

the 1937 Medal Jury, in addition to Dr. Landis, were Dr. L. W. Bass, Dr. J. M. Weiss, Professor A. W. Hixson and Professor Victor K. LaMer.

Dean Whitmore, in his address of acceptance, discussed recent research on polymerization and the genesis and interrelation of his chemical investigations. Professor Marston T. Bogert, of Columbia University, past president of the society, spoke on the scientific achievements of the medallist, and Dr. Gerald L. Wendt, director of the American Institute of the City of New York, outlined his personal career. In his address Dr. Whitmore reported that with the aid of a dozen assistants, he has succeeded, after five years of work, in removing most of the "magic and uncertainty" attached to reactions involved in polymerization, and in reducing these complex changes to an orderly basis.

Dr. Whitmore was born in North Attleboro, Mass., on October 1, 1887, and received his early education in Atlantic City, N. J. Later he attended Harvard University, taking the degree of bachelor of arts in 1911, of master of arts in 1912 and of doctor of philosophy

in 1914. He was instructor in organic chemistry at Williams College in 1916-17 and at the Rice Institute in 1917-18. From 1918 to 1920 he was assistant professor at the University of Minnesota, when he joined the faculty of Northwestern University with the rank of professor, serving as head of the department of chemistry from 1924 to 1929, leaving to become dean at Pennsylvania State College.

He is consultant and member of the Scientific Advisory Committee of the Chemical Warfare Service, and was formerly chairman of the Division of Chemistry and Chemical Technology of the National Research Council. In 1932 he was vice-president of the American Association for the Advancement of Science and chairman of its chemical section. Beginning with the treasurership of the Southwest Texas Section in 1917, Dean Whitmore has held many offices in the American Chemical Society, of which he has been a director since 1927. He was an officer of the Division of Organic Chemistry for eight years, and is an associate editor of the *Journal* of the society.

## SCIENTIFIC NOTES AND NEWS

THE John Scott Awards for 1937 of the City of Philadelphia, \$1,000 and a copper medal, were presented on March 5 to Dr. W. D. Coolidge and Dr. Irving Langmuir, director and associate director of the research laboratories in Schenectady of the General Electric Company, and to Dr. Evarts A. Graham, professor of surgery at the Washington University Medical School, St. Louis. The award to Dr. Coolidge was for his application of a new principle in x-ray tubes and that to Dr. Langmuir for development of the electric bulb now in common use. The award to Dr. Graham was for his application of the x-ray to the study and diagnosis of gall bladder conditions. Dr. Ernest T. Trigg, chairman of the Board of City Trusts, made the presentations.

THE seventieth birthday of Dr. Adolf Meyer and the beginning of his twenty-fifth year as director of the Henry Phipps Psychiatric Clinic of the Johns Hopkins University Medical School will be celebrated on April 16 and 17.

HONORARY scrolls in recognition of "outstanding contributions to the human race" have been awarded by the Columbia Graduate School Alumni Association to John Kunkel Small, head curator of the New York Botanical Garden; Jesse Feiring Williams, of Teachers College; Victor Emanuel Levine, professor of biological chemistry at Creighton University, and William Crocker, director of the Boyce Thompson Institute for Plant Research, Yonkers.

A BANQUET was given on March 4 at Northwestern

University for members of the faculty who had served for twenty-five years. These included Dr. Robert Blue, Dr. James Carr, Dr. Arthur Curtis, Dr. Alexander Day, Dr. Charles Freeman, Dr. William Holmes, Dr. George Meyer, Dr. Stephen Ranson and Dr. John A. Wolfer, *medicine*; Professor William Bryan and Professor Walter K. Smart, *English*; Professor William Burger and Professor Herbert Philbrick, *engineering*; Professor Elton J. Moulton, *mathematics*; Professor Horace Secrist, *economics*; Dr. William Skillen, *dentistry*; Professor David Himmelblau, *accounting*.

A TESTIMONIAL dinner to Willis H. Carrier was held on February 25 at the Boston Chamber of Commerce, with members of eight societies of air conditioning, heating, refrigerating, mechanical and metallurgical engineers attending. Mr. Carrier made an address on the application of air-conditioning work at the Robinson Deep Mine in the Rand Gold Fields of South Africa.

*Museum News* calls attention to the following awards made to scientific men in South Africa: K. H. Barnard, assistant director of the South African Museum, Capetown, has been awarded the senior Captain Scott medal by the South African Biological Society in recognition of his researches with South African crustacea and fish. H. M. L. Bolus, curator of the Bolus Herbarium, University of Capetown, has received an honorary degree of doctor of science from the University of Stellenbosch. John Hewitt, director of the Albany Museum, Grahamstown, received the South African medal and

grant from the South African Association for the Advancement of Science at its annual meeting in October at Johannesburg, in recognition of his contributions in zoology and South African prehistory.

