cently Daly (*23*) has developed a similar rapid-scanning spectrometer that allows very accurate measurement to be made of the percentage absorption by using a double beam technique, which eliminates effects of atmospheric and solvent absorption.

The use of infrared spectroscopy to study the atmospheres of the planets has already given a wealth of information about the presence of carbon dioxide, ammonia, and methane on several planets (*24*). The use of photoconductive detectors will, of course, increase our knowledge of planetary atmospheres, but a new development has made possible such photoconductive detectors as the study of the reflected radiation from parts of a planet (e.g., the polar caps on Mars and the rings of Saturn). Work along these lines by Kuiper (*25, 26*) and his associates has shown that the polar caps of Mars do not consist of solid carbon dioxide and are almost certainly composed of ice. Even more interesting are the indications (*26*) that Saturn's rings may consist of ice.

In the industrial field, lead sulfide cells open up new possibilities in high-speed radiation pyrometry. Lee and Parker (*27*) pointed out that temperatures as low as 100° C can be measured with fair accuracy, and temperatures of 500° C encountered on the wheels in rapid braking of locomotives can be followed continuously with an accuracy of about 1 per cent. An obvious extension of this technique can be made to the measurement of temperature at localized hot spots in various problems in the field of friction. An entirely different application (*28*) is the use of lead sulfide cells in the cinema industry for improved sound reproduction.

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News and Notes

Arid Zone Research

THE Second Session of the Advisory Committee on Arid Zone Research was held September 3–5, 1951, at Unesco House, Paris. The United Nations, the Specialized Agencies, and international nongovernmental scientific and engineering organizations with interests in arid zone research were invited to send representatives, and approximately 40 experts participated.

The session was opened by the chairman of the First Session, Richard L. Boke (USA). As chairman of the Second Session the committee elected L. Picard (Israel). The chairman designated Richard L. Boke, J. Pérès (France), and H. G. Thornton (United Kingdom) as a subcommittee to draft the report of the session.

The committee noted that the Institute of Biology (UK) was organizing in 1952 a Conference on the Biology and Productivity of Hot and Cold Deserts and recommended that its Fourth Session be held at the same place as the conference either immediately before or after it.

The committee took note of the report on the Symposium on Desert Research to be sponsored by the Research Council of Israel in 1952 and recommended that the director-general allocate a sum of $2,000 toward the publication of the proceedings of the symposium. Representatives of the Food and Agriculture Organization and Unesco reported on the exploratory mission to the Sidi Mesri Research Station, Libya. Reports were also submitted on the Saharan Research Centre, Beni-Abbes, Algeria; the Beni-Ounif Saharan Biology Station, Algeria; and the Jaswant College, Jodhpur, India.

The committee reviewed the maps showing the world distribution of arid and semiarid homoclimates prepared for Unesco by Peveril Meigs, noting that the maps had been approved by the International Geographical Union. The committee approved the list of

countries having arid and semiarid areas, regionally grouped, which had been submitted to Unesco by Dr. Meigs on behalf of the International Geographical Union, with minor modifications.

Having studied the reports reviewing hydrological research with special reference to underground water, submitted to Unesco by R. D. Dhir, Y. M. Simaika, H. F. Frommurze, R. K. Linsley, E. S. Hills, and G. Drouhin, the committee recommended that the director-general take steps to publish them.

The committee recommended the following program for 1953 and 1954:

1) To promote research on scientific and technical problems concerning the arid zone.
2) To collect and disseminate information on research being carried out on problems of the arid zone and on the organizations, scientists, and engineers engaged in such research.
3) To assist institutions designated by the Advisory Committee on Arid Zone Research in carrying out specific projects approved or recommended by the committee and falling within a coordinated program of fundamental arid zone research.
4) To organize, in collaboration with a member state, a symposium on a specific group of problems—with a Latin-American country in 1953, and with India in 1954.
5) To have studies carried out, with the approval of the Executive Board, on questions that may be submitted to the director-general by a member-state, the United Nations, or a specialized agency, provided funds for these studies are found outside the regular budget of Unesco. The committee recommended that the director-general consider in addition to the normal program for 1953 and 1954, the following subjects for study if more funds become available:
   (i) evolution of arid areas in the past and present,
   (ii) utilization of salt water,
   (iii) utilization of dew,
   (iv) artificial rain.

