

of chemical engineering at the Massachusetts Institute of Technology, at a meeting of the American Section of the Society of Chemical Industry, held at The Chemists' Club, New York City. The meeting was held jointly with the American Chemical Society. Dr. George A. Burrell, of the Burrell-Mase Engineering Company, gave a short talk on the subject of the medalist and Professor Marston T. Bogert, of Columbia University, made the presentation. Professor Lewis gave the medal address entitled "Application of Physical Data to High Pressure Processes." He spoke about the use of high pressure in modern chemical industry, as in the syntheses of ammonia, the aliphatic alcohols and phenol, the hydrogenation of coal and oil and the separation of mixtures by both absorption and rectification.

Warren K. Lewis was born in 1882, in Sussex County, Delaware, and graduated in chemical engineering from the Massachusetts Institute of Technology in 1905. He served one year in that institute as laboratory assistant in industrial chemistry, after

which he studied for two years in Germany, taking his doctor's degree under Abegg and Ladenburg at the University of Breslau. In 1909 he became chemist for a tannery and leatherboard mill. A year and a half later he returned to the Institute of Technology as assistant professor of industrial chemistry and has been on its faculty continuously since that time. During the war, first in the Bureau of Mines and later in the Chemical Warfare Service, he had charge of research on gas defense.

Throughout his career as a teacher of engineering Professor Lewis has maintained close contact with the vital problems of industry, largely through consulting activities, and has endeavored not only to develop solutions of these problems in the laboratory, but even more to train in the classroom men with the power to solve them. His work has focussed mainly on filtration, distillation and absorption, the thermal properties of materials and the chemistry of colloids and amorphous materials.

SCIENTIFIC NOTES AND NEWS

THE William H. Nichols Medal for 1936 of the New York Section of the American Chemical Society has been awarded to Dr. William Mansfield Clark, professor of physiological chemistry in the Johns Hopkins University, for researches characterized as "of incalculable value to human welfare."

DR. ARTHUR E. KENNELLY, professor emeritus of Harvard University and of the Massachusetts Institute of Technology, has been notified by the Société Française des Electriciens, Paris, that he has been granted the 1936 Mascart Medal of that organization. The medal is awarded triennially for distinguished service in either basic or applied electricity.

DR. JOEL H. HILDEBRAND, professor of chemistry at the University of California, has been elected faculty research lecturer for 1936. This appointment is the highest recognition that the faculty can give to one of its members. Professor Hildebrand will give the annual research lecture during the week of Charter Day, which falls on March 23.

THE list of British New Year's honors includes knighthood conferred on Dr. Arthur Harden, emeritus professor of biological chemistry at the University of London, and on Dr. David Percival Dalbreck Wilkie, professor of surgery at the University of Edinburgh.

DR. JAMES B. AYER, James Jackson Putnam clinical professor of neurology, Harvard Medical School, was honored recently at a dinner at the Tavern Club, in

recognition of his completion of twenty-five years of teaching at the medical school. Dr. Charles Macfie Campbell acted as toastmaster, and brief speeches were made by Drs. James H. Means, William Jason Mixter, George L. Walton, Merrill Moore and Henry R. Viets.

THE Distinguished Service Award of the National Council of Geography Teachers was this year conferred upon Dr. Douglas Clay Ridgley, of Clark University, in recognition of his services to educational geography through years of teaching and many publications. Previous recipients of the award are the late William Morris Davis, Professor R. H. Whitbeck, of the University of Wisconsin, and Dr. A. E. Parkins, of Peabody College. The award for distinguished service in the field of educational geography is conferred from time to time upon persons who have made outstanding contributions in the field.

Nature states that at a meeting of the Harrison Memorial Prize Selection Committee, consisting of the presidents of the Chemical Society, the Institute of Chemistry, the Society of Chemical Industry and the Pharmaceutical Society, held on December 12, the award of the Harrison Memorial Prize for 1935 was made to Dr. Leslie Ernest Sutton. The presentation of the prize will be made at the annual general meeting of the Chemical Society to be held at the University of Bristol on April 16.

