

The secret balloting by competent experts should be extended to numerous additional fields. Aside from the encouragement that such recognition affords, another major advantage of such rating by secret ballot of those high in a wide variety of fields is that it increases the prospect that those who are judged outstanding will be given better opportunities to use their special talents and skills in the making of a better world. This happens partly because universities and other institutions dedicated to human betterment actively desire assistance in locating persons of especial merit so that they can obtain their services. Hence, the extension of starrng to numerous fields not now represented would be highly advantageous and would certainly result in increased achievement.

Not only have nine-tenths of the 770 starred scientists

who recently voted on the matter approved of a broadening of the basis for starrng and expressed the conviction that the consequences would be advantageous, but large numbers of nonstarred scientists and persons who employ scientists have expressed similar opinions. It therefore appears that in the eighth edition of *American men of science*, now in preparation, many more persons should be starred than in the previous editions. Moreover, the voting should be done in fields small enough so that those selected to vote are better qualified to rate the younger workers than is possible when the fields are large and diversified (all of zoology, for example, or all of chemistry). This will mean extra work for those who arrange for and assemble the votes and for the publishers, but the benefits should abundantly justify the extra efforts.

NEWS and Notes

The Army's electronically-controlled C-54 recently used to demonstrate pilotless flight across the Atlantic was first developed early in 1946 and since then has been used on many shorter hops within the United States. From the time the flight commander, Col. J. M. Gillespie, set the automatic controls into action on the runway of the Newfoundland airport at Stephenville, it was not necessary for him or his crew to direct the flight in any way. Signals from two radio transmitters, located on ships at sea along the course of the flight, were interpreted by the plane's radio compass, and a third set of signals from a transmitter on a truck at the British airport brought it in for an automatic landing.

The 14 passengers making this initial flight included several U. S. scientists and an observer from the RAF.

About People

S. H. Katz, senior consultant, Chemical Corps Technical Command, Army Chemical Center, Maryland, is visiting

England and Germany to investigate work on Chemical Warfare Protective Equipment. His investigation will cover materials, manufacturing processes, testing, and the theoretical aspects.

Allan D. Maxwell, formerly of the Nautical Almanac Office, U. S. Naval Observatory, has been appointed professor of astronomy, Howard University, Washington, D. C.

R. L. Meier, research chemist, California Research Corporation, has been appointed executive secretary, Federation of American Scientists, Washington, D. C., for one year to succeed **William Higinbotham**.

Arthur B. Bromwell, Northwestern University, was appointed secretary, American Society for Engineering Education, effective October 1. The headquarters of the Society will be moved from the University of Pittsburgh to Northwestern University.

Bowen C. Dees, assistant professor of physics, Rensselaer Polytechnic Institute, has been appointed physicist, Economic and Scientific Section of Gen. MacArthur's organization in Tokyo. In this position, Dr. Dees will survey and advise concerning the physical research being conducted in university and commercial laboratories in Japan.

Marjorie T. Bingham, formerly botanist, Cranbrook Institute of Science, has been appointed assistant professor of biology, Northern Michigan College of Education, Marquette.

C. Lee Huyck, professor and head, Division of Pharmacy, Columbia University College of Pharmacy, has resigned in order to become director, Department of Pharmacy, Howard College, Birmingham, Alabama.

Jacques Rousseau, director, Montreal Botanical Garden, has recently returned from a botanical survey in the interior of the Ungava Peninsula. Dr. Rousseau traveled by canoe from the source of George River to its mouth and crossed that peninsula from Seven Islands on the St. Lawrence River to the Ungava Bay.

Alexander Brunswick, formerly professor of surgery, University of Chicago, has been appointed head, Department of Surgery, Memorial Hospital, Center for Cancer and Allied Diseases, New York City. Dr. Brunswick also holds the concomitant appointment as professor of clinical surgery, Cornell University Medical College.

George A. Edwards, Harvard University, has been appointed assistant professor, Department of Biology, Tufts College, Medford, Massachusetts.

Frederick C. Frick, Columbia University, and **Moncrieff H. Smith**, Stanford University, have been appointed instructors in psychology at Harvard University.

