman of the Scientific Advisory Group that visited Japan in 1947. Dr. Bronk is chairman of the current mission. The visit of the group coincides approximately with an election of 210 members of the country's first National Science Council—an election in which about 40,000 Japanese scientists will participate. The Americans will review progress made by Japanese scientists in developing Democratic National Organizations for Scientific Activity as well as bring up to date the report submitted by the previous advisory group.

Pathologists preparing for a career in diagnostic laboratory work have an opportunity to receive training in a program now being sponsored by the New York State Department of Health and administered in the Division of Laboratories and Research. Experience in pathology, bacteriology, biochemistry, and other laboratory fields is afforded in this Division and in cooperating institutions in Albany and in New York City. The one-year appointments are open to physicians with postgraduate training in laboratory work who wish additional experience in order to qualify for positions in diagnostic laboratories throughout New York State. The program is approved for one year of training by the American Board of Pathology. Candidates must be U. S. citizens who have graduated from a medical school approved by the American Medical Association. They need not obtain a license to practice medicine in New York State, but they must be eligible to take the examination for license. A stipend is granted to trainees. Inquiries should be directed to the Division of Laboratories and Research, State Department of Health, Albany 1, New York.

Make Plans for—

The National Malaria Society, joint meeting with the American Society of Tropical Medicine, American Academy of Tropical Medicine, and American Society of Parasitologists, December 5-8, Hotel Roosevelt, New Orleans, Louisiana.

Highway Research Board, 28th annual meeting, December 7-10, National Academy of Sciences, Washington, D. C.

North Central Weed Control Conference, annual meeting, December 8-10, Springfield, Illinois.

Symposium on the Pathogenesis and Pathology of Viral Infections, December 14-15, New York Academy of Medicine, 2 East 103rd Street, New York City.

Society of American Foresters, annual meeting, December 16-18, Statler Hotel, Boston, Massachusetts.

Centennial Greetings to the AAAS From the American Chemical Society

At the various regional meetings of the American Chemical Society, held just prior to the AAAS Centennial Celebration, the following greetings to the Association were read:

One week from today in Washington, D. C., the American Association for the Advancement of Science will open its Centennial Celebration. The American Chemical Society is pleased to extend its heartiest felicitations to the AAAS on the completion of its first 100 years of service.

During the early part of the last century the growing popularity of science led to the formation of several organizations broadly encompassing all branches of the natural and the physical sciences. Among these were the American Philosophical Society and the British Association for the Advancement of Science. The latter body served as the model for its American counterpart, the American Association for the Advancement of Science, which was organized in 1848 from the Association of American Geologists, which had been founded in 1840.

From its second meeting, which was held in Cambridge, Massachusetts, in 1849, chemistry was an important concern of the American Association. One of the sessions of that meeting dealt with "chemistry, mineralogy, and meteorology." From 1850 until 1875, papers presented at the meetings of the Association were given in two technical sessions broadly classified as the physical sciences and natural history. Chemistry was a subsection of the physical sciences. In 1881, nine sections were organized, each with a vice-president, of which chemistry was one. In 1900, the rapid growth in membership was worthy of comment in the proceedings of the AAAS, especially the fact that the growth of the Section on Chemistry had been extraordinary.

This growth of science, particularly in chemistry, in the latter half of the last century resulted in the formation of individual organizations devoted to the special branches of science. Among these was the American Chemical Society, founded in 1876. Its formation as a separate organization dedicated to one of the branches of science served by the American Association has in no way lessened the importance of the American Association in this field. The relations between the two organizations have always been cordial and, in fact, 11 chemists have been presidents of the AAAS. Of these, 8 also have been presidents of the American Chemical Society.

The American Chemical Society has long been an affiliated society of the American Association. In addition, a number of Local Sections of the American Chemical Society have cooperated with the AAAS Section on Chemistry in arranging joint symposia at Association meetings.

The Association is a common meeting ground for all sciences, a factor which is becoming of increasing im-

portance as the boundaries between the sciences grow more diffuse. For example, physicists 10-15 years ago were doing work that now is the field of nuclear chemists. Spectroscopy at its inception was of concern to chemists, who used it for purposes of analysis. Later it became a tool in determining the fundamental laws of atomic structure and, as such, became a field of activity for physicists. In medicine and the biological sciences, several branches of science frequently are called into play, and the modern scientific worker in these fields must move easily in each of them. The American Association offers opportunities for interscience contacts of this type.

It is with a feeling of pride that all scientists look back upon the traditions of service built up during the past 100 years by the American Association for the Advancement of Science, and the American Chemical Society is glad to offer its congratulations for the successful century concluded and its hopes for continued success in the future.

Resolution of the AAAS Executive Committee

The following resolution on animal experimentation was passed unanimously by the Executive Committee of the AAAS at its meeting in Washington, D. C., September 15, 1948:

At this Centennial Meeting the American Association for the Advancement of Science reaffirms its conviction that animal experimentation is essential for progress in the biological and medical sciences.

We recognize the important role of animal experimentation in the study of, and the control of, diseases, especially those of childhood, and in the perfecting of those procedures and treatments to which no small part of our community owes its health and life.

We regard with apprehension the activities of certain groups which are attempting to prevent the use of unclaimed animals for study in qualified institutions of biology and medicine.

This Association is in accord with the practically unanimous and often-expressed authoritative voice of science and medicine that animal experimentation has conferred and is conferring inestimable benefits upon mankind, as well as upon animals themselves.

The American Association for the Advancement of Science, with a membership of over 40,000 and representing all the sciences of nature and of man, is confident that a fully informed public will not support legislation which would seriously interfere with the progress of preventive and curative medicine.

The Association believes that a supply of animals for research and teaching purposes for qualified institutions should be assured, by legislation or ordinance where necessary, and not left to the option of local pound officials and private groups.