

NEWS and Notes

Richard H. Young, dean of the College of Medicine of the University of Utah, has been made dean of the Medical School of Northwestern University. Dr. Young succeeds **J. Roscoe Miller**, who has been appointed president of the university.

Stanley D. Wilson, who has just completed twenty years as dean of the College of Science at Yenching University, is retiring this month and will return to the United States during the summer. Dr. Wilson arrived in China in 1917 to organize instruction in chemistry at the Pre-medical School of Peiping Union Medical College (Rockefeller Foundation), and later became professor of organic chemistry at the College of Science of Yenching University.

William A. Hinton has been appointed clinical professor of bacteriology and immunology at the Harvard Medical School. Dr. Hinton is director of the Laboratory Department of the Boston Dispensary, chief of the Wasserman Laboratory of the Massachusetts Department of Public Health, and special consultant to the U. S. Public Health Service.

C. J. Goodnight, of the Department of Biological Sciences, Purdue University, with his wife and a group of graduate students, left June 23 for Guatemala and southern Mexico to conduct ecological studies on the mammals, birds, reptiles, and animal parasites of tropical mountain communities. The expedition, financed by a grant from the Purdue Research Foundation, will be Dr. and Mrs. Goodnight's fourth research project in these regions. They will continue their work on tropical species of *Phalangida* in relation to the problem of continental drift.

Carl Voegtlin, former director of cancer research and retired chief of

the National Cancer Institute of the U. S. Public Health Service, has been elected honorary member of the Swiss Academy of the Medical Sciences.

Roger Revelle, director of oceanographic research during the Bikini tests and resurvey, has been named associate director of the University of California Scripps Institution of Oceanography.

Isabelle H. Perry has resigned as director of the Department of Oncology of the Women's Medical College, Philadelphia, to accept a position as executive secretary of the Subcommittee on Oncology of the Committee on Pathology for the National Research Council.

Roy G. Hermann has been appointed head of the Biochemistry Section of the Research Laboratories of the Wm. S. Merrell Company, Cincinnati, Ohio.

Visitors to U. S.

Himansu Kumar Mitra, head of the Refractories Engineering Department of Tata Iron and Steel Company in India, visited Pittsburgh June 21-26 as part of a two-month tour of U. S. steel and refractories plants. He came here to attend the meetings of the Rotary International in New York City, to which he was the representative from India, and the Rotary Governors' International Assembly at Lake Placid. On his return trip, Dr. Mitra will spend several weeks in England.

Visitors at the National Bureau of Standards during the week of June 27-July 1 included: **A. J. A. Roux**, principal research officer, South African Council for Scientific and Industrial Research; **M. Escolano**, director, Instituto Tecnico de la Construcción y del Cemento, Madrid, Spain; **Realf Ottesen**, civil engineer, Norwegian Motor Engine Manufacturers Research Laboratory, Trondheim, Norway; **Anand N. Harkauli**, irrigation engineer with Irrigation Department, United Provinces, India; and **Gordon W. Collett**, chief chemist, Wanderlich, Ltd., of Sydney, Australia.

Grants and Awards

Five Bausch and Lomb Science Scholarships, valued at \$1,500 each, have been awarded at the University of Rochester. Seven other finalists in the nationwide competition stood so high that they have been awarded comparable scholarships by the university. A total of 61 students, including this year's recipients, have been granted major scholarships at the university as a result of the annual Bausch and Lomb Science Scholarship contests during the last six years. The awards are made on a competitive basis to students throughout the United States.

