interstellar space, with Professor A. S. Eddington, at Cambridge University.

Dr. Olive C. Hazlett, assistant professor of mathematics at the University of Illinois: to study the arithmetics of linear associative algebras together with their application and interpretation in other lines of mathematics, in Europe.

Dr. Perry Byerly, assistant professor of seismology in the University of California: to study mathematical geophysics in order to apply data already obtained in the study of the Montana and other American earthquakes to the problems of the nature and position of these discontinuities in the earth's structure which lie above the central core.

Dr. J. J. Hopfield, assistant professor of physics at the University of California: to study the Zeeman effect of the infra-red spectra of oxygen and nitrogen with reference to the classification of the extreme ultra-violet spectra of these elements, with Professor F. Paschen, at the Imperial Physico-Chemical Institute, Charlottenburg, Germany.

Dr. R. J. Kennedy, research associate in physics at the California Institute of Technology: to do research towards establishing a consistent theory of radiation, with Professor Sommerfeld at Munich and Schrödinger at Berlin.

Dr. Noel C. Little, professor of physics at Bowdoin College: to determine the thermo-magnetic properties of gaseous molecules by a new method of convective flow with a view to the study of their structure and special quantitization, with Professor W. Gerlach at Tubingen.

Dr. F. W. Loomis, associate professor of physics at New York University: to make a study of the new quantum mechanics, especially in relation to problems in band spectra, with Professor T. Frank at Göttingen and Professor Schrödinger at Berlin.

Dr. L. E. Reukema, assistant professor of electrical engineering at the University of California: to make a theoretical and experimental study of electric discharge of gases at high frequencies and of the breakdown of solid insulating materials under high electric stress, with Professor W. O. Schumann at Munich.

Dr. W. W. Watson, assistant professor of physics at the University of Chicago: to study molecular spectra under Professor Frank of Göttingen and Sommerfeld of Munich, with a view to learning more about the structure of molecules and the nature of chemical reactions.

Dr. Richard Bradfield, assistant professor of soils at the University of Missouri: to investigate some of the principles involved in the purification of colloids by electrodialysis (reappointment).

Dr. G. H. Coleman, assistant professor of chemistry at the State University of Iowa: to carry out an experimental study of a new method for the preparation of amines by the reaction of organomagnesium halides with chloramines and related compounds, with Professor Victor Grignard at the University of Lyons.

Dr. Earl C. Gilbert, associate professor of chemistry at the Oregon State College: to make an experimental study of some hitherto uninvestigated reaction of hydrazine from the standpoint of modern theories of solution,

catalysis and electronic structure; principally with Professor J. N. Bronsted, of the Polytechnic Institute, Copenhagen.

Dr. Ralph E. Cleland, associate professor of botany at Goucher College: to make studies of the chromosome constitution and behavior in the evening primrose.

Dr. R. B. Harvey, associate professor of plant physiology and botany at the University of Minnesota: to investigate the effects of low temperature on plants, in Northern Russia.

Dr. Warren K. Stratman-Thomas, research pharmacologist of the University of Wisconsin: to determine by clinical trial the therapeutic value of certain new arsenical compounds in the chemotherapy of sleeping sickness, with Dr. Clement C. Chesterman, in the Belgian Congo.

Dr. Homer W. Smith, professor of physiology at the University of Virginia: to go to Naples, Cairo and Khartum to make physiological studies of rare species of lung fishes surviving in the waters of the Nile and Mediterranean.

Dr. Dwight E. Minnich, associate professor of zoology at the University of Minnesota: to make physiological studies on the chemical senses of insects, principally with Professor Karl V. Frisch, director of the Zoological Institute at the University of Munich.

Dr. Emmett R. Dunn, associate professor of zoology at Smith College: to carry out researches on Central American reptiles and amphibians, and on the salamanders of the family Ambystomidae, field work in Mexico and Costa Rica and study in European museums.

Dr. William V. Cone, instructor in surgery at the Columbia University College of Physicians and Surgeons: to study the reactions of the interstitial cells of the central nervous system, with Dr. Gordon Holmes at the National Hospital for the Paralyzed and Epileptic in London.

Dr. R. R. Dieterle, instructor in psychiatry at the University of Michigan: to study the spirochetosis of the central nervous system in the syphilitic diseases affecting the nervous tissues, with Professor F. Jahnel, in Munich.

Dr. John C. McKinley, associate professor of neuropathology at the University of Minnesota: to make quantitative studies on human muscle tonus at the University of Breslau, Germany.

