NEWS and Notes

E. N. da C. Andrade, Quain Professor of Physics at the University of London, will become director of the Royal Institution of Great Britain and resident professor and director of the Davy Faraday Research Laboratory on January 1. Dr. Andrade succeeds **E. K. Rideal,** who has been head of the Royal Institution since 1946.

Ju Chin Chu, director of research in the Department of Chemical Engineering at Washington University, St. Louis, has been appointed associate professor of chemical engineering at Polytechnic Institute of Brooklyn.

Raymond B. Montgomery, of Woods Hole Oceanographic Institute, has been appointed professor of oceanography at Brown University, Providence, Rhode Island. This is the university's first course of instruction in oceanography.

P. B. Medawar, professor of zoology at the University of Birmingham, England, has been appointed John M. Prather Lecturer in Biology at Harvard University this fall. During the first three weeks of November, Dr. Medawar will give a series of six lectures on "Growth, Individuality, and Ageing."

Charles M. Slack has been made technical director of the Westinghouse Electric Corporation's Atomic Power Division, which is now working on an atomic power plant for naval ship propulsion in cooperation with the Argonne National Laboratory of Chicago.

Howard A. Jones has been named assistant director of laboratories for U. S. Industrial Chemicals, Inc., New York City. He will be located at the research and development laboratories in Baltimore.

Victor A. Greulach, botanist in the Department of Plant Physiology, Agricultural and Mechanical College of Texas, has been appointed associate professor of botany at the University of North Carolina, Chapel Hill.

H. Lowell Olson, former University of Wisconsin physicist, has joined the staff of the Applied Physics Laboratory of Johns Hopkins University at Silver Spring, Maryland.

Visitors to U. S.

Christopher Howard Andrewes, head of the Department of Bacteriology and Virus Research, National Institute for Medical Research, Hampstead, London, will lecture at the Harvard Medical School, November 3, 8, and 10. The lectures, to be presented under the Edward K. Dunham Lectureship for the Promotion of the Medical Sciences, will deal with the subject of viruses.

Carl F. von Weizsäcker, professor of physics at the University of Göttingen and at the Max Planck Institute, has arrived here to spend the fall and winter quarters as Alexander White Visiting Professor at the University of Chicago. Dr. von Weizsäcker will present a series of public lectures on "The Modern Concept of Nature" and teach on the staff of the university's Committee on Social Thought.

Margaret Hardy, of Strangeways Laboratory, Cambridge, England, will be a guest research worker in the Tissue Culture Laboratory of the University of Texas Medical Branch, Galveston, in January, 1950. Dr. Hardy plans also to visit the Dermatology Laboratories of Harvard Medical School at the Massachusetts General Hospital, Boston.

Attilio Rampoldi, Italian surgeon and specialist in physical medicine at the University of Rome Clinic, has begun five months' study at the Columbia University College of Physicians and Surgeons. Brought here through efforts initiated by the Foster Parents Plan for War Children, Dr. Rampoldi will study the most recent techniques for treating disabled children. The university contributed a scholarship and the Columbian Civic Club of Newark provided $3,000 toward Dr. Rampoldi's traveling and living expenses.

Gerhart Kessler, visiting instructor from Stuttgart Institute of Technology, Germany, is studying procedures of engineering education at Illinois Institute of Technology this month. Dr. Kessler is also engaged in electrotechnical research at Stuttgart Institute. His visit here is being sponsored by the U. S. Office of Military Government for Germany and the Federal Security Agency's Office of Education.

Grants and Awards

The Farrer Memorial Medal for 1949 has been awarded to W. L. Waterhouse, research professor of agriculture at the University of Sydney, Australia. Dr. Waterhouse received the medal in recognition of his research on wheat diseases and their control.

The Jane Coffin Childs Memorial Fund for Medical Research granted to Gray H. Twombly, Department of Cancer Research, College of Physicians and Surgeons, Columbia University, $5,000 for studies on the selective localization of radioactive estrogens and allied substances in normal and cancer-bearing tissues. It was erroneously stated in the August 19 issue of *Science* that this grant had been made to Frances L. Haven, Biochemistry Department, University of Rochester School of Medicine and Dentistry. Dr. Haven's grant of $3,000 was for studies on the storage and mobilization of fat in tumor-bearing rats.