THE British Institution of Chemical Engineers has awarded the Osborne Reynolds Medal to Lord Leverhulme, for contributions to the progress of chemical engineering, and the Moulton Medal to Professor D. M. Newitt, of the Imperial College of Science and Technology, for his work on the design of vessels to withstand high internal pressures.

DR. JOHN HENDLEY BARNHART, of the New York Botanical Garden, has been elected president of the Torrey Botanical Club for 1937. He has also become editor for the New York Academy of Sciences.

THE Association of American State Geologists has elected the following officers for the year beginning March 1. *President*, Arthur Bevan, state geologist of Virginia; *Vice-president*, Walter F. Pond, state geologist of Tennessee, and *Secretary*, Raymond C. Moore, state geologist of Kansas. These representatives of the association were also elected: To the National Research Council, Henry B. Kummel, state geologist of New Jersey, on the Division of States Relations, and Henry A. Buehler, state geologist of Missouri, on the Highway Research Board; to the Federal Board of Surveys and Maps, Edward B. Mathews, state geologist of Maryland; Washington, D. C., representative, George H. Ashley, state geologist of Pennsylvania.

DR. HANOR A. WEBB, chairman of the Division of Science and Mathematics of the George Peabody College for Teachers, was elected president of the National Association for Research in Science Teaching for 1937 at the meeting held in connection with the Department of Superintendence of the National Education Association at New Orleans. Dr. S. Ralph Powers, professor of natural sciences, Teachers College, Columbia University, was elected *vice-president*; Professor Ellsworth S. Obourn, head of sciences, John Burroughs School, *secretary*; Professor Fred Anibal, assistant professor of education, Stanford University, and Professor Walter G. Whitman, head of the department of science, State Teachers College, Salem, Mass., *members of the executive committee*. The association celebrated its tenth anniversary at this meeting.

HENRY BALFOUR, curator of the Pitt Rivers Museum, has been elected president of the Royal Geographic Society, London.

DR. SIMON FLEXNER, director-emeritus of the Rockefeller Institute for Medical Research, New York, was elected a trustee of the Johns Hopkins University on February 23.

DR. HUGO H. SCHAEFER, associate professor of chem-

istry at the Columbia University College of Pharmacy and director of its chemical laboratory, has been appointed dean of the Brooklyn College of Pharmacy of Long Island University. He succeeds Dr. William C. Anderson, whose retirement was recently announced.

DR. F. G. GREGORY has been appointed as from October 1 to the chair of plant physiology, University of London, tenable at the Imperial College—Royal College of Science. Since 1931 he has been assistant director of the research institute of plant physiology at the Imperial College.

PROFESSOR R. H. FOWLER, Plummer professor of applied mathematics in the University of Cambridge since 1932, has been elected a member of the Athenaeum Club for eminence in science.

MRS. AGNES CHASE, senior botanist in the Bureau of Plant Industry of the U. S. Department of Agriculture, has been appointed honorary custodian of the section of grasses in the U. S. National Museum. Mrs. Chase was associated with the late A. S. Hitchcock in building up the collection.

H. E. ANTHONY, of the American Museum of Natural History, has been made chairman of the Committee on the Preservation of Natural Conditions recently formed by the National Research Council.

DR. ADOLPH WEINZIRL, epidemiologist of the Baltimore Department of Health, has been appointed health officer of Portland, Ore. He will succeed Dr. John G. Abele, who will become city epidemiologist.

DR. NORMAN TAYLOR, formerly of the New York Botanical Garden and the Brooklyn Botanic Garden, has been appointed director of the recently established Cinchona Products Institute, New York City. The institute will promote medical and industrial research in the use and application of cinchona products.

DR. JOHN W. SCOTT, head of the department of zoology of the University of Wyoming, has been appointed executive secretary of the State Game and Fish Commission. Dr. Scott will be granted an indefinite leave of absence from the university and will assume his new work at once.

L. C. G. CLARKE, fellow of Trinity Hall, curator of the Museum of Archeology and Ethnology, has been appointed director of the Fitzwilliam Museum at the University of Cambridge and Marlay curator as from October 1, in succession to Sir Sydney Cockerell, who retires at the end of September.

DEAN CORNELIUS BETTEN, of Cornell University, sailed on February 24 for England. He plans to work in the British Museum and expects to be absent for three months.