SCIENTIFIC NOTES AND NEWS

SIR THOMAS HOLLAND, of the Imperial College of Science and Technology, has been nominated by the council to be president of the British Association for the Advancement of Science for the 1929 meeting, which is to be held in South Africa.

ON the occasion of the Harvey tercentenary meeting of the Philadelphia College of Physicians on March 22, Jefferson Medical College and the University of Pennsylvania conferred the honorary doctorate of laws upon Sir Humphry Davy Rolleston, physician-in-ordinary to King George of England, and the degree of doctor of science on Dr. J. J. R. Macleod, professor of physiology in the University of Toronto.

DR. ADOLPH ENGLER, professor of botany at the University of Berlin, has been elected an honorary member of the Russian Academy of Sciences.

M. BOUIN, professor of histology in the University of Strasbourg, and M. Bardier, professor of pathology in the University of Toulouse, have been elected corresponding members of the French Academy of Medicine.

DR. PAUL KOEEE, professor of mathematics in the University of Leipzig, has been awarded the international mathematics prize of the Swedish Academy of Sciences.

PROFESSOR W. H. HOFFMANN, of the Finlay Laboratory, Havana, has been elected a fellow of the Royal Society of Tropical Medicine and Hygiene, London.

SEBASTIAN L. DE FERRANTI, past-president of the Institution of Electrical Engineers of Great Britain, has been elected a fellow of University College, London.

THE February issue of the *Deutsche Zeitschrift für Chirurgie* is dedicated to Professor Alexander Fraenkel, director of the surgical division of the General Policlinic of Vienna, on the occasion of his seventieth birthday.

DR. L. A. ROGERS, director of the research laboratories of the U. S. Bureau of Dairy Industry, who, on July 1, completed twenty-five years of continuous service in the Department of Agriculture, was guest of honor at a dinner given at the Cosmos Club on the evening of March 3. The occasion was the formal presentation of the book entitled "Fundamentals of Dairy Research," written by Dr. Rogers's associates and dedicated to him in recognition of his leadership and his many outstanding scientific contributions and as an expression of the high regard in which he is held.

A WILLIAM SNOW MILLER lectureship has been established at the University of Wisconsin Medical School by the Phi Beta Pi fraternity in connection with the seventieth birthday of Dr. William Snow Miller, emeritus professor of anatomy at the university. Dr. T. Wingate Todd, of Western Reserve University, will discuss "The Medieval Physician" soon as the first of the series of lectures.

DR. CHARLES SHEARD, of Rochester, Minn., and Dr. Howard C. Doane, president of the Massachusetts Board of Registration in Optometry, have been selected as recipients of the first gold medals of the Distinguished Service Foundation of Optometry.

PROFESSOR C.-E. A. WINSLOW, Lauder professor of public health in the school of medicine at Yale University has been awarded the Ling medal by the Ling Foundation of Los Angeles, "in appreciation and recognition of Professor Winslow's active and unselfish work in behalf of the health progress of school children."

ON account of blindness, Professor Thomas E. Mc-Kinney, of the department of mathematics and astronomy at the University of South Dakota, will retire from service at the end of the present university year.

PROFESSOR CHARLES B. BREED, of the Massachusetts Institute of Technology, was elected president of the Boston Society of Civil Engineers at its eightieth annual meeting.

DR. L. H. ADAMS, of the Geophysical Laboratory of the Carnegie Institution, has been appointed secretary of the central petroleum committee of the National Research Council, which acts as adviser of the American Petroleum Institute in expending the funds for fundamental research on petroleum donated by Mr. John D. Rockefeller and the Universal Oil Products Company.

THE following officers were elected at the annual general meeting of the Geological Society of London, held on February 17: *President*, Professor J. W. Gregory; *vice-presidents*, Dr. F. A. Bather, Professor E. J. Garwood, Dr. E. Greenly and Mr. H. W. Monckton; *secretaries*, Mr. W. Campbell Smith and Dr. J. A. Douglas; *foreign secretary*, Sir Arthur Smith Woodward; *treasurer*, Mr. R. S. Herries.

M. MANGIN, director of the National Museum of Natural History, Paris, has been elected vice-president of the French Academy of Sciences to take the place of the late M. Henneguy.

THE Chicago Academy of Sciences has appointed Mr. Alfred M. Bailey as director. He was recently assistant on the Abyssinian expedition of the Field Museum, Chicago, and has been actively engaged in museum and field work during the past ten years.