The Dazian Foundation of New York has awarded a research fellowship to Albert S. Gordon, associate professor of biology at New York University. Dr. Dazian will conduct research on mechanisms underlying the effects of endocrine factors in hemopoiesis.

Theodore Koppanyi, professor of pharmacology and materia medica, Georgetown University School of Medicine, has been elected an honorary member of the Society of Pharmacology and Therapeutics of the Argentine Medical Association.

Fellowships

The Medical Fellowship Board of the National Research Council is now accepting applications for postdoctoral research fellowships for 1950–51 under the following programs:

National Research Fellowships in the Medical Sciences, supported by grants from the Rockefeller Foundation, provide opportunities for experience in research in all branches of medical science. They are open to citizens of the U. S. or Canada who hold the M.D. or Ph.D. degree. As a rule, candidates should be under 30 years of age.

Welch Fellowships in Internal Medicine, also supported by the Rockefeller Foundation, provide a prolonged period of advanced training to persons of proven research ability. They are open to physicians under 40 years of age who are citizens of the U. S.

Fellowships in Poliomyelitis and related fields are supported by the National Foundation for Infantile Paralysis, Inc. They provide training and experience in the study of virus diseases, and in any field contributing to progress in orthopedic surgery. Candidates for fellowships in virus diseases must hold the M.D. or the Ph.D. degree. Fellowships in orthopedic surgery are open only to graduates in medicine who have completed one or more years of hospital work in clincal surgery. Applicants must be citizens of the U. S. and, as a rule, should be under 30 years of age.

Senior Fellowships in Poliomyelitis and related fields are also available under grants from the National Foundation for Infantile Paralysis, Inc. They provide, for persons of proved research ability, opportunity for advanced training and research in the fields of clinical neurology, epidemiology, orthopedic surgery, pediatrics, and virus diseases. Applicants must be U. S. citizens under 40 years of age. Senior fellowships in the field of virus diseases are open to physicians and to holders of the doctorate in the basic sciences; applicants in the four other fields must be graduates in medicine.

Fellowships in Anesthesiology have been made available by a grant from the American Society of Anesthesiologists, Inc. They are designed to relate the disciplines of anatomy, biochemistry, pharmacology, physics, and physiology to problems of clinical anesthesia. Applicants must have the M.S. degree and at least one year of hospital experience.

Fellows will be appointed at a meeting of the Medical Fellowships Board early in March, 1950. Applications for consideration at this meeting must be filed before *December 1.* Appointment may begin at any date determined by the board. For further information address the Secretary of the Medical Fellowship Board, National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

The Solvay Process Division of Allied Chemical and Dye Corporation has established two graduate fellowships for research on additives to concrete at the Engineering Experiment Station of the University of Kentucky, Lexington. The studies will be directed principally toward increasing the workability of concrete through chemical additives.

Meetings and Elections

A symposium on Tropospheric Wave Propagation, sponsored by the U. S. Navy Electronics Laboratory at San Diego, was held at the NEL laboratory on Point Loma during the week of July 25–29. Organized by Charles R. Burrows, director of the School of Electrical Engineering at Cornell University, Ithaca, New York, the symposium attracted between 50 and 60 specialists in this branch of science, from the U. S., Alaska, and Europe.

Following addresses of welcome by Rawson Bennett, director of NEL, and J. P. Maxfield, chief scientist, representatives of various government facilities conducting radio wave propagation experiments gave talks on the work in progress at their various establishments.

The scientific papers which followed were divided into two main groups—those having to do with atmospheric refraction and those having to do with scattering. An additional session was devoted to hydrometeors and atmospheric absorption. A final session consisted of a lively discussion on topics suggested by participants of the symposium during the earlier sessions.