The Commonwealth Fund has awarded 20 fellowships for 1949-50, among them 12 to the following scientists: *Richard E. D. Bishop*, assistant lecturer in applied mechanics, South East London Technical College, to study mechanical engineering (dynamics and vibrations) at Stanford University; *John Glover*, assistant lecturer in biochemistry, Liverpool, to study the techniques of radioactive and stable isotopes as tracer elements for the investigation of biochemical processes, at the Edward Mallinckrodt Institute of Radiology, St. Louis; *A. Michael Michelson*, research student, Cambridge, to study the broader aspects of nucleic acids and nucleotides at the California Institute of Technology; *John C. S. Paterson*, senior registrar, Department of Medicine, Post-Graduate Medical School of London, to study the chemical pathology of extracellular fluid in the presence of anemia, at the School of Medicine and Dentistry, University of Rochester; *Audrey Jane Pincent*, research student, Lister Institute, University of London, to study the functions of trace elements in the metabolism of microorganisms, at Stanford University's Hopkins Marine Station, Pacific Grove, California; *William I. Pumphrey*, research leader, Department of Industrial Metallurgy, University of Birmingham, to study the application of metallurgical principles to industry; *Claude A. Rogers*, assistant lecturer in mathematics, University College, London, to study the geom-

etry of numbers and combinational topology at the Institute for Advanced Study, Princeton; *George J. Romanes*, lecturer, Department of Anatomy, University of Edinburgh, to study the structure of the nervous system, especially the ventral horn cells, at the College of Physicians and Surgeons, Columbia University; *George Smith*, extradispendary surgeon, Western Infirmary, and demonstrator in anatomy, University of Glasgow, to study cardiovascular surgery and congenital disorders at the Johns Hopkins Hospital, and at the College of Physicians and Surgeons, Columbia University; *Len C. Taylor*, research student at the Oxford Institute of Experimental Psychology and the Department of Education, Oxford University, to study adolescent educational psychology; *Darcy Walker*, research fellow, Physics Department, University of Birmingham, to study experimental techniques in nuclear physics at Cornell University; and *Peter J. Wheatley*, demonstrator and lecturer in chemistry, University of Oxford, to study the infrared spectra of rapidly burning substances, at the University of Minnesota.

The National Foundation for Infantile Paralysis has allocated almost \$2,000,000 of March of Dimes funds for new projects in virus research, professional education and training in poliomyelitis, and study of after-care of the disease.

The grants for virus research were made to New York University-Bellevue Medical Center, University of Minnesota, Michigan Department of Health Laboratories, University of Michigan, Bowman Gray School of Medicine of Wake Forest College, University of Washington, University of California at Berkeley, University of Pittsburgh, Johns Hopkins University, Yale University, Chicago Board of Health, University of Tennessee, and University of Cincinnati. National Foundation headquarters will administer an appropriation of \$20,000 to determine the role of flies in the transmission of human polio.

Recipients of appropriations for professional education are American Public Health Association, National

Organization of Public Health Nursing, American Physical Therapy Association, Committee on Careers in Nursing, D. T. Watson School of Physical Therapy, Northwestern University Medical School, University of Southern California, Meharry Medical College, and Washington University School of Medicine.

Eight medical schools and hospitals received funds for the study of after-care. They are Children's Hospital, Boston; University of Illinois; Northwestern University; University of California; University of Minnesota; Brown University; University of Vermont; and Cornell University.

Fellowships

The National Research Council announces the availability of a fund of \$25,000 from the estate of Charles R. Blakely for support of research in the field of lymphatic leukemia. Application forms for grants-in-aid from this fund and further information may be obtained from the chairman, Division of Medical Sciences, NRC, 2101 Constitution Avenue, N.W., Washington 25, D. C.

The American Cyanamid Company announces the renewal of 15 scholarships for the academic year 1949-50, chiefly in the fields of chemistry and chemical engineering. These scholarships provide \$1,500, and are awarded to graduate students in their last year of predoctoral study. Recipients of postdoctoral scholarships receive \$3,000.

Scholarships have been established at Brown University, Massachusetts Institute of Technology, Columbia University, Princeton University, University of Virginia, Pennsylvania State College, Cornell University, University of Illinois, University of Notre Dame, University of Michigan, University of Wisconsin, University of Minnesota, University of Colorado, and Purdue University.