The committee also recommended that in 1952 Unesco delegate qualified experts to prepare reports reviewing the research carried out on plant ecology, as it pertains to arid and semiarid regions, based upon available published literature, as well as upon any information which Unesco may be able to collect. Eight reports are contemplated, embracing the major arid regions of the earth.

The committee accepted the offer extended by the government of Turkey to Unesco to cosponsor the symposium on Arid Zone Hydrology, with Special Reference to Underground Water in Turkey in the spring of 1952, and the invitation of the government of Turkey that the Third Session of the committee be held in conjunction with the symposium.

Condensed from the report by

RICHARD L. BOKE
J. PÉRÈS
H. G. THORNTON

Scientists in the News

M. L. Anderson has succeeded **E. P. Stebbing** in the chair of forestry at the University of Edinburgh. Dr. Anderson has directed instruction and research in British forestry practice at the Imperial Forestry Institute at Oxford since 1946.

Martin E. Blazina, Frank L. Meyer, and **Julius J. Wineberg,** students at the University of Illinois College of Medicine, have been awarded Beaumont Memorial prizes. The awards are made to students or faculty members who have made important research contributions and have been recommended for consideration by heads of departments in the College of Medicine. Beaumont Memorial Prizes were endowed by the late Frank Smithers, of Chicago, in memory of William Beaumont, famous nineteenth-century surgeon and physiologist. Three third-year students, **Allen H. Lefstin, Arthur S. Granston,** and **John H. Frenster,** have been awarded Yarros scholarships, which were established in honor of the late Rachelle S. Yarros by her husband, Victor S. Yarros, of La Jolla, Calif. Professor Yarros taught obstetrics and social hygiene at the College of Medicine prior to her retirement in 1938.

Francis Boyer, executive vice president, has become president, and **O. J. May,** vice president in charge of operations, has been made executive vice president, at Smith, Kline & French Laboratories. Mr. Kline, who has been president since 1921, will continue in the active management of the company as chairman of the board.

George J. Dienes, physical chemist formerly associated with North American Aviation, Inc., and Bakelite Corp., has joined the Physics Department of Brookhaven National Laboratory. He will use neutrons from the Brookhaven reactor, as well as other forms of radiation, to study the structure of metals and other solids, and the effects of these radiations on them.

Howard Evans has been appointed associate director of clinical research at Lakeside Laboratories, Inc., Milwaukee. He was formerly director of the Professional Service Department.

Frances A. Hellebrandt, of the Medical College of Virginia, has been made professor and head of the Department of Physical Medicine and Rehabilitation at the University of Illinois College of Medicine. Dr. Hellebrandt also is serving as chief of physical medicine and rehabilitation at the University of Illinois Research and Educational Hospitals. She has succeeded **H. Worley Kendell,** who resigned to accept a position as medical director of the Institute of Physical Medicine Rehabilitation at Peoria. Dr. Kendell will retain an appointment at the University of Illinois as clinical professor of physical medicine and rehabilitation.

Henrietta Herbolsheimer, chief of the Division of Maternal and Child Health of the Illinois Depart-

ment of Health, has been appointed an assistant professor of preventive medicine at the University of Chicago medical center. Dr. Herbolsheimer was on leave last year from the Department of Public Health to serve as a deputy director of the Illinois Civil Defense Agency. In this capacity, she had charge of planning medical and casualty services for the Illinois State Defense Plan.

L. E. Howlett, codirector, Division of Physics, National Research Council of Canada, has been named chairman of Commission I of the International Society of Photogrammetry.

Vladimir N. Ipatieff, director of chemical research for Universal Oil Products Company and director of the Ipatieff High Pressure and Catalytic Laboratory, Department of Chemistry, Northwestern University, has been named a Chevalier of the Cross of Lorraine and Companion of the Resistance. The French Association of the Knights of Cyprus and Jerusalem has also awarded Professor Ipatieff its Order.

Frederick G. Keyes has been elected to the office of treasurer of Alfred Bicknell Associates, Inc., the scientific laboratory apparatus manufacturers of Cambridge, Mass. Dr. Keyes has served the company as director of research the past two years since his retirement as chairman of the Chemistry Department at MIT. **Arthur B. Lamb,** professor emeritus of Harvard University and editor for many years of the *Journal of the American Chemical Society,* has been elected vice president.