It was generally agreed that the size of the group was ideal for the informal personal participation which contributes so much to the development of science. An informal dinner at the Admiral Kidd Commissioned Officers Mess, and an all-day inspection trip to the Palomar Astronomical Observatory added to the enjoyment of the participants and contributed to the free discussion of the subject matter of the conference among the visiting scientists.

During sessions on refraction, the data obtained by the NEL on propagation over water in the San Diego area and in propagation over the desert in Arizona were presented and discussed at length, together with the data obtained by the Electrical Engineering Research Laboratory of the University of Texas on the angle of arrival of microwaves, both in the Arizona desert and along the Gulf of Mexico. These and other data were interpreted theoretically on the basis of the relation of the vertical gradient of the index of refraction to the laws of radio wave propagation. Methods and difficulties of obtaining the meteorological data from the radio data were also presented.

After the presentation of data on the fluctuations and scattering of radio waves in the atmosphere, collected by members of the Naval Research Laboratory and the NEL, Henry G. Booker and William E. Gordon, of the School of Electrical Engineering at Cornell University, presented their theory of atmospheric scattering. This new theory may explain the deviations of long distance tropospheric propagation from that expected on existing theories. While it is still in the formative stage, many of the consequences of the theory were discussed, and experiments for testing it were described.

C. R. Burrows

The Theory and Organization of Complicated Automata will be the subject of a series of lectures to be

presented December 12–16 at the University of Illinois by John von Neumann, of the Institute for Advanced Study. The program follows the series presented at the university last year by Douglas R. Hartree, British physicist.

The American Meteorological Society will hold its 30th anniversary meeting in St. Louis, January 3–6. The first two days will be devoted to a symposium on air pollution, under the chairmanship of C. A. Gosline, of E. I. du Pont de Nemours and Company, Wilmington, Delaware.

The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, sponsored by the Analytical Division of the American Chemical Society's Pittsburgh Section and the Spectrographic Society of Pittsburgh, will be held at the William Penn Hotel, Pittsburgh, February 15–17, 1950. Papers on all phases of analytical chemistry and applied spectroscopy are invited and abstracts in triplicate must be received by *November 1.*

Deaths

Knight Dunlap, 73, professor emeritus of psychology at the University of California at Los Angeles, died August 14 of pneumonia. Dr. Dunlap was for many years professor of psychology at Johns Hopkins University and was chairman of the Division of Anthropology and Psychology of the National Research Council from 1927 to 1929.

Earnest Stanley Shepherd, 70, retired research chemist at the Geophysical Laboratory of the Carnegie Institution of Washington, D. C., died in Washington on September 29. Dr. Shepherd conducted research in the application of physical chemistry to rock magmas and the measurement of the temperature of molten lava.

Sigmund Samuel Greenbaum, 59, professor of dermatology and syphilology at the University of Pennsylvania, died October 3 at his home in Philadelphia. At the time of his death, Dr. Greenbaum was also attending dermatologist at Mount Sinai and Philadelphia General Hospitals.

Leonor Michaelis, 74, physical chemist and retired member of the Rockefeller Institute for Medical Research, died October 9 of a heart attack. His most recent work was the discovery of the radical of vitamin E, the antisterility factor. A native of Berlin, Dr. Michaelis was at one time professor of biochemistry at the Medical School of Nagoya, Japan, and later resident lecturer at Johns Hopkins University.

National Health Program, 1949, a transcript of public hearings conducted last May and June by the Senate Labor and Public Welfare Committee, has been published and copies are obtainable from the committee, U. S. Capitol, Washington 25, D. C. The two-volume, 1,247-page transcript contains the testimony of American Medical Association officers, medical deans, economists, labor spokesmen, and others on compulsory health insurance, voluntary prepayment plans, federal support of medical and dental education, hospital expansion, and other national health issues.

Central Scientific Company announces the opening of a new office at 347 Madison Avenue in New York City to facilitate service in that area on scientific instruments, laboratory supplies, and chemical reagents from unlimited stocks.