THE Botanical Society of America, at its thirtieth

annual meeting, which was held from December 31 to January 2, elected the following officers for the ensuing year: *President*, C. Stuart Gager, Brooklyn Botanic Garden; *Vice-president*, H. A. Gleason, New York Botanical Garden; *Treasurer*, F. E. Denny, Boyce Thompson Institute for Plant Research; *Member of the Editorial Board of the American Journal of Botany*, C. E. Allen, University of Wisconsin. Chairmen of the sections of the society elected or announced at the meeting are: General, R. F. Griggs, George Washington University; Physiological, A. J. Heinicke, Cornell University; Systematic, S. F. Blake, Bureau of Plant Industry. Corresponding members elected were: Dr. N. E. Svedelius, professor of botany and director of the Botanic Gardens, University of Uppsala; Dr. A. B. Rendle, lately keeper of botany, British Museum (Natural History); Dr. Fritz von Wettstein, director of the Botanical Institutes and professor of botany, University of Munich, and Dr. N. A. Maximov, professor at the Union Institute for Grain Husbandry, Saratov, U.S.S.R.

At the St. Louis meeting the Genetics Society of America elected the following officers: *President*, P. W. Whiting, University of Pennsylvania; *Vice-president*, L. J. Stadler, U. S. Department of Agriculture and the University of Missouri. The secretary of the society is Dr. M. Demeree, the Carnegie Institution of Washington, Cold Spring Harbor, N. Y.

At the thirty-second annual meeting of the Association of American Geographers, which met at Washington University, St. Louis, from December 29 to January 1, the following officers were elected: *President*, Professor W. H. Hobbs (emeritus), University of Michigan; *Vice-president*, Dr. John K. Wright, librarian, American Geographical Society; *Secretary*, Professor P. E. James, University of Michigan; *Treasurer*, Professor John E. Orchard, Columbia University; *Councillors*, Claude H. Birdseye, U. S. Geological Survey (one year); Professor R. J. Russell, Louisiana State University (three years).

At Princeton University Professor Robert Scoon, chairman of the department of philosophy, a member of the faculty since 1915, has been appointed Stuart professor of philosophy to fill the chair left vacant since the retirement in 1932 of the late president, John Grier Hibben. The McCosh professorship in philosophy has been given to Professor Edward G. Spaulding, a member of the faculty since 1905. This chair was left vacant by the retirement last June of Professor Roger B. Johnson. Dr. Erling Dorf, assistant professor of geology, has been appointed to the new post of curator of paleobotany, while Dr. Glenn L. Jepsen has been made curator of vertebrate paleontology, a post previously held by the late Professor William J. Sinclair.

DR. NEIL E. STEVENS, chief pathologist of the Bureau of Plant Industry, of the U. S. Department of Agriculture, has accepted the position of professor of plant pathology in the department of botany of the University of Illinois, made vacant through the death in 1934 of Professor Frank L. Stevens, who had held the position for twenty years. Dr. Stevens will take up the work at the beginning of the second semester.

DR. HOWARD M. CLUTE has been appointed professor of surgery in Boston University School of Medicine and chief of the surgical service of the Massachusetts Memorial Hospitals, succeeding Dr. Ralph C. Wiggin.

DR. LAWRENCE WELD SMITH, formerly associate professor of pathology, Cornell University Medical School, New York, has been appointed professor of pathology at Temple University School of Medicine to succeed the late Dr. John I. Fanz.

THE title of emeritus professor has been conferred by the University of Leeds on Professor W. H. Lewis, head of the department of chemistry.

The British Medical Journal reports that Dr. P. Manteufel, professor of hygiene at Düsseldorf; Dr. Fritz Specht, professor of laryngology at Erlangen, and Dr. H. v. Haberer, professor of surgery at Cologne, have been nominated rectors of their respective universities. The *Journal* also notes that with the exception of Louvain, all the Belgian universities now have a medical man as their rector, Professor A. Dustin, of Brussels, having been the last to be elected.

A FELLOWSHIP which will allow two years of graduate study in the Metals Research Laboratory of the Carnegie Institute of Technology, Pittsburgh, has been established by the Molybdenum Corporation of America. It has been awarded to Coolidge Alexander Karns, a graduate of Gettysburg College and formerly metallurgist with the Republic Steel Corporation, Buffalo. He will study the application of tungsten in alloys. Last year the Aluminum Company of America made a similar award.

DR. SIMON FLEXNER, director emeritus of the Rockefeller Institute for Medical Research, has been reappointed by Governor Lehman as chairman of the New York State Public Health Council. New members of the council are: Dr. Clayton Greene, of the College of Medicine, University of Buffalo, and Dr. George Baehr, of New York City. Dr. Herman G. Weiskotten, dean of Syracuse University, has been appointed to succeed Dr. Frederick Fuller Russell, of Brooklyn, resigned.