W. T. O'Gara, formerly field geologist with the Conselho Nacional do Petroleo do Brasil, is now paleontologist with the Corporacción de Fomento de la Producción Chile, at Punta Arenas, Chile.

J. H. Parkin, director of the Division of Mechanical Engineering, National Research Council of Canada, was awarded the Engineering Alumni Medal at the recent triennial reunion of the Engineering Alumni Association of the University of Toronto. Early this year, when the Canadian government created the National Aeronautical Establishment, Mr. Parkin was appointed its first director.

Dean Rusk, Assistant Secretary of State for Far Eastern Affairs since March 1950, will become president of the Rockefeller Foundation. Mr. Rush will succeed **Chester I. Barnard** when the latter retires because of age limitation on June 30, 1952. This action was taken by the Board of Trustees of the Foundation at a meeting held at Williamsburg, Va.

The National Air Council Award for outstanding achievement in aviation research and experiment has been awarded to **John P. Stapp,** USAF (MC). The award is made annually to that member of the Air Force and that member of the Navy who have contributed most in the field of aviation research and experiment. The award is not restricted to medical research, but this is the second time aeromedical research activities have been so honored. The Navy recipient of the NAC award for 1951 is **Walter S. Diel,** for his work in organizing and directing the Navy's transonic flight program. Major Stapp was nominated for providing science with data on deceleration forces encountered in aircraft crashes.

Harold L. Stewart, chief pathologist of the Cancer Institute of the National Institutes of Health, was U. S. delegate to the International Cancer Research Commission, meeting Dec. 15–20 in Lisbon. He was selected by the *ad hoc* committee of the National Research Council, formed at the request of the National Cancer Institute, the American Cancer Society, and the American Association for Cancer Research. Accompanying Dr. Stewart was **Alexander Symeonidis,** a special research fellow from Greece, who directs the Geographical Pathology Unit at the National Cancer Institute. **E. V. Cowdry,** of the Washington University School of Medicine, was appointed alternate U. S. delegate and also attended the Lisbon conference.

Charles L. Thomas has joined the research and development staff of Sun Oil Company. For the past six years he has been director of research and development for the Great Lakes Carbon Corporation.

Charles F. Wagner, of Westinghouse Electric Corp., has been awarded the 1951 Edison Medal for "distinguished contributions in the field of power system engineering." The medal is awarded annually by an AIEE Committee as "an honorable incentive to scientists, engineers and artisans to maintain by their works the high standards of accomplishments" set by Thomas A. Edison. Dr. Wagner is the 41st recipient of the medal since it was established in 1904 by an organization of associates of Mr. Edison.

Orville Derby Commemorative medals have been presented on behalf of the Brazilian Government by Alberto Ericksen, former chief of the Divisão do Fomento, Departamento Nacional da Producão Mineral, **to William E. Wrather,** director of the U. S. Geological Survey, and to the following Geological Survey personnel: **William T. Pecora, George Switzer** (for the U. S. National Museum), **Alfred J. Bodenlos,** and **Mackenzie Gordon.** A medal will be mailed also to **Philip W. Guild,** who was not present at the ceremonies. Similar medals have been presented to the Geological Survey group now in Brazil by Alberto Lamago, director of the Divisão de Mineralogia e Geología, Departamento Nacional da Producão Mineral, in Rio de Janeiro. The awards were given for work completed on mineral projects in Brazil wherein Survey personnel are cooperating with the Brazilian National Department of Mineral Production.

The Institute of International Education has named **Louise L. Wright** director of its Midwest office. The new office in Chicago, established with the aid of the Ford Foundation, will coordinate international exchange of students, teachers, and specialists in Midwestern states.

Grants and Fellowships

Oak Ridge Institute of Nuclear Studies, which is administering the fellowship program of the **Atomic Energy Commission,** has announced the names of 300 predoctoral and 43 postdoctoral fellows. Of the former, 223 are in the physical sciences, and 77 in the biological sciences. Among the postdoctoral fellows, 21 are in the physical sciences, 17 in the biological, and 5 in the medical sciences. Eighty-one were extensions of 1950–51 predoctoral fellowships. Several scientists will study abroad. Among them are Richard A. Ferrell, who will work at the Max Planck Institute under Werner Heisenberg; Ben R. Mottelson, who will work under Niels Bohr; and Norton M. Hintz, who is studying with Otto Frisch.

