members of Sigma Xi, whether delegates from chapters or not, are invited and urged to take this occasion to get acquainted with the new spirit in the organization.

SCIENTIFIC NOTES AND NEWS

THE Lalande Medal of the Paris Academy of Sciences has been awarded to Dr. Henry Norris Russell, director of the Princeton Observatory. The Janssen Medal goes to Dr. Carl Stormer, professor of pure mathematics at the University of Christiana, for his work on the aurora borealis.

Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research, New York, was elected an honorary member of the Copenhagen Medical Society at a recent meeting celebrating the one hundred and fiftieth anniversary of that body.

AT a general meeting of the Royal Scottish Geographical Society, held on November 7, the society's gold medal was awarded to Professor J. W. Gregory, University of Glasgow, in recognition of the scientific importance of results obtained by him through explorations in Spitsbergen, Australia, East Africa and southwest China.

Dr. J. Border, professor of bacteriology at Brussels, has been given an honorary degree by the University of Paris.

Dr. H. J. Kammerlingh Onnes, of the University of Leiden, celebrated on November 11 the completion of his fortieth year of service as professor of physics.

A BANQUET was tendered Dr. Calleja, professor of histology at the University of Madrid, on the occasion of his fiftieth professional anniversary.

Dr. John W. Harshberger, professor of botany at the University of Pennsylvania, has been made a member of the Swedish Linnæan Society and of the Finnish Forestry Society.

Dr. F. W. Peabody, of Boston, professor of medicine at the Medical School of Harvard University, and physician-in-chief of the Boston City Hospital, has been elected a member of the Council on Pharmacy and Chemistry to fill the vacancy caused by the resignation of Dr. C. L. Alsberg, formerly chief of the Bureau of Chemistry, Department of Agriculture, and now director of the Food Research Institute of Stanford University.

Dr. Kenyon L. Butterfield, president of the Massachusetts Agricultural College, has been reelected president of the American Country Life Association for 1922-23. C. J. Galpin, of the U. S. Department of Agriculture, is first vice-president.

THE British Institution of Civil Engineers has made the following awards for papers printed in the Proceedings for the session 1921-1922: A George Stephenson gold medal to Dr. B. C. Laws (London); Telford premiums to Professor L. Bairstow (London), Dr. A. J. Sutton Pippard (London), Mr. E. A. Cullen (Brisbane), Mr. H. H. Dare (Roseville, N. S. W.), and Mr. F. W. Stephen (Aberdeen). For papers read before meetings of students in London and the provinces the following awards have been made: A Miller prize and the James Forrest medal to Mr. F. H. Bullock (Cardiff); and Miller prizes to Mr. J. G. Mitchell (London), Mr. A. G. M'Donald (London) and Mr. Harry Wolf (Manchester).

Professor E. W. Brown, of Yale University, will be absent from New Haven until April, 1923. His address will be care of the Bishop Museum, Honolulu, H. I.

Dr. R. S. Breed, chief in research (bacteriology) at the New York State Agricultural Station, has been granted six months' leave of absence beginning on March 1, 1923, for the purpose of special study of bacteriological problems at the Pasteur Institute and of dairy sanitation in France, Denmark and Holland.

Dr. Louis I. Dublin, statistician of the Metropolitan Life Insurance Company, will deliver the third Harvey Society Lecture at the New York Academy of Medicine, on Saturday evening, December 16, 1922. His subject will be "The Possibilities of Human Life."

At the November meeting of the Society of the Sigma Xi of the University of Wisconsin, Professor Louis Kahlenberg, of the department of chemistry, delivered the address on the subject, "The separation of crystalloids from one another by dialysis."

Professor Cassius J. Keyser delivered an address on the "Mathematical obligations of philosophy and education" at the weekly convocation of Connecticut College on November 14. On December 2 he gave an address on "Mathematics and man" at the meeting of the Association of Teachers of Mathematics of the Middle States and Maryland held at Wilmington, Del.

A STATUE of Claude Louis Berthollet, the French chemist, has been erected at his birthplace, Annecy, on the occasion of the centenary of his death on November 6, 1822.

DR. ALBERT HENRY BUCK, from 1887 to 1904 professor of otology in Columbia University, a leading aurist in New York City, died on November 16, in his eighty-first year.

Dr. OSCAR HERTWIG, director of the Institute of Histology at the University of Berlin, died on October 27, aged seventy-three years.

The death is announced of Dr. Lassar-Cohn, since 1894 professor of chemistry at Königsberg.

Mr. James A. Teit, well known for his researches on the ethnology of British Columbia, died on October 30 at Merrit, British Columbia. Mr. Teit carried on researches in connection with the work of the Jesup North Pacific Expedition of the American Museum of Natural History. He contributed to the work of the Bureau of American Ethnology and to the Anthropological Department of the Geological Survey of Canada. During the last years of his life, Mr. Teit succeeded in organizing the Indians of British Columbia for the purpose of acting collectively in necessary negotiations with the Canadian government relating to questions of land holding, fishing rights and other matters concerning the life of the natives.

Professor A. V. Vassiliev, of the University of Petrograd, sends us the following note: "Professor A. A. Markov (1856-1922), emeritus professor of the University of Petrograd, member of the Russian Academy of Science,

died at Petrograd on July 27. A mathematician of world-wide reputation, Professor Markov was a graduate of the University of Petrograd, pupil and follower of Chebyshev, Korkin and Zolotarev. The main fields of his investigations were the theory of indefinite binary and ternary quadratic forms and the theory of linear differential equation (hypergeometrical equation). His brilliant achievements brought him at the age of thirty the honor of being elected member of the Russian Academy of Science. His works on the calculus of finite differences and on the theory of probabilities were translated into German and published in 1896 and 1912, respectively."