The National Foundation for Infantile Paralysis announces the following scholarships and fellowships available in physical medicine, public health, medical social work,

and physical therapy, under recently approved appropriations totaling \$495,000: \$100,000 has been allocated for clinical fellowships in physical medicine for periods of one to three years of study, open to physicians who wish to prepare for eligibility for certification by the American Board of Physical Medicine; \$50,000 for fellowships to physicians for one year of postgraduate study leading to the degree of Master of Public Health; \$225,000 for physical therapy scholarships in approved schools for men and women in need of financial aid to complete training; \$100,000 for medical social work scholarships; \$20,000 for fellowships of two to four weeks' duration for the study of poliomyelitis patients at courses to be given at Children's Hospital in Boston, City Hospital in Cleveland, University of Colorado Medical Center in Denver, and Stanford University School of Medicine in San Francisco. All scholarships are on a competitive basis. Further information and application blanks may be obtained from the Division of Professional Education, National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

Colleges and Universities

The Medical College of the University of Vermont has established a Cardiovascular Unit in its Bishop DeGoesbriand Hospital. W. Raab, professor of experimental medicine at the university, will be director and attending physician. Dr. Raab, a former assistant of K. F. Wenckebach, cardiologist at the University of Vienna, has been conducting cardiovascular research at Burlington since 1939.

The Midwest Inter-Library Center, incorporated last March under the auspices of ten Middle Western universities, will be located on the University of Chicago campus. The center, a nonprofit corporation, was established with a \$750,000 grant from the Carnegie Corporation and a \$250,000 grant from the Rockefeller Corporation. It is a libraries' library and will furnish central housing and servicing for cooperative de-

posit and use of research materials by the participating universities which are: University of Chicago, University of Illinois, Illinois Institute of Technology, Indiana University, State University of Iowa, University of Kansas, Michigan State College, University of Minnesota, Northwestern University, and Purdue University. More than a million volumes will be stored in the six-story building. The site provides sufficient space for a second unit to be built in the future.

Industrial Laboratories

New laboratory facilities for chemical and physical research by the **Kellex Corporation** for the U. S. Atomic Energy Commission in its nuclear reactor development program are now in operation at the Jersey City plant of the M. W. Kellogg Company, the parent company. The laboratory will be headed by W. A. Bain, director of chemical research.

Adenosine-5-phosphoric acid (AMP), the adenine nucleotide usually called muscle adenylic acid, is now available from **Schwarz Laboratories, Inc.** Made by a process that does not require the use of animal tissues, this basic constituent of such vital coenzymes as ATP and coenzyme I has been used clinically in the treatment of cardiac affections, some types of rheumatic conditions, and malnutrition.

Meetings and Elections

Plant and animal nutrition in relation to soil and climatic factors will be the theme of the first of the series of British Commonwealth specialist conferences on agriculture, recommended by the 1946 Official Scientific Conference in London. The conference will be held in Australia in August. Visitors from the U. S., Canada, India, South Africa, and New Zealand will participate.

A colloquium on macromolecules will be conducted on September 2, 3, and 5 by the Macromolecules Section of the International Union of

Chemistry, as part of its September 5-11 conference. Subjects under discussion will include the kinetics of polymerization and macromolecules in solution. The colloquium was initiated by H. F. Mark, of the Polytechnic Institute* of Brooklyn, and has as its executive committee H. R. Kruyt, chairman; J. J. Hermans, R. Houwink, C. Koningsberger, L. J. Oosterhoff, J. Th. G. Overbeek, and A. J. Staverman, all of the Netherlands. Further information may be obtained by writing to the Executive Committee, P. O. Box 71, Leiden, Holland.