Commonwealth Scientific and Industrial Research Organization is offering a number of two-year studentships for postgraduate training in science, engineering, and related subjects. Up to 8 overseas traveling awards will be made and up to 16 in Australia.

Thirteen graduate students have received **Humble Oil & Refining Company** fellowships for the 1951–52 academic year at A & M College of Texas, Rice Institute, University of Texas, University of Oklahoma, Louisiana State, and MIT. Each fellow is selected by the participating school from among its own students. Civil, mechanical, chemical, and petroleum engineering, physics, geology, and chemistry are among the fields of study.

The **A. W. Mellon Educational and Charitable Trust** has given $250,000 to the University of Pittsburgh to aid the five-year program of the Western Psychiatric Institute and Clinic. Additional funds for the five-year program have been received from the Maurice and Laura Falk Foundation ($250,000), the Sarah Mellon Scaife Foundation ($75,000), and the Howard Heinz Endowment ($25,000). Three specialists are participating in the research of the institute: Henry W. Brosin, medical director; I. Arthur Mirsky, head of the Research Division; and Benjamin Spock, professor of child development.

Sharp & Dohme has awarded two grants for medical research from the $50,000 recently created for the advancement of fundamental research in biology, microbiology, and chemistry (SCIENCE, **114,** 84 [1951]). A 3-year grant, in the amount of $6,000, for virus research, went to L. O. Krampitz, director of microbiology, Western Reserve, and another $6,000 for work on bacterial metabolism, to E. E. Snell, of the University of Texas.

Westinghouse Educational Foundation will award 20 to 40 fellowships to secondary-school science teachers for participation in a special six weeks' summer program at Carnegie Institute of Technology. Full-time staff members of the College of Engineering and Science will have charge of the course. Further information may be obtained from the Carnegie director of admissions.

In the Laboratories

American Can Company has established a new Research and Technical Service Department, of which B. S. Clark, formerly director of research, has been made scientific director. The new department will consist of Research, Development, Technical Service, and Agronomy divisions. R. W. Pilcher has been appointed director of the Research Division, D. F. Sampson, manager of the Technical Service Division; F. W. Geise remains as manager of the Agronomy Division. The Development Division has not yet been organized. Among projects to be taken up by the new department will be studies in the cold sterilization of canned foods by gamma radiation from radioactive waste material, and a search for alternative raw materials of various kinds.

American Cyanamid has appointed T. F. Cooke manager of the Application Laboratories in the Textile Resin Department, succeeding L. A. Fluck, who has become assistant to Richard E. Sumner.

Borden's Chemical Division in Philadelphia has begun construction of a new $365,000 research laboratory, scheduled for completion next June. Research emphasis will be on the development of new techniques and chemical products such as synthetic resins, coatings, and binders, useful in various ways to the rearmament program.

Hercules Powder Company will construct a $2,500,000 plant for the manufacture of toxaphene at Henderson, near Las Vegas, Nev. Operations are expected to begin early in 1953, increasing the present output of the chemical by approximately 25%.

Among new appointments at **Lederle Laboratories Division,** American Cyanamid Company, are J. Charles Cavagnol, chemist, formerly associate professor of chemistry, University of Kentucky; Ralph F. Elliott, animal nutritionist, of the same university; and Arthur W. Tallman, who will be head of the Human Bacteriological Department. Dr. Tallman was formerly head of Squibb's Department of Biological Production.

National Research Corporation has added James H. Gardner, of Shell Oil Company and the University of Houston, to its Petrochemical Research Department. He will supervise the physical chemistry phases of the research program undertaken jointly with Electric Bond and Share and United Gas, directed toward the development of new chemicals from natural gas. Thomas R. Steadman, of B. F. Goodrich, has joined the department to supervise the organic chemistry phases of the research.

Whittier Laboratories, Division Nutrition Research Laboratories, Inc., has appointed Robert H. Broh-Kahn medical director. Dr. Broh-Khan has been medical director of Bristol Laboratories, Syracuse, N. Y., and associate professor of medicine at the State University of New York Medical Center, Syracuse.

Meetings and Elections

The annual meeting of the **American Academy of Forensic Sciences** will be held Mar. 6–8 at the Biltmore Hotel, Atlanta, Ga. All those interested in presenting papers are urged to submit titles immediately to the program chairman, A. W. Freireich, 180 Hempstead Ave., Malverne, N. Y. Orders for the printed proceedings of the 1950 annual meeting may be filed with Ralph E. Turner, Department of Police Administration, Michigan State College, East Lansing.