Ethel Melsheimer Miller, librarian of the Botany and Zoology Library, Ohio State University, and of the Ohio Academy of Science, retired September 30. Mrs. Miller established the Botany and Zoology Library in 1917.

Marshall Clagett, instructor in history, Columbia University, has been appointed assistant professor, Department of the History of Science, University of Wisconsin.

Irving A. Denison, who has been connected with the Soil Corrosion Section, National Bureau of Standards, since 1929, has been appointed chief of the Bureau's Underground Corrosion Section.

Noel Elmer Foss, technical director, Department of Pharmacy, Calco Chemical Division, American Cyanamid Company, Bound Brook, New Jersey, has been appointed assistant dean, College of Pharmacy, University of Illinois.

Kenneth N. Ogle, formerly professor of research in physiological optics, Research Division, Dartmouth Eye Institute, Hanover, New Hampshire, has become a member of the permanent staff, Division of Physics and Biophysical Research, Mayo Foundation and Mayo Clinic, Rochester, Minnesota, where he will continue research in physiological optics and visual problems and carry on clinical researches in collaboration with the Section on Ophthalmology.

Robert J. Oilry, formerly a teacher at St. Lawrence University, has been appointed associate professor of biology and acting chairman, Department of Biology, Norwich University, Northfield, Vermont.

Max Hansen, formerly director of research, Durener Metallwerke, Duren, Germany, and a leading nonferrous physical metallurgist, has been appointed associate professor of metallurgical engineering, Illinois Institute of Technology.

J. A. Stekol, Amino Products Division, Rossford, Ohio, and **Denis R. A. Wharton**, Cornell University Medical College, have been appointed to the staffs of the Lankenau Hospital Research Institute, and the Institute for Cancer Research, Philadelphia.

William D. Gray, formerly chief, Biological Laboratories, U. S. Quartermaster Depot, Jeffersonville, Indiana, has been appointed associate professor, Department of Botany, Ohio State University.

Cecil A. Gibb, University of Sydney, Australia, has been appointed half-time visiting lecturer in the Department of Psychology, University of Illinois.

Hubert Bleier, who succeeded **Erich von Tschermak** at the School for Agriculture, Vienna, has informed **Lester W. Sharp**, Cornell University, that he was compelled to flee from Austria to Germany in 1945 and suffered the loss of all his possessions, including his scientific library. Prof. Bleier, who has now found employment in a seed improvement company, where he is carrying on researches on polyploid rye, would deeply appreciate the donation of any books, separates of articles in the fields of cytology, genetics, and agriculture, together with any other publications which would in some measure compensate for the loss of his library and that of the company with which he is associated. They may be sent in care of F. von Lochow-Petkus, 20a Bergen (Kreis Celle), Postschliessfach 5, Germany (British Zone).

Grants and Awards

Corrosion research being carried on in the Department of Chemistry, University of Texas, under the direction of **Norman Hackerman** is being supported by grants from the Office of Naval Research and the Natural Gasoline Association of America. Under the Navy grant **Don Marshall** and **Aubrey McClelland** will work on passivity of metals, especially chromium and stainless steel, and **John Sudbury** will carry out fundamental research on the mechanism of corrosion inhibitor action. The other grant provides for work being done by **E. E. Glen** on the mechanism of corrosion inhibitors, particularly in anaerobic systems.

The Kirksville College of Osteopathy and Surgery, Kirksville, Missouri, has received a \$6,119 grant from the National Institute of Health to be used in support of the work of **J. S. Denslow**, director of research, who is studying the spatial relationship of muscle fibers in single motor units.

The Poultry and Egg National Board has announced that nominations are solicited for the Christie Award of \$500 and a scroll, which will be presented at the annual meeting of the Board in Chicago in January of 1948. This award, made possible through a donation from Andrew Christie, will be presented each year for the next 5 years. The recipient will be the person who has made the greatest contribution in the past 10 years through research, teaching, or extension

in the interpretation of scientific results or prosecution of research dealing with the determination, preparation, conservation, or improvement of the nutritive properties of poultry and eggs. Contributions must have served to enlighten the public regarding the value of poultry and eggs in the human diet or to increase the knowledge of the quality and nutritive value of poultry products. Further information may be obtained from the chairman of the Christie Award Committee, J. Holmes Martin, Purdue University, West Lafayette, Indiana.