Plans are being made for the **Fifth International Congress of Microbiology** to be held August 17-24, 1950, in Rio de Janeiro. The executive committee includes Henrique Aragao, president; H. C. de Souza-Araujo, first vice president, Genesio Pacheco, second vice president; Olympio da Fonseca, executive secretary; Joaquim Travassos, secretary; Cassio Miranda, treasurer.

The program is built around sections on general and industrial microbiology, medical bacteriology, viruses, Rickettsial diseases, mycology, protozoology, bacterial diseases of plants, microbiology of water and soil, and immunity and resistance.

President Dutra of Brazil has authorized a special round-trip Brazilian boat for the transportation of European members and delegates to the congress, and hotel accommodations will be arranged for them by the committee.

The **National Shellfisheries Association**, at its annual meeting June 7-9, elected the following officers: president, James Nelson Gowanloch, Louisiana Department of Wildlife and Fisheries; vice president, James B. Engle, U. S. Fish and Wildlife Service; secretary, A. F. Chestnut, University of North Carolina Institute of Fisheries Research; and treasurer, David H. Wallace, Maryland Department of Tidewater Fisheries. The meeting was held jointly with the Oyster Institute of North America and the Oyster Growers and Dealers Association of North America.

An international conference on the optical properties of thin films was held in Marseille, April 19-23. This was one of a series of scientific gatherings sponsored by the French Centre National de Recherche Scientifique. Among the representatives were A. Vasicek from Czechoslovakia; P. Jacquinot, M. Perrot, and P. Rouard from France; K. Greenland, O. S. Heavens, H. Kuhn, and S. Tolansky from England; P. Van Alphen and B. Blaisse from Holland; M. Ballerini from Italy; M. Schaetti from Switzerland; B. Billings, J. Strong, N. Scott, and A. Turner from the United States. The conference was organized by P. Rouard, director of the Physical Laboratory of the Faculté des Sciences in Marseille.

This conference was a manifestation of the current interests in thin film optics. These interests were kindled by the evaporation of metallic reflecting coats by Ritchi and Ornstein, by low index reflection-reducing and high index reflection-enhancing films, and by combinations of all these to produce color films, filters, and interferometers.

The conference itself was outstanding in that each paper presented material completely different from the others. This was particularly remarkable since the publications of several of the members were in journals not accessible to the others. The conference was divided into several sections. The first was devoted to the discussion of the theoretical analysis of the optical behavior of thin films. Several ingenious techniques were presented for the mathematical treatment of films of varying index of refraction. One treatment was based on the electrical impedance analogue, another used a matrix technique in which the equations were set up for many layers, which were then allowed to become infinitesimal in thickness. These treatments would seem to foreshadow the more frequent appearance of such films in the laboratories of experimental physicists.

In the next section most of the papers were on the optical properties of thin films. Two pieces of research reported were new to most of the American group. One was the

demonstration by Professor Rouard of Marseille which showed that the reflection of light going from glass to air can be eliminated by a metal film. In this demonstration light was reflected from a wedge of glass which was coated on the back by a wedge of metal. The metal surface was imaged on the screen and showed a black band at the thickness at which reflection was eliminated. Because of dispersion in certain metals the black band was replaced by a colored fringe. Another piece of new research was the preparation of a film of iron oxide which seemed to combine the mechanical features of TiO_2 film with the desirable optical features of Sb_2S_3 . In this same group of papers were a series of talks on narrow band filters. One five-layer filter had both narrower pass bands and higher peak transmission than the older type of silver-dielectric-silver interference filter.

The final part of the conference was given over to the applications of thin films. Although the optical properties of thin films may be a narrow field, this last section showed clearly that it is important in many branches of science. Discussions ranged from the aluminizing of large telescope mirrors to use of interferometers in series for the detection of faint satellites in spectra.

In this section we were especially excited by Professor Tolansky's provocative experiences with interference plates using "Fabry-Perot" reflectivities with "Newton's" spacings. Using his procedures, distances to 10 Å or less can be measured. Many unsettled questions were posed by him—for example, he reported unexplained jagged fringes when a thin curved piece of mica is interposed between his plates.