WALLACE H. CAROTHERS has resigned his instructorship at Harvard University to accept a position with the E. I. du Pont de Nemours and Company, where he will engage in fundamental research in organic chemistry at the experimental station, Wilmington, Del.

PROFESSOR N. H. FURMAN, of Princeton University, has resumed his duties after a year's leave of absence, during which he visited university and research laboratories and chemical plants in England, France, Germany and Austria.

HUGH B. FREEMAN returned from Chile on March 10, where he has been director of the Mt. Montezuma solar radiation station of the Smithsonian Institution for the past three years. M. Keith Baughman sailed for Chile on March 15 to take up the duties of assistant to Mr. Zodtner, the present director of the Mt. Montezuma station. Mr. Baughman expects to remain in Chile three years.

DR. C. E. MYERS, professor of plant breeding at the Pennsylvania State College and Agricultural Experiment Station, will be on sabbatical leave from April 1 to August 1. During this time he will tour the South Atlantic, Gulf, Western and Northern States. He will visit a number of the agricultural experiment stations and educational institutions and also some of the leading trucking and seed-producing sections.

CHESTER WASHBURNE, geologist, of New York, returned from Venezuela in March, and has since departed for São Paulo, Brazil.

DR. CHRISTIAN POULSEN, curator of paleontology at the Mineralogical Museum, Copenhagen, has returned to Washington for three months' research work on the U. S. National Museum's early Paleozoic invertebrate fossils in connection with his studies on these same faunas from Greenland.

DR. KARL BÜHLER, of the University of Vienna, who was visiting professor of psychology at the Johns Hopkins University during the first semester, is lecturing at Harvard University during the second semester.

SIR HUMPHRY ROLLESTON, Regius professor of physics at the University of Cambridge, will be in residence at the Peter Bent Brigham Hospital, Boston, for the week beginning March 25, as the fourteenth physician-in-chief, *pro tempore*, in charge of the medical service of Dr. Henry A. Christian, Hersey professor of the theory and practice of physics at Harvard University and physician-in-chief of the Peter Bent Brigham Hospital.

PROFESSOR W. E. BRAGG, of the University of Leeds, gave a lecture at the Rockefeller Institute for Medical Research on March 19 on "The Scattering of X-rays by Atoms."

DR. E. J. LONDON, director of physiology in the University of Leningrad, will deliver the sixth Harvey Society lecture at the New York Academy of Medicine on Friday evening, April 13. His subject will be "Experimental Fistulae of Blood Vessels." DR. SIMON FLEXNER, director of the Rockefeller Institute of Medical Research, who has been chosen by the Association of American Physicians as the lecturer of the Kober Foundation for 1928, will deliver a lecture on "Obvious and Obscure Infections of the Central Nervous System" at Georgetown University.

DR. G. H. PARKER, professor of zoology and director of the zoological laboratory at Harvard University, will give a course of lectures in the graduate school of the Ohio State University from April 9 to 20. The course will consist of six lectures on organic evolution and four lectures on the animal mind.

ON March 17, Dr. C. E. Kenneth Mees, director of the Research Laboratory of the Eastman Kodak Company, Rochester, delivered an address to the Royal Canadian Institute, on the subject "The Formation of a Photographic Image."

DR. CORNELIUS C. WHOLEY delivered an address on "The Nature of Multiple Personality" before the Sigma Xi alumni association of the University of Pittsburgh on March 15. Moving pictures of a person exhibiting multiple personality were shown.

DR. C. DAVISSON, of the Bell Telephone Laboratories, New York, will address the Philosophical Society of Washington, March 31, on "Reflection and Diffraction of Electrons by a Crystal of Nickel."

DR. JEROME ALEXANDER, consulting chemist and chemical engineer of New York, recently lectured on colloid chemistry before the Baltimore section of the American Chemical Society, the Brooklyn Engineers Club and the New York Microscopical Society.

PROFESSOR EDWIN C. KEMBLE, of the Jefferson Physical Laboratory at Harvard University, addressed the Franklin Institute on March 29, when he spoke on "Recent Progress in the Interpretation of Molecular Spectra."

WILLIAM F. M. Goss, formerly professor of railway engineering and dean of the college of engineering at the University of Illinois, died on March 23 in his sixty-ninth year.

PROFESSOR GAETANO LANZA, emeritus professor of theoretical and applied mechanics at the Massachusetts Institute of Technology, died on March 21, at the age of seventy-nine years.