Thomas H. Johnson, chief, Ballistic Measurements Laboratory, and associate director, Ballistic Research Laboratories, Aberdeen Proving Ground, Maryland, during the war, and now head of the Physics Section, Brookhaven National Laboratories, received the Medal for Merit, the highest civilian award for war work from the Government, on September 25, in recognition of his outstanding wartime leadership in the development of highly accurate techniques for the measurement of the blast and fragmentation effects of bombs and in the development of microwave techniques for measuring velocities of projectiles, both in the bore of the gun and in flight.

Moses J. Eisenberg, chief, Dental Services, Jewish Memorial Hospital, Boston, and formerly research fellow in dentistry, Harvard University, was the recipient of the First Award for his exhibition at the recent Boston meeting of the American Dental Association. The award was given for original research in a basic science. Dr. Eisenberg's field is histology.

Fellowships

The General Electric Company has announced that applications are now being accepted for the academic year 1948-49 for grants under the \$1,000,000 G-E Educational Fund which include the Charles A. Coffin Fellowships, awarded in the fields of electricity, physics, and physical chemistry, and the Gerard Swope Fellowships, first granted in 1946, awarded in the fields of industrial management, engineering, physical sciences, and any other scientific or industrial field. The fellowships will be granted for the amount needed up to a maximum of \$1,500 annually for each individual. A grant of \$500 may be made for specific apparatus or other expense in connection

with the research work. In addition, in case of need, loans up to \$1,000 may also be made. The fellowships are intended for graduates who need financial assistance and who have shown by the character of their work that they could with advantage undertake or continue research work in educational institutions either in this country or abroad. They are not intended for graduates who now hold, or expect to hold, any other fellowship which carries a stipend larger than the tuition at the institution where the research work is to be done. Applications, which must be filed by January 1, 1948, may be obtained from A. D. Marshall, secretary, General Electric Educational Fund, Schenectady, New York.

Colleges and Universities

The School of Medicine, Louisiana State University, has appointed **Harry E. Dascomb** instructor in medicine, **Robert M. Waters** instructor in surgery, **John J. Blasko**, clinical instructor in neuropsychiatry, **Louis Raider**, clinical instructor in radiology, **Simon V. Ward, Jr.**, clinical instructor in obstetrics and gynecology, **Harold S. Gamble** assistant in anatomy, **John D. Krafchuk** assistant in microbiology, **James T. McQuitty**, clinical assistant in surgery, and **Robert D. Bone**, clinical assistant in medicine. The school year has been expanded from 32 to 36 weeks.

A Department of Bacteriology was created July 1 on the Bloomington campus of Indiana University, having as its chairman **L. S. McClung**, associate professor. Instruction and research in bacteriology had been combined with botany since 1940. In the same Department, **S. E. Luria**, assistant professor, has been promoted to associate professor; **I. C. Gunsalus**, Cornell University, has been appointed professor and will have charge of a program relating to bacterial physiology and metabolism; **Herbert J. Welshimer**, Ohio State University, has been appointed instructor; **C. F. Rob- inow**, Strangeways Laboratory, Cambridge, has been appointed visiting professor during the spring semester and will give an advanced course in bacterial cytology; and **Charles Russell** and **Renato Dulbecco** will serve as research associates. Research in the Department will be supported in part by grants from the National Institute of Health and the American Cancer Society.

At the Marine Laboratory, University of Miami, Coral Gables, Florida, **Craig A. Gathman**, who has been appointed research associate in fisheries biology, is collaborating with **F. G. Walton Smith**, director of the Laboratory, in a study of the British Honduras fisheries carried out on behalf of that government. **Luis Rivas**, recently named associate professor of zoology at the University, is working on the taxonomy of West Indian marine fishes, a work which, it is hoped, will greatly add to the reference collection of Florida and West Indian marine fish at the Marine Laboratory; and **Charles C. Davis**, newly appointed assistant professor of zoology, is studying the plankton as part of a comprehensive ecological survey of the in-shore waters near Miami.