At a meeting held at the University of Brussels, Belgium, March 28–30, electrochemists from several Western European countries created a new international organization designated as the **Committee of Electrochemical Thermodynamics and Kinetics.** The goal of the committee is to facilitate and promote international collaboration in these fields. In each country where collaboration is secured, there will be a delegate in charge of coordinating the various activities within the program of the committee.

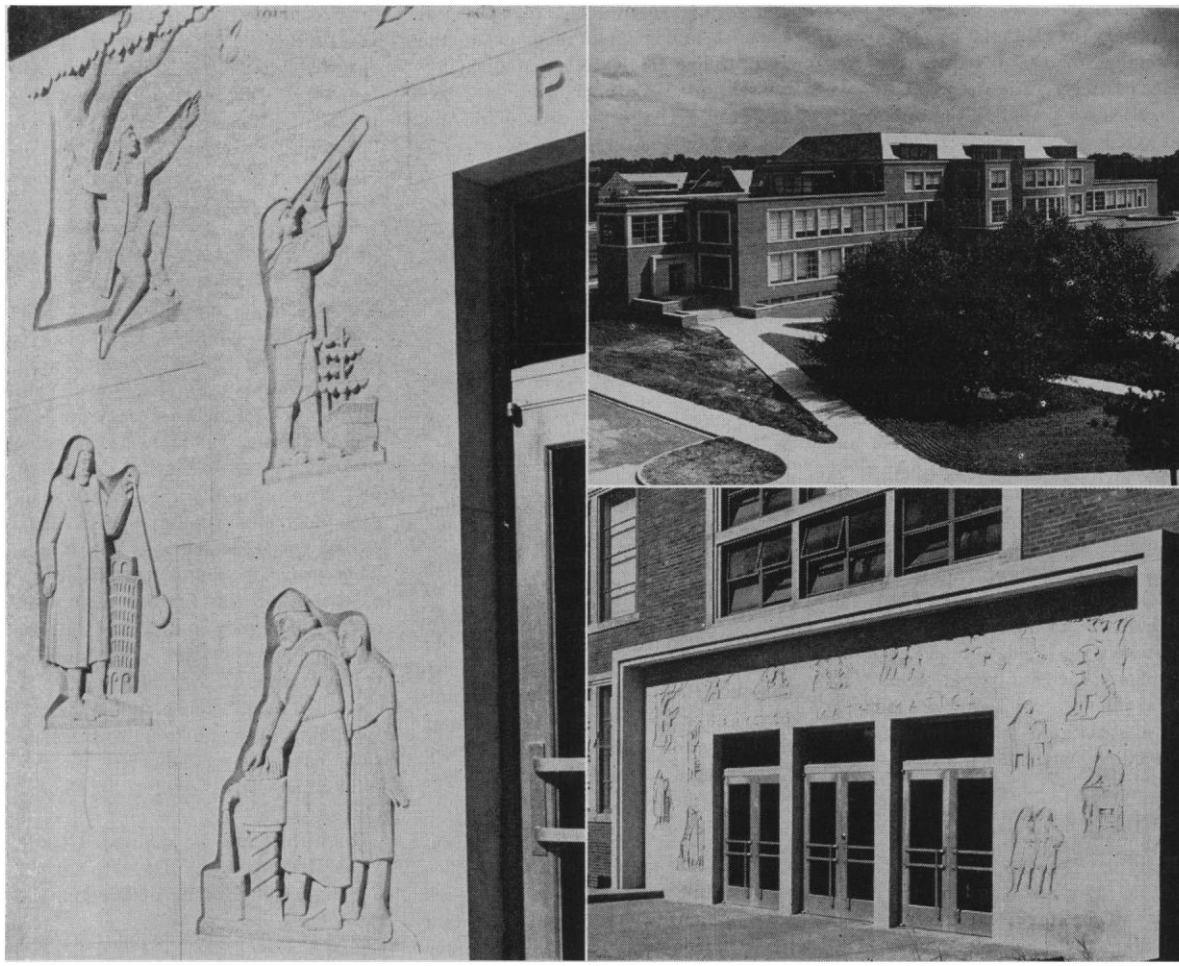
The officers of the committee are: Pierre Van Rysselberghe, University of Oregon, president; M. Pourbaix, University of Brussels, secretary. Delegates have been selected as follows: A. Juliard, Brussels, for Belgium; F. E. W. Wetmore, Toronto, for Canada; J. Heyrovsky, Prague, for Czechoslovakia; G. Charlot, Paris, for France; T. P. Hoar, Cambridge, for Great Britain; R. Piontelli, Milan, for Italy; W. G. Burgers, Delft, for the Netherlands; A. B. Winterbottom, Trondheim, for Norway; E. Jimeno, Madrid, for Spain; and E. Wyler, Bern, for Switzerland.