Professor Vassiliev also writes: "Professor L. A. Chugaev (1873-1922) died of typhoid fever at the city of Griazovtzy in the province of Vologda on September 23. One of the most eminent of Russian chemists, Professor Chugaev was a professor in the University of Petrograd, and director of the Institute for the Investigation of Platinum. His various articles on camphor, platinum, cobalt and nickel were published both in Russia (The Journal of the Physico-Chemical Society of Russia) and in western Europe (Journal of the Chemical Society, Zeitschrift für anorganische Chemie, etc.)."

The fourteenth annual meeting of the Paleontological Society will be held Thursday to Saturday, December 28 to 30, in the Natural Science Building, University of Michigan. The address of Charles Schuchert, retiring president of the Geological Society of America, will be delivered in the closing hour of the morning session of that society, Thursday, December 28. The address of W. D. Matthew, retiring president of the Paleontological Society, on the subject "Recent progress and trends in vertebrate paleontology" will be given at 2 P.M., Friday, December 29. The members are invited to the annual smoker at 9 P.M. Thursday and the annual dinner at 7 P.M. Friday with the Geological Society of America.

THE Eleventh International Physiological Congress will be held in Edinburgh, from July 23 to July 27, 1923, under the presidency of Sir Edward Sharpey Schafer, M.D., F.R.S. Those who desire to be enrolled as members are requested to forward their names and addresses, together with the amount of their subscription (25 shillings), to Miss Charlton, Department of Physiology, University, Edinburgh, who will send on request particulars of hotels and lodgings, and all other necessary information.

In its issue of October 28 Nature says: "In an article on Lord Inchcape's task in the Sunday Times of October 22, a former finance member of the government of India, Lord Meston, makes an alarming suggestion. Speaking of things 'useful, but not essential,' he says, "many of the research institutes and the like will come under the shears.' The illiberal spirit which inspired our domestic wielders of the axe may thus be carried by one of them to India—a country which, more than any other. perhaps, has benefited by the application of science to 'useful' purposes. The plant breeders there, alone, have literally added millions to the country's wealth; new wheats and cottons yielding 20 to 30 per cent. more than the indigenous varieties have already been successfully introduced. It must not be forgotten that, in India, the prosperity of agriculture is a fundamental element of the solvency of the government, for there, the state, as owner of the soil, takes one half of the rental value of the land. The sum thus raised approaches a moiety of the whole taxation of the country. It is to be hoped that such a suicidal policy as that indicated by Lord Meston will not be advocated by Lord Inchcape, though as a quondam member of the Geddes Committee he may be inclined to repeat its mistakes."

Dr. H. M. Quanjer, head of the Institute for Phytopathology at Wageningen, Holland, announces that an international phytopathological conference is being organized to meet in Holland in June, 1923. The committee in charge consists of Professor Westerdijk, Mr. v. Poeteren, and Dr. v. Slogteren in addition to Dr. Quanjer. A cordial invitation is extended to Americans. Detailed announcement may be expected later and meanwhile any inquiries may be addressed to Dr. Quanjer.

The program for the second annual meeting of the Science Section of the Association of Colleges and Preparatory Schools of the Middle States and Maryland held at the Tower Hill School, Wilmington, Delaware, on Saturday, December 2, 1922, at 9:45 A.M., was as follows: Address on "Science teaching in schools and colleges," Dr. Charles L. Reese, chemical director, E. I. duPont deNemours and Company. Symposium on "Outstanding Problems of the Science Curriculum" (ten-minute papers): "The present status of science in the high schools of New York City," Rosemary F. Mullen, Washington Irving High School, New York City; "The ideal science curriculum for the high school," J. M. Arthur, Tome School, Port Deposit, Md.; "The elective system and the science curriculum in the secondary school," Henry M. Snyder, Wilmington High School; "Biology in the science curriculum," Winifred J. Robinson, dean of Women's College, University of Delaware, Newark, Delaware; "The status of the American Chemical Society on the correlation of high school and college chemistry," Neil E. Gordon, University of Maryland, secretary of Chemical Education Section, American Chemical Society. Address on "The relation between science and modern religious thought, Dr. S. C. Schmucker, professor of biology, State Normal School, West Chester, Pa.

The University of Paris has published comparative statistics of students matriculated in 1921 and 1922, which are quoted in the Journal of the Medical Association. In July, 1921, the total matriculation reached 21,185 (17,993 men and 3,192 women). In 1922 the number had grown to 21,612 (18,066 men and 3,546 women), or an increase of 427 students. The department most strongly represented in 1922 was law. Then came medicine, with 4,639 students (738 women); belles-lettres, with 3,381 students (1,450 women); sciences, with 3,179 students (532 women), and pharmacy, with 743 students (234 women). The department in which the most women are enrolled is that of belles-lettres (1,450 women as against 1,931 men). From 1921 to 1922 the number of

French students at the University of Paris increased by 959, while the number of foreigners decreased by 332.

The annual report of the general progress of the British Museum and of the Natural History Museum during 1921 has been issued. Notes by Sir F. G. Kenyon and Sir Sidney F. Harmer describe the additions