The Geological Museum of the University of Minnesota has purchased from F. W. Sardeson his private collection of fossils which contains about 3,300 species, each being represented by from 1 to 100 specimens. Dr. Sardeson collected most of the specimens over a period of 50 years from the Ordovician rocks of Minnesota, Wisconsin, and Iowa. The collection also contains Jurassic invertebrates which Dr. Sardeson collected in central Europe while a student at Heidelberg.

Industrial Laboratories

Sharp & Dohme, Inc., has announced the following staff changes following a meeting of the Board of Directors: **John S. Zinsser**, president and chief executive officer, elected chairman of the Board; **William L. Dempsey**, executive vice-president, elected president to succeed Mr. Zinsser, who will continue as chief executive officer; and **William A. Feirer**, formerly vice-president in charge of medical research, elected executive vice-president and a director of the Company.

Maurice L. Moore, assistant director of research, Frederick Stearns & Company, has been appointed director of the Research Laboratories of Smith, Kline & French, Philadelphia, to succeed the late **Walter G. Karr**.

General Electric Corporation has recently developed, under the direction of **D. E. Bovey** in its General Engineering and Consulting Laboratory, a "metals comparator" which, by employing an electronic circuit, discriminates between the metal in question and a standard

sample. Paint, polish, or rust on the metal does not affect its accuracy. It is expected that the device will prove useful in the inspection for quality of assembly line parts and in the rapid sorting of supplies of metal objects without damage to the metals.

Eastman Kodak Company has recently prepared a quantity of isotopic methyl iodide in its Synthetic Organic Research Laboratory. This chemical compound contains "tracer" C^{13} in an improved and highly usable form which does not require further extensive treatment before actual use, as did the previous heavy carbon produced by Kodak. The method used in making the new compound was one first used at the University of California in the preparation of compounds containing radioactive carbon. The National Research Council has received the first shipment of methyl iodide and will distribute it and later shipments to qualified research organizations.

Meetings

The American Mathematical Society will hold its 428th meeting at Hunter College, October 25, beginning at 10:00 A.M. Section I, on Analysis, in Room 1217, will hear papers by I. E. Segal, Institute for Advanced Study; Paul Erdős, Syracuse University; J. C. Oxtoby, Bryn Mawr College; Everett Pitcher, Lehigh University and Institute for Advanced Study; Arthur Sard, Queens College; and R. J. Duffin, Carnegie Institute of Technology. At the meeting of Section II, on Algebra, Topology, and Logic, in Room 1239, papers will be presented by O. E. Glenn, Lansdowne, Pennsylvania; G. C. Webber, University of Delaware; Saunders MacLane, University of Chicago; L. V. Toralballa, Fordham University; E. H. Spanier, Institute for Advanced Study; Hing Tong, National Research fellow, Institute for Advanced Study; and Ira Rosenbaum, Brooklyn College. A general session, to be held at 2:00 P.M. in the High School Auditorium, will feature a lecture on "Global Theorems in Riemannian Geometry" by C. B. Allendoerfer, Haverford College.

The National Academy of Sciences will hold its autumn meeting November 17-19 at 2101 Constitution Avenue, Washington, D. C. The sessions on Monday will be devoted to a discussion of the functions of the Academy with reference especially to its relations to the Govern-

ment and other groups and to the character of its scientific sessions. Scientific papers will be presented at the morning and afternoon sessions on Tuesday, and the morning session on Wednesday. The Public Lecture will be given Monday evening at 8:30 in the Academy Auditorium, and the Academy Dinner will be held Tuesday evening at the Hotel Washington at 6:30. F. E. Wright, Geophysical Laboratory, Carnegie Institution of Washington, is chairman of the Local Committee on Arrangements.

The American Philosophical Society will hold its autumn general meeting November 20-21 in Philadelphia. At the open sessions on these two days, beginning at 10 A.M. Thursday, papers will be read by: Lyman H. Butterfield, Leonard Carmichael, Wallace O. Fenn, Paul D. Foote, Werner Jaeger, Chester S. Keefer, Hayward Keniston, William L. Langer, O. E. Neugebauer, William G. Roelker, Carl O. Sauer, Robert L. Schuyler, Harlow Shapley, Sumner H. Slichter, Mark Starr, Francis R. Steele, Vincent du Vigneaud, and William L. Westermann. On the evening of November 20 Douglas S. Freeman will give the Franklin Medal Lecture on the subject of recent discoveries concerning George Washington.