DR. JOHN P. MUNSON, head of the department of biology at the Washington State Teachers College, died on February 27, aged sixty-eight years.

THE death occurred on March 4, at the age of seventy-five years, of Sir Aubrey Strahan, F.R.S., lately director of the Geological Survey of Great Britain, and of the Museum of Practical Geology, London.

THE death is announced of Dr. E. J. Lesser, of Mannheim, Germany, known for his work on the carbohydrates, and of Dr. Theodore Curtius, of the University of Heidelberg, author of publications on the hydrazins.

THE sixth annual meeting of the Virginia Academy of Science will be held on May 4 and 5 at the College of William and Mary. A new section, that of geology, is to be organized at this meeting. Other sections of the academy are: astronomy, mathematics and physics, biology, zoology, chemistry, psychology and education and geology. Donald W. Davis, president of the College of William and Mary, is president of the academy.

A NATIONAL meeting on oil and gas power is being planned for June 14, 15 and 16, to be held at Pennsylvania State College. In connection with the meeting will be an exhibition—the first of its kind—of oil and gas engines, parts and accessories. It will be located in the new mechanical laboratory of the college, which is a well-lighted building with 20,000 square feet of floor space. The college is not only providing exhibition space free of charge, but is also supplying light, power, steam and compressed air in limited amount for the use of exhibitors. The technical program calls for a number of sessions on subjects of vital interest to this field of engineering. Such subjects as power economics, fuel, oil specifications, research and specialization in engine manufacturing will be discussed by prominent engineers and executives in the industry. The meeting is held jointly by the oil and gas power division of the American Society of Mechanical Engineers and the Pennsylvania State College.

In connection with the recent celebration of the twenty-fifth anniversary of the founding of the University of Porto Rico, plans were discussed for the establishment of a school of tropical agriculture. The possibilities of founding a joint school with Cornell University have been considered. Dr. Livingston Farrand, president of Cornell University, who attended the anniversary celebration, is reported to have expressed his approval of the project and has outlined the details of the institution and its requirements, financial as well as scientific and physical, stating that Cornell would need to provide at least \$1,000,000 in endowment to carry its share of the burden of the new school. A graduate school of tropical agriculture, Dr. Farrand said, would do more to increase productivity in the tropics and spread prosperity and make better living conditions in backward areas than any one other institution.

THE U. S. Coast and Geodetic Survey will in a short time put into operation at its observatory at Cheltenham, Md., the new seismometer recently developed by Dr. Frank Wenner, of the U.S. Bureau of Standards. This will be its first test at a seismological observatory. It has been operated by Dr. Wenner at the bureau during a period of four months past, during which earthquakes occurring at various parts of the earth have been recorded in a very satisfactory manner. This instrument differs in principle from others as yet in operation in this country in that the shock transmitted by the earth to the instrument is recorded not directly but through a galvanometer. This makes it possible, if desired, to place the instrument in a very small building, or in a cave if necessary, and then have the recording at a convenient building elsewhere.

THE United States government has taken up its option on 22,500 acres of forest land in the Waterville Gap of the White Mountains of New Hampshire. This virtually completes the final step in adding this area to the already extensive forest reservation in that section. With this purchase the government has a total area of nearly 750 square miles of public forest in this part of the White Mountains, which is considered one of the finest scenic sections of New England. The purchase was made at a price of \$1,050,000, and became possible through adoption of the McNary-Woodruff bill, which completed its passage through Congress March 14 carrying a \$1,000,-000 appropriation for the purpose.

A CONFERENCE on racial differences was held in Washington on February 25 and 26 under the auspices of the division of anthropology and psychology of the National Research Council, and the committee on problems and policies of the Social Science Research Council. According to *Eugenical News* the conference was called to consider the coordination and facilitation of research on problems of racial differences and racial changes; such problems as occur in connection with the Negro and the immigrant in relation to Whites and stocks of earlier introduction. The subject was opened by 20 minute addresses by Drs. Fay-Cooper Cole, T. Wingate Todd, Franz Boas, W. I. Thomas, M. J. Herskovits, Joseph Peterson, Thos. Woofter, Jr., and Raymond Pearl.

UNIVERSITY AND EDUCATIONAL NOTES

NEW endowment gifts for the University of Chicago, totaling \$208,250, have been announced by President Max Mason. They include \$50,000 for scholarships and fellowships in archeology from the estate of