The hosts of the conference organized excursions and diversions which adroitly combined the abundant history and scenery with the scientific activity which is available around Marseille, to produce a lasting impression in the memories of the conferees. All conferees, after a few hours, were fraternizing as if they had been collaborators in the same laboratory.

JOHN STRONG and BRUCE BILLINGS

Deaths

Earle L. Overholser, 60, head of the Department of Horticulture at Virginia Polytechnic Institute, died on April 18. Dr. Overholser was an authority on tree fruits.

Francisco Sierra Soto, Colombian plant scientist trained in the U. S., was assassinated June 19 near his farm on the lower Labrija River in the State of Antioquia. Dr. Soto was engaged in a research and development project conducted cooperatively by the U. S. and Colombia to encourage modern rubber plantations in Colombia.

Ivan L. Nixon, 65, vice president in charge of the Scientific Instrument Division of Bausch and Lomb Optical Company, died June 25. He was a member of the company's board of directors and a director of its Canadian company.

John C. Gifford, 79, professor of tropical forestry at the University of Miami, died June 25 at the Jackson Memorial Hospital in Miami. Dr. Gifford was founder and first editor of the *American Forestry Magazine*.

Harry Manley Goodwin, 79, dean emeritus of the Massachusetts Institute of Technology Graduate School, died June 26 at his summer home at Squam Lake, New Hampshire. Dr. Goodwin's extensive research in physics and electrochemistry included electrochemical studies of the voltaic cell and the electrical properties of inorganic salts at high temperatures.

After a lapse of five years, owing to the war, the **Theobald Smith Award in Medical Sciences**, established in 1936 by Eli Lilly and Company, will again be given at the Annual Meeting of the AAAS. Fellows of the Association should submit names of proposed recipients to Dr. Gordon K. Moe, secretary of Section N, Medical School, University of Michigan, with full information (in triplicate) concerning personality, training, and research work of candidates. Nominations must be received *before September 15*.

The award will be \$1,000 and a bronze medal, given for "demonstrated research in the field of the medical sciences, taking into consideration independence of thought and originality." An additional amount of \$150 is available toward traveling expenses. The recipient must be less than 35 years of age on January 1 of the year in which the award is to be made, and a citizen of the United States.

Past recipients are Robley D. Evans, professor of physics, Massachusetts Institute of Technology, Cambridge; Charles F. Code, Department of Astronomy and Astrophysics, Yerkes Observatory, Williams Bay, Wisconsin; Albert B. Sabin, professor of pediatrics, Children's Hospital Research Foundation, Cincinnati, Ohio; Herald R. Cox, director of virus research, Lederle Laboratories, Inc., Pearl River, New York; and Sidney C. Madden, professor and head of Department of Pathology, Emory University School of Medicine, Atlanta.

The Alabama Science Talent Search for General Gorgas Scholarships, conducted by the Alabama Academy of Science in cooperation with Science Service, has awarded scholarships at the University of Alabama, Tuskegee Institute, Alabama Polytechnic Institute, Birmingham-Southern College, and Howard College. Winners receive four years' tuition and fees from the various colleges and cash awards ranging from \$500 to \$1,500, given by the Alabama State Chamber of Commerce, in cooperation with business and industry.

The National Registry of Rare Chemicals, 35 West 33rd Street, Chicago 16, Illinois, has submitted the following list of wanted chemicals: Muscone, 1,1-diacetylene, colophene, vicine, isoascorbic palmitate, phosphonium chloride, perfluoroheptane, trans-hexahydrophthalic acid, β -tocopherol, isatoic anhydride, isocitric acid, isoaconitic acid, 2-hydroxybenzothiazole, 2-nitrosophenol, adenine thiomethylpentoside, 2,2-difluoroheptane, uric acid riboside, ketosuccinic acid, keracyanin, and muscarine.