The annual meeting of the Society of Rheology will be held October 30-November 1 at the Hotel Pennsylvania, New York City. The program follows: Friday morning, "Measurements of Stress Relaxation in High Polymer Materials," W. S. Macdonald and Alexis Ushakoff, W. S. Macdonald Company, Cambridge, Massachusetts; "Rheological Properties of Polystyrene," Rolf Buchdahl, Monsanto Chemical Company, Springfield, Massachusetts; and "Viscous Flow of Molten Polystyrene," R. S. Spencer and R. E. Dillon, The Dow Chemical Company, Midland, Michigan; Friday afternoon, "The Cragoe L Function for Viscosity of Oils Under Pressure at Certain Temperatures," R. B. Dow, Bureau of Ordnance, Navy Department, Washington, D. C.; "The Viscosity Basis of Plasticizer Action," H. Jones and E. Chadwick, Plastics Division, The Geigy Company, Ltd., Manchester, England; "Viscosity and Shear Elasticity Measurements of Liquids by Means of Shear Vibrating Crystals," W. P. Mason, Bell Telephone Laboratories, Murray Hill,

New Jersey; and the annual business meeting at 3:45 P.M. A social program in the evening will include color movies by K. Compton, Bell Telephone Laboratories. Saturday morning, "Theory of Plastic Flow Versus Theory of Plastic Deformation," W. Prager, Brown University; "Anomalous Viscosity of Aluminum Soap-Benzene Gels," Walter H. Bauer, Henry Raich, and Grant K. Rauscher, Rensselaer Polytechnic Institute; "New Aspects of Colloid Science to Rheology," Ernst A. Hauser, Massachusetts Institute of Technology; and "Pseudoplastic Flow Properties of Lyophilic Colloids," Earl K. Fischer and Charles H. Lindsley, Institute of Textile Technology, Charlottesville, Virginia.

The IXth General Assembly of the International Union of Biological Sciences was held in Copenhagen July 28, 1947, with participation of representatives of UNESCO and of the International Council of Scientific Unions (ICSU), and delegates of the following countries: Belgium, Brazil, Bulgaria, Czechoslovakia, Denmark, France, Great Britain, Holland, Mexico, Morocco, Norway, Poland, Spain, Sweden, Switzerland, United States. The representative of China, delayed, sent his regrets from Marseille in not being able to arrive in time. Prof. Borel, vice-president of ICSU, was present at the Assembly, which was of particular importance. Actually the General Assembly had not been able to be convened since 1935 as a consequence of world events. Revised statutes were therefore adopted by the Assembly, and new activities were undertaken appropriate to new circumstances.

The new Bureau was thus constituted: president: M. J. Sirks, Genetisch Institut, Huis de Wolf, Haren (Gron.), Holland; vice-president: H. Munro Fox, Department of Zoology, Bedford College for Women, Regents Park, London N.W.1, England; secretary general: P. Vayssiére, Museum d'Histoire Naturelle, 57 Rue Cuvier, Paris Ve, France; associate secretary general: **Stuart Mudd**, School of Medicine, University of Pennsylvania, Philadelphia 4; treasurer: F. Chodat, Institut for General Botany, University of Geneva, Switzerland.

Joseph Needham, representing UNESCO, in agreement with A. Establier, representing ICSU, indicated that the great international organization of UNESCO attached a very special importance to the

activities and investigations pursued by the Unions, and that UNESCO would aid in their realization, it being understood, however, that the maintenance of the Unions themselves must be assured by their own resources. In brief, these international Unions are self-sustaining organizations supported by contributions from adhering nations. Substantial sums from UNESCO will be distributed, however, through these Unions as grants-in-aid or subventions to particular projects.

The creation of new Sections was planned—Experimental Cytology, Embryology, Entomology, Genetics, Microbiology, Zoology—and also several mixed Commissions, such as Radiobiology, Natural Calamities, Oceanography. These last Commissions should comprise members of other Unions. The Executive Committee, which convened on October 2, was to assure the carrying out of these projects.