DR. ALWIN M. PAPPENHEIMER, professor of pathol-

ogy of the College of Physicians and Surgeons, Columbia University, and Dr. Frederic M. Hanes, of the School of Medicine of Duke University, have made a stay of several weeks at the School of Tropical Medicine at San Juan, Puerto Rico.

DR. HERMENEGILDO ARRUGA, director of the clinic of ophthalmology at Barcelona, Spain, who has been an exile from his native land since early in the Spanish civil war, is making a lecture tour through the United States, South America and Europe. He plans to return to Spain after the war.

DR. WALTHER KUBIENA, of the Agricultural Institute, Vienna, will be guest professor of soils at the Iowa State College from April 1 to September 30.

DR. THORVALD MADSEN, director of the State Serum Institute of Denmark, who will deliver the Abraham Flexner Lectures at the School of Medicine of Vanderbilt University, will be in residence during the months of March and April. The dates and titles of the individual lectures are: March 10, "Control of Venereal Diseases in Denmark"; March 15, "Mechanism of Bacterial Infection"; March 19, "Epidemiology of Tuberculosis"; March 24, "The Influence of Seasons on Infections," and March 29, "Whooping Cough."

OWING to the flood emergency, it was necessary for Surgeon General Thomas Parran to postpone the Gehrmann Lectures scheduled at the College of Medicine of the University of Illinois, from January 25, 26 and 27 to March 22, 23 and 24. The subjects of the lectures are: "Health as a Factor in Social Security"; "Industrial Hygiene" and "Syphilis."

DR. I. S. BOWEN, professor of physics in the California Institute of Technology, gave on February 17 an illustrated lecture on "Bright-Line Astronomical Spectra" before the University of California at Los Angeles Chapter of the Society of the Sigma Xi.

DR. HERBERT S. GASSER, director of the Rockefeller Institute for Medical Research, will deliver the sixth Harvey Society lecture of the current series at the New York Academy of Medicine on March 18. Dr. Gasser will speak on "The Control of Excitation in the Nervous System."

THE Royal College of Surgeons, England, has appointed Sir Charles Gordon-Watson Bradshaw lecturer for 1937 and Sir Charles Sherrington Thomas, Vicary lecturer.

THE seventh annual meeting of the American Association of Physical Anthropologists will be held on April 9 and 10 at the Faculty Club of Harvard University.

THE date at which the spring meeting of the Midwestern Psychological Association will be held has been changed from April 23 and 24 to May 7 and 8.

THE thirty-second annual meeting of the Southern Society for Philosophy and Psychology will be held at Columbia, S. C., on Friday and Saturday, March 26 and 27, 1937, under the presidency of Lyle H. Lanier. The University of South Carolina is the host institution. Separate sections for contributed papers in philosophy and psychology have been arranged for the Friday morning and afternoon sessions; the Saturday morning meeting will be devoted to papers of general interest from both fields. The annual banquet and presidential address are scheduled for Friday evening at the Hotel Columbia. The annual business meeting will follow the Saturday morning session.

FORMATION of a Cancer Council, to bring together the fields of cancer education, therapy and research and to serve as a liaison agent between the outstanding authorities in cancer and the lay public through the medium of the press and radio, has been announced by Dr. Clarence C. Little, managing director of the American Society for the Control of Cancer. Members of the council include Dr. Frank Adair, of Memorial Hospital, appointed by the regents of the American College of Surgeons; Dr. Karl Kornblum, appointed by the president of the American Roentgen Ray Society; Dr. Little and Dr. James B. Murphy, of the Rockefeller Institute for Medical Research, appointed by the council of the American Society for Cancer Research; Dr. James Ewing, of Memorial Hospital, and Dr. Burton T. Simpson, State Institute for the Study of Malignant Diseases, Buffalo, appointed by the directors of the American Society for the Control of Cancer. The first meeting of the council was held on March 5.

DR. WILLIAM J. ROBBINS, dean of the Graduate School at the University of Missouri, and president of the Missouri Academy of Science, has appointed a standing Committee of the Academy on Conservation, with the following membership: H. C. Beckman, U. S. Geological Survey, Rolla; Dr. H. A. Buehler, state geologist and director, Missouri Bureau of Geology and Mines, Rolla; Dr. H. H. Krusekopf, professor of soils, University of Missouri; Dr. G. T. Moore, director, Missouri Botanical Garden, St. Louis; A. E. Shirling, professor of science, Kansas City Teachers College; E. Sidney Stephens, president, Restoration and Conservation Federation of Missouri, Columbia; Dr. R. H. Westveld, assistant professor of forestry, University of Missouri, and Dr. Rudolf Bennitt (chairman), associate professor of zoology, University of Missouri. The purposes of the committee are: (1) to keep the membership of the academy informed of current activities in the many fields related to conservation of natural resources; (2) to direct the influence of the academy in support of conservational moves which are for the public good, and (3) to assist in placing the scientific resources of this state-wide organization at

the disposal of agencies working toward conservation of the natural resources of Missouri.