THE *Journal* of the American Medical Association reports that Dr. Jacob Kasanin, clinical director of the Rhode Island State Hospital for Mental Diseases,

Howard, R. I., has been appointed head of the department of psychiatry of Michael Reese Hospital, Chicago.

PROFESSOR YAS KUNO has accepted election as a member of the International Committee of the Physiological Congresses. For many years Professor Kuno was director of the laboratory of physiology at Mukden and has a wide acquaintance with Chinese and Japanese physiologists.

THE British Lords Commissioners of the Treasury have appointed Dr. J. J. Fox, deputy government chemist, to the post of government chemist, effective on April 17, on the retirement of Sir Robert Robertson, government chemist since 1921, who will be sixty-seven years old on that date.

MARSTON BATES, of the Museum of Comparative Zoology, Harvard University, has been granted leave of absence to join the entomological staff of the Rockefeller Foundation to make studies of *Anopheles* of Albania.

FERDINAND A. VARRELMAN, of the department of biology of the American University, is spending the year in Europe making a special study of botanical gardens for the sub-committee on botanical gardens of the Library Committee of the House of Representatives. This committee has sent out questionnaires to each botanical garden of the world making inquiries about administration, library, research, educational and other activities, with the idea that some of these ideas might be incorporated in the plans for the new Botanical Garden which the Congress hopes to develop in Washington. Professor Varrelman is making a personal survey, getting plans, photographs and other data, which may be of use to the committee. His winter headquarters are at the Botanical Institute of the Botanical Garden of the University of Vienna.

THE London *Times* reports that the party which will make the fifth attempt to climb Mount Everest in the 1935-36 expedition under the leadership of Hugh Rutledge has been chosen by the Mount Everest Committee, of which Major-General Sir Percy Cox is chairman. The members of the party will include E. E. Shipton, leader of the Mount Everest reconnaissance party in Tibet; F. S. Smythe, whose fourth expedition to Everest this will be; P. Wyn Harris (Kenya Civil Service); Dr. C. B. Warren, formerly of St. Bartholomew's Hospital; E. G. H. Kempson, a master at Marlborough College; Major C. J. Morris, late 2nd/3rd Gurkha Rifles, and Dr. Noel Humphreys, who led the Oxford University Expedition to Ellesmere Land last year.

DR. KARL VON TERZAGHI, professor at the Institute of Technology in Vienna, will give at Harvard Uni-

versity, beginning on February 5, a special lecture course on recent developments in soil mechanics and its application to problems in earth and foundation engineering. These lectures will be given each Monday, Wednesday and Friday from 4 to 5 p. m., with a discussion period following each lecture.

THE fourth lecture of the series before the Harvey Society in affiliation with the New York Academy of Medicine was given on January 16 by Dr. A. B. Housay, director of the Institute of Physiology of the University of Buenos Aires, on "The Interaction between the Parathyroid and the Hypophysis and Pancreas."

DR. JAMES BRYANT CONANT, president of Harvard University, addressed a meeting at the Academy of Natural Sciences of Philadelphia on January 16, when a program of further development of the academy was initiated by Effingham B. Morris, president of the academy. The other speaker was Dr. William Berryman Scott, emeritus professor of geology at Princeton University. Mr. Morris outlined the proposed plan for extending the activities of several departments. At the conclusion of the meeting the newest of the habitat groups in the Free Natural History Museum—a representation of East African animals gathered at a water-hole—was formally unveiled.

DESIGNED to foster investigations and disseminate information concerning the flora of the region, the Southern Appalachian Botanical Club has been formed and a journal will be published, beginning with January, 1936. Acting officers of the club are: *President*, Frank A. Gilbert, Marshall College, Huntington, W. Va.; *Vice-president*, Randolph Boggess, Duke University; *Secretary*, Paul R. Stewart, Waynesburg College; *Treasurer*, Nellie Ammons, West Virginia University; *Editor*, Earl L. Core, West Virginia University.