After having reviewed the actions of the International Congresses of Experimental Cytology at Stockholm and of Microbiology at Copenhagen and those to take place later in 1947 under the auspices of IUBS (Symposia on Trace Elements in Plants and on Biological Antagonisms), the following program of activities was established for 1948 and 1949: *International Congresses*—Genetics (Stockholm), Entomology (Stockholm), Zoology (Paris), Silkworm Culture (Ales (Gard)), Physiology and Pathology of the Reproduction of Animals (Milan); *Symposia*—Bases of Nomenclature and of Systematic Botany (Utrecht), Terminology of Genetics and Cytology (Stockholm), Interaction of Egg and Sperm (Milan), Embryological Chemistry (Berne), Development and Regeneration of Nerves (probably in the United States).

There were also proposed: (1) Symposia on the Role of Anaerobes in Nature, on Nomenclature in Zoology and Entomology, and on Evolution in Biology; (2) Publication of a Catalogue of Type Specimens of Animal Species and of Historical Collections; (3) Distribution of Artificial Radioactive Isotopes for Experimental Biology; (4) Creation of a Center of Marine Biology in the Malay Archipelago; and (5) Formation of an Association of Directors of European Botanical Gardens.

Finally the Assembly approved unanimously the resolution transmitted to it by the Congress of Microbiology with regard to prohibiting all means of biological warfare. This resolution had been adopted by

acclamation at the final Plenary Session of the Fourth International Congress of Microbiology held in Copenhagen July 26:

"The Fourth International Congress of Microbiology joins the International Society of Cell Biology in condemning in the strongest possible terms all forms of biological warfare. The Congress considers such barbaric methods as absolutely unworthy of any civilized community and trusts that all microbiologists throughout the world will do everything in their power to prevent their exploitation."

The next Assembly will take place in 1950, probably at Stockholm. The International Union of Biological Sciences invites all countries not at present adhering to join the Union in the interests of science in general and of each country in particular.

For all information address the Secretary General, Prof. P. Vayssiere, 57 Rue Cuvier, Paris Ve, France.

The American Type Culture Collection, located at Georgetown University School of Medicine for the past 10 years, is to be established soon in a laboratory of its own at 2029 M Street; N. W., Washington 6, D. C. The staff will consist of **Ruth E. Gordon**, curator, **Isabel Christison**, mycologist; **Ruth Davis**, bacteriologist; and **Katherine Alvord**, secretary and business manager. **Ralph St. John-Brooks**, retired curator, National Collection of Type Cultures, Lister Institute, London, and present permanent secretary, International Association of Microbiologists, and collaborator, Centre de Collection de Type Microbiens, is returning from Switzerland in November and will occupy an office in the new laboratory. The task of examining the 4,000 cultures of the Collection for viability and purity, begun in 1944, is nearly finished. A complete catalogue of the American Type Culture Collection strains will be published as soon as possible after the appearance of the 6th edition of Bergey's Manual.

The figuring of the 200-inch telescope mirror was completed October 3, its parabolic surface reaching perfection within two millionths of an inch, according to the results of John A. Anderson, who has been in charge of the optical work, Ira S. Bowen, director, Mount

Wilson Observatory, and members of the Observatory Council, who devised new methods of testing the mirror surface to check the accuracy of previous testing methods. The giant disc, weighing about 20 tons before the grinding, and larger than the floor of a two-car garage, was cast in 1935 by the Corning Glass Works and shipped to the California Institute of Technology the following spring. Five and one-quarter tons of glass were removed in the grinding and polishing of the mirror, under the direction of Marcus H. Brown. The disc will now be aluminized and mounted in the observatory built for it on the top of Mount Palomar in California, 130 miles southeast of Pasadena. It is expected that the telescope will be in operation by early summer of 1948. Both the Mount Palomar and the Mount Wilson Observatories will be operated jointly by the California Institute of Technology and the Carnegie Institution of Washington.

The first foreign shipment of radio-isotopes produced from the atomic pile at Clinton Laboratories, Oak Ridge, Tennessee, left September 5 for the Commonwealth X-Ray and Radium Laboratory, Melbourne, Australia. The shipment, which consisted of 20 millicuries of phosphorus 32 for treatment of an urgent case of polycythemia vera, was made by air since phosphorus 32 has a half-life of only 14.3 days.