The **British Commonwealth Scientific Official Conference,** first to be held outside the United Kingdom, will open in Canberra on Feb. 18 and close in Melbourne on Mar. 7. Leaders in the fields of industrial agricultural, and medical research will attend and plan collaboration in civil scientific work. The formal sessions will be broken by visits to enable delegates to study developmental problems. CSIRO is in charge of local arrangements.

The **Colston Research Society** will hold a Symposium on the Suprarenal Cortex at Bristol, Eng., Mar. 31–Apr. 4. The provisional list of speakers includes F. Verzar (Basle), George W. Thorn (Harvard), C. H. Li (Berkeley), Harry Robinson (Merck), Dwight J. Ingle (Upjohn), and Hudson Hoagland (Worcester Foundation). Those interested in attending should write to J. M. Yoffey, Department of Anatomy, The University, Bristol, 8.

Conveyor Equipment Manufacturers Association, at its annual meeting in Hot Springs, Va., elected G. Walter Ostrand president to succeed L. B. McKnight. R. C. Sollenberger, staff head of the association since 1945, was re-elected executive vice president. Harry C. Davis was elected vice president, R. F. Tomlinson treasurer, and Lee Sekulski secretary for a second term. J. A. Jeffrey, J. E. McBride, and Mr. McKnight were elected to the Executive Committee.

Heinz Hartmann, of New York, succeeds Leo Bartemeier as president of the **International Psychoanalytic Congress,** which met in Amsterdam in August. Ruth Eissler succeeds Grete Bibring as secretary, and Max Gitelson was elected treasurer. The 18th congress will be held in England in 1953.

At the AAAS meeting in Philadelphia, **Sigma Delta Epsilon,** national fraternity for graduate women in science, announced that its 1951 Research Award had been given to Margaret Green, of Ohio State, for a paper published in the *Journal of Morphology.* Marie Farnsworth won the Home Research award, established last year, for a paper on ancient pigments that appeared in the *Journal of Chemical Education.* Jay Traver won honorable mention. SDE, which is celebrating its 30th anniversary this year, presented certificates of outstanding service to Martha Doan (chemist), Sophia H. Eckerson (microchemist), Stella Hague (botanist), Rosalie Parr (chemist), Laetitia M. Snow (bacteriologist and botanist), and Bertha Van Hoosen (surgeon).

The **Sociedad Cubana de Psicoterapia** has elected José A. Bustamante president, Oscar Sagredo president-elect, José Perez Villar and Francisco Aguero secretaries, and Armando Cordova and Carlos Acosta treasurers. Miguel A. Nin was elected secretary.

Technical Papers

The Inhibition of the Development of Histamine Sensitivity in Mice Immunized with *Hemophilus pertussis*

Elizabeth H. Thiele and Lee F. Schuchardt

Department of Bacteriology, Research Division, Sharp & Dohme, Inc., Glenolden, Pennsylvania

Parfentjev and Goodline (*1*) and, later, Halpern and Roux (*2*) showed that mice immunized against *Hemophilus pertussis* concurrently became hypersensitive to histamine. They showed further that this increase in sensitivity to histamine, which is of a 100- to 200-fold magnitude, can be blocked effectively by injection of antihistaminic drugs such as Bromothen or Phenergan given 15 min prior to the injection of a lethal shocking dose of histamine.

This communication expands the above observations by the examination of the action of another type of compound, described by Martin *et al.* (*3*) and Moss *et al.* (*4*) as capable of inhibiting histidine decarboxylase. These authors found that certain aglycone flavonoid compounds of the Vitamin P group, including quercitin and D-catechin, possess this ability, and the latter, when given prophylactically for 19 days, prevented guinea pigs from becoming sensitized to horse serum but did not protect nonsensitized, normal animals challenged with histamine.

By using the method of Parfentjev and Goodline for increasing the sensitivity of mice to histamine, it has been found that repeated treatment with quercitin (*5*) during the period between immunization and histamine challenge could inhibit the development of histamine hypersensitivity, though this compound was unable to block the lethal action of histamine when given immediately prior to histamine challenge. In contrast to this, the antihistaminic Chlorotrimeton was found to be effective as a blocking agent but was not able on repeated administration to inhibit the develop-