Research planned at the meeting includes: 1. Preparation of an "Atlas of Electrochemical Equilibria," which will be an extension of the fundamental work of Dr. Pourbaix on the potential-pH diagrams of iron, copper, chromium, etc., to all elements for which the necessary data are available. This atlas is being prepared by Drs. Pourbaix, Delahay, and Van Rysselberghe. 2. Systematic determination of polarization curves for electrochemical reactions. This program would consist of the extension of the fundamental work of Drs. Wagner and Traud, of the development of the polarographic method, and of overvoltage studies, etc. 3. Applications of the two foregoing groups of studies to corrosion, catalysis in solutions, electrolytic phenomena, analytical chemistry, etc.

Inquiries may be addressed to P. Van Rysselberghe, Department of Chemistry, University of Oregon, Eugene, Oregon.

Status of AAAS Meeting Reservations

The early and heavy demand for *single* rooms already indicates a potential shortage of this type of accommodations at the **116th Meeting of the AAAS in New York City,** December 26–31. There are plenty of hotel rooms but many have double or twin beds. Miss Sylvia T. Peltonen, Manager, Housing Bureau, New York Convention and Visitors Bureau, 500 Park Avenue, New York 22, who is in charge of room assignments, urges that, when possible, room reservations be placed by parties of two or more. This also has the advantage of a lower cost per person. Room reservation coupons will appear in the advertising pages of *Science* at frequent intervals.



A unique feature of the new $1,700,000 **Michigan State College Mathematics and Physics Building** is the stone carving on the main and side entrance panels, which tells the history of mathematics and physics. Designed by Carl L. Schmitz, New York sculptor, the work is done in sunken relief, a method widely used by the ancient Egyptians, and comparatively rare today.

Panels at the left of the main entrance depict Newton under a tree, watching an apple fall, Galileo with a pendulum in his hand, Archimedes immersing King Hieron's gold crown in water, and Huygens holding a telescope.

At the right of the entrance Franklin is shown flying his kite, Faraday contemplating a cell through which an electric current is being passed, Newton and Leibnitz discussing a problem by the methods of calculus, and Oersted demonstrating the magnetic effect produced by an electric current.

Above the main entrance are various forms of simple machines—from left to right, the lever, the pulley, gears, the screw, and the inclined plane.

The building houses 135 classrooms and laboratories, one laboratory being two stories high, for experiments using very tall equipment. A central control panel permits any desired voltage and frequency of current to be piped to any laboratory. Equipment to be installed includes an electron microscope, x-ray apparatus for analysis of atomic properties, various radio and radar instruments, and a 10-inch telescope on the building's flat roof.

Thomas H. Osgood is director of MSC's Division of Mathematics and Physical Sciences.

Make Plans for—

Industrial Minerals Division of the American Institute of Mining and Metallurgical Engineers, November 9–12, Tampa Terrace Hotel, Tampa, Florida.

National Symposium on Air Pollution, sponsored the Stanford Research Institute, the California Institute of Technology, and the Universities of California and Southern California, November 10–11, Huntington Hotel, Pasadena, California.

International Symposium on High Altitude Biology, November 23–30, Lima, Peru.

Pittsburgh Conference on X-Ray and Electron Diffraction, November 7–8, Mellon Institute of Industrial Research, Pittsburgh, Pennsylvania.