THE sixteenth annual meeting of the Southwestern Division of the American Association for the Advancement of Science will be held at Flagstaff, Ariz., and the Grand Canyon on April 27, 28, 29 and 30. Dr. Harold S. Colton, director of the Museum of Northern Arizona, is president, and Dr. T. J. Tormey, president of the Arizona State Teachers College at Flagstaff, is chairman of the local committee. M. R. Tillotson, superintendent of the Grand Canyon National Park, is chairman of the committee in charge of arrangements at the Canyon. Meetings for presentation of papers will be held at Flagstaff on Monday, Tuesday and Wednesday morning. On Wednesday evening the Powell lecture, with Dr. John C. Merriam as speaker, will be given at the Canyon and Thursday will be devoted to trips at the Canyon.

AN International Congress of Criminal Anthropol-

ogy and Psychiatry will be held in Rome next April, when the following subjects will be discussed: (1) aetiology, diagnosis and prophylaxis of delinquent minors; (2) prophylaxis of criminality and penal laws; (3) the fundamental principles of biology and criminal biotypology; (4) prophylaxis of crime. Visits will be paid to the more important modern penitentiaries and institutions for the prevention of criminality and the reeducation of delinquents. The general secretary of the congress is Professor B. di Tullio, via Giulia 52, Rome.

THE Laboratory Section of the American Public Health Association is anxious to collect any documentary material relating to the early history of the section, which was organized in Minneapolis in 1899. Letters, programs and biographical notes concerning members, particularly regarding the officers during the first five years of the organization, are especially desired. The section would appreciate it if any such material could be sent to the archivist, Dr. Augustus Wadsworth, director of the New York State Laboratories, New Scotland Avenue, Albany, N. Y.

DISCUSSION

DOES THE "RADIO ACT" HAMPER RESEARCH?

IN answering inquiries based on the final paragraph of my recent discussion¹ in SCIENCE, a member of the Federal Communications Commission excuses the non-cooperative activities of that body by claiming that changes must be made by Congress in the Communications Act before the commission can alter the disputed paragraphs in its own regulations. Though appreciating the friendly attitude which the commission has maintained during the discussion we contend that the commissioners are merely renewing an old army game called "passing the buck."

The needless interruption of a legitimate research enterprise is of serious consequence to all scientists. In the sincere hope that a clear discussion of the present difficulty may lead to improved governmental cooperation in the future, we wish to summarize our own view of the controversy, as follows:

(1) The commission fully admits the engineering merits of our highly-specialized radio equipment. From a technical standpoint there has been no dispute in regard to the suitability and complete safety of our method of operation. The transmitter has been thoroughly tested during many months of normal service and the operating frequency has remained stable within 0.002 per cent. The monitor device would immediately shut down the entire station if the frequency should shift by a very slight amount. Failure in other parts of the circuit might suppress the signal but could not cause faulty modulation. At all times the operation of the transmitter has been observed and automatically recorded by a monitor receiving set.

(2) We have never had any intention of dispensing with human operators and have never suggested the slightest relaxation in the strict regulations which prohibit the use of transmission apparatus by *unlicensed* persons. *Three operators*, holding commercial licenses properly issued by the government,

are salaried members of our laboratory staff. They perform all services in supervising the equipment. We contend that the government is utterly unreasonable in asking us to disrupt all other research activities in order to keep any one of these men on duty at times when human intervention is clearly unnecessary and useless.

(3) Section 318, Title III, of the Communications Act of 1934 reads as follows:

The actual operation of all transmitting apparatus in any radio station for which a station license is required by this Act shall be carried on only by a person holding an operator's license issued hereunder. No person shall operate any such apparatus in such station except under and in accordance with an operator's license issued to him by the Commission.

The context plainly indicates that this clause was inserted by Congress in order to protect the public from interference caused by the abuse of radio equipment in the hands of irresponsible or unqualified persons. We consider that the phrasing is excellent and we have no desire to modify it in any way. We also contend that our method of operation satisfies the spirit and the letter of this law to the fullest possible extent. Licensed operators completely predetermine every single dot which our apparatus emits, *whether they are actually present in the operating room when that dot leaves the antenna or not.*

(4) Our prolonged negotiations with the commission may be outlined briefly:

In June, 1934, after many months of successful, 24-hour daily operation, Secretary Herbert L. Pet-
tety suddenly took cognizance of our semi-automatic method of operation and peremptorily ordered us to keep an operator in uninterrupted attendance, regardless of engineering necessity. Pointing out that this would involve prohibitive expense, would serve no purpose and would thoroughly disrupt our experimental program, we requested special authorization to con-

¹ H. R. Mimno, SCIENCE, November 29, 1935.