At the High Plains Potato Conference held in Monte Vista, Colorado, on August 15, a new organization, the Intermountain Plant Pathologists, was formed by 12 plant pathologists from that region. Through the society plant pathologists of the Intermountain Region will be able to maintain closer contact with each other with respect to plant disease problems in the region and thus more effectively attempt to solve such problems. Membership in the society, an unofficial branch of the American Phytopathological Society, is open to plant pathologists in Idaho, Montana, Nebraska, Wyoming, Utah, Colorado, New Mexico, and Arizona. W. D. Thomas, Jr., of Colorado A & M College, is chairman of the group for the coming year; W. J. Henderson is secretary.

A new observatory for the daily determination of the radiation of the sun at sea level is now being set up at Miami, Florida, as a part of the program of the

Smithsonian Institution's Astrophysical Observatory, directed by **L. B. Aldrich**. Other similar observatories under Smithsonian direction are located on the tops of Mt. Montezuma in Chile, and Table Mountain in California, where the amount of heat radiation from the sun is least affected by dust or water vapor in the atmosphere. The Miami station, however, where the atmosphere is considerably more dense, will be an especially desirable place for studying the effects of the absorption by water vapor. The new station will also cooperate with the Army in measuring the effects of solar radiation on various fabrics. Mr. Aldrich is now looking for another high mountain site in Mexico for an observatory to replace one recently abandoned at Tyrone, New Mexico.

Clinton Laboratories, at Oak Ridge, Tennessee, which have been operated since July 1945 by the Monsanto Chemical Company, are to be renamed Clinton National Laboratory and, under the terms of a four-year contract now being negotiated, will henceforth be operated by the University of Chicago. The Laboratory will thus become the third of AEC's national laboratories. The first to be established, Argonne National Laboratory, also operated by the University of Chicago, has as participants 29 institutions throughout the Midwest, while Brookhaven National Laboratory, operated by Associated Universities, Inc., is composed of 9 eastern universities. At Clinton 14 southern universities in the Oak Ridge Institute for Nuclear Studies and a score of industries and industrial representatives will participate in the research, development, and training programs. This plan of establishing national laboratories, conceived by Manhattan District's Advisory Committee on Research Policy, has as a major objective the utilization of research personnel and facilities of industry and academic institutions throughout the country and institution of a program of training in the nuclear sciences. The Oak Ridge Institute for Nuclear Studies, headed by Frank P. Graham, president, University of North Carolina, and formed last year to promote activities in nuclear science in southern universities, includes as members Alabama Polytechnic Institute, Catholic University of America, Duke University, Emory University, Georgia School of Technology, Louisiana State

University, Tulane University, the Universities of Alabama, Kentucky, North Carolina, Tennessee, Texas, and Virginia, and Vanderbilt University.

The National Registry of Rare Chemicals, 35 West 33rd Street, Chicago 16, Illinois, lists the following wanted chemicals: 6-hydroxy-2,2,5,7,8-pentamethylchroman; d-2-desoxyribose; hydrocoerulignone; diborane; deuterioammonia; coniferin; nitroarginine; agmatin; galegin; canaline; canavanene; hydroxylysine; laudanoline; 3-chloropyridazine; pyridazone; pyridazone-3-carboxylic acid; pyridazinone-3-carboxylic acid; xanthopterin; desoxyriboflavin; ethionine; carbon oxyselenide; and carbon sulfoselenide.

The Huancayo Magnetic Observatory, the most important of its kind in this hemisphere, has now been transferred to the Government of Peru from the Carnegie Institution of Washington, in accordance with the latter's policy of transferring fixed observatories to the governments of countries in which they are located, and also in accordance with the recommendation of the International Union of Geodesy and Geophysics that governments take over such facilities within their own territory because of their importance to national economy. The Observatory, functioning autonomously, will be supervised by a Directive Committee headed by Jorge Broggi, director, Geological Institute of Peru, and including three Peruvian scientists, and three U. S. representatives: J. M. Hydrick, Rockefeller Foundation, and now of the Peruvian Ministry of Public Health; John A. Fleming, formerly director, Department of Terrestrial Magnetism, Carnegie Institution, and currently special adviser to the Institution in international scientific affairs, who led in the establishment of the Observatory in 1922; and the cultural attaché of the U. S. Embassy in Peru.

The Swedish Deep Sea Expedition

The Swedish Deep Sea Expedition, organized by, and under the personal direction of, Hans Pettersson, director of the Oceanografiska Institutet, left Göteborg on July 4, 1947, on the 1,450-ton motor schooner *Albatross*. The trip is expected to last approximately 15 months, and during that time oceanographic studies will be conducted in low-latitude regions

in the Atlantic, the Caribbean, the Pacific, the Indian Ocean, and the Mediterranean. On August 20, 1947, the *Albatross* had reached the Canal Zone and was scheduled to proceed to Tahiti via the Galapagos and Marquesas Islands, thence to Hawaii and the Netherlands East Indies, and through the Indian Ocean to the Mediterranean.

The principal work of the expedition is to obtain cores of sediment in the deep ocean basins. These are taken with the new piston core sampler developed by Börje Kullenberg, and undisturbed cores have been obtained up to 20 meters in length. The events recorded in these deep-sea cores should greatly add to our meager knowledge of the recent history of the oceans, and such long cores may extend a few millions of years into the geologic past when obtained from the center of a large ocean basin. In addition to cores, continuous depth records are made with a new type of British fathometer which records on a larger scale than any other at present in use. Depth profiles from the Atlantic basins show a remarkable roughness of the bottom in the deep basins in many places with several abrupt changes in depth suggesting fault zones. Waloddi Weibull is measuring the apparent thickness of the deep ocean sediments by means of sonic reflections recorded from the explosion of small depth bombs. In the Caribbean Weibull has obtained a probable thickness ranging from 1,000 to 3,000 feet. Complete hydrographic stations are being occupied at regular intervals, and the intensity of light penetration is being measured at various depths. Large water samples also are being collected from deep water layers for a study of their radioactivity.

It was the good fortune of the undersigned to be the guest of the expedition on its way from Martinique to the Canal Zone, representing the Hydrographic Office of the Navy Department and the Woods Hole Oceanographic Institution. Towing techniques for living Foraminifera were demonstrated, and a new type of bottom sampler was loaned to the party. The *Albatross* is admirably fitted out for a round-the-world cruise, and the scientific party and ship officers and crew are of the highest degree of competence. The ship is a freighter and merchant officer training ship with the midship section converted into laboratories and quarters for the scientific staff. On the main deck is a large general laboratory as well

as a chemical and biological laboratory. On the second deck is a large laboratory for treating the cores, which are opened on board, a large refrigeration room for the preservation of certain materials, an aquarium room, a completely equipped photographic dark room, and a small machine shop. The large winch for operating the piston core sampler is in the forward hold and is equipped with 7,500 meters of unspliced heavy cable.

It is interesting to note that the cost of the expedition (approximately \$500,000) is not being borne by the government of Sweden, but is made up entirely of donations from private Swedish citizens who are interested in sponsoring the pure science of oceanography. This is a remarkable achievement for a country having only about 4 per cent of the population and 1 per cent of the wealth of the United States and now being subjected to severe income taxation. There is no doubt that the Swedish Deep Sea Expedition will produce results which are of fundamental importance to oceanography. (FRED B. PHLEGER, JR., *Woods Hole Oceanographic Institution*.)

Erratum. The price of *Thermodynamics for chemists* by Samuel Glasstone was incorrectly quoted in its review by Don M. Yost in *Science*, September 26. The book is a single volume, not one of a series, and its correct price is \$5.00.

Make Plans for—

American Institute of Electrical Engineers, Midwest General Meeting, November 3-7, Chicago, Illinois.

American Institute of Chemical Engineers, November 9-11, Detroit, Michigan.

National Committee for Mental Hygiene, November 12-13, Hotel Pennsylvania, New York.

American Society of Animal Production, November 28-29, Chicago, Illinois.

The Society of American Foresters, Annual Meeting, December 18-20, Minneapolis, Minnesota.

American Association for the Advancement of Science, 114th Meeting, December 26-31, Chicago, Illinois.