A SUIT for recovery of \$215,730, allegedly lost by the American Society of Mechanical Engineers in publishing *The Engineering Index*, was brought up in Supreme Court when the plaintiffs moved on February 16 for appointment of a temporary receiver for The Engineering Index, Inc., a separate corporation which has published the index since 1934. The plaintiffs are two members of the society, Clifford J. Stoddard and John Parker, suing on behalf of themselves and other members. The complaint alleges that in 1927 the society advanced money for the *Index* and for a service known as the Engineering Card Index Service, but that eventually the Engineering Index, Inc., was organized as a non-profit-making corporation to publish the magazine, the society receiving a small percentage of the income. The suit seeks to invalidate this agreement and wants an accounting of the corporation. A similar suit, brought in 1935, was dismissed after an official referee found that "no property or funds of the American Society of Mechanical Engineers has been misappropriated or diverted to any other purpose than for which the society was incorporated."

THE *Manchester Guardian* prints in its issue of February 7 the following: "The *Berliner Tageblatt* reports a lecture given by Geheimrat (Privy Councillor) Professor Dr. Stark, president of the National Phys-

ical and Technical Institution (Physikalisch-Technische Reichsanstalt), on 'Dogmatism and Experience in Atomic Research.' Professor Dr. Stark, according to this report, rejected the theory of the form of the atom the moment it was put forward by Lord Rutherford and Niels Bohr—less on technical (sachlichen) grounds than from fundamental objections to their acceptance of views and dogmas of Jewish physicists. He now wished not only to criticize but to bring forward something better as an alternative. He described his new model of the atom with the aid of a short film. Its main feature is that the electron has not the form of a sphere, assigned to it by the Jewish physicist Abraham, but that of a vortex-ring (Wirbelring). Jewish influence, said Professor Dr. Stark, had gone so far that even non-Jewish scientists like Planck, Bohr, Von Laue, Schrödinger and Heisenberg had become partisans of the false doctrine (Irrlehre), and no young lecturer who gave a thought to his career dared to oppose the dominant theory. Some particularly pushing physicists married Jewish women in order to advance their careers. Now that these monstrous circumstances had been discovered, German and authentic (arteigene) physics would forge ahead. 'Privy Councillor Stark's lecture is to serve,' the report concludes, 'as a new thrust to eliminate from German physics the effects of the Jewish mind.' Unfortunately, Stark said in conclusion, in the two decades no important discovery had been made by physicists of the German alignment."

## DISCUSSION

### SURVIVAL OF MARMOTS AFTER NEPHRECTOMY AND ADRENALECTOMY<sup>1</sup>

IN studying a series of nephrectomized marmots (*Arctomys monax*) during the early part of 1936, it appeared very strange that the first animals used did not seem to suffer any ill effects from the operation. Both kidneys had been completely removed at one sitting. For two, three and (in some cases) four weeks they ate and drank freely and appeared in good health, fighting vigorously with their cage-mates occasionally like normal animals. This is strikingly different from observations made on other mammals: rats, guinea-pigs, cats and dogs quickly show severe effects and survive only a few days after bilateral renal excision. All the marmots which were nephrectomized eventually succumbed, however, with the usual symptoms observed in other animal forms. In many observed cases, food was eaten within a few hours of death.

<sup>1</sup> Grateful acknowledgment is made of aid received from the Rockefeller Foundation.

Recalling earlier observations on adrenalectomized marmots which survive for months—until spring time—when operated on during the winter, it was thought possible that seasonal variations in survival after nephrectomy might also be shown by this species. Several animals were nephrectomized, therefore, throughout the summer period—or the warmer half of the year, from April to September, in this latitude. In all these cases the post-operative life-span was very short and approximated that found in the usual laboratory types.

In the winter-nephrectomized group (October to March), four marmots survived 28 to 35 days and two others 21 days each; the average survival period in seven cases was 20 days. In 15 summer-operated animals the life-span averaged, in contrast, only 6 days. The latter group showed considerable reductions in serum sodium and chloride, and more marked rises in blood urea than the winter-operated series. Very high blood urea values, running sometimes over one per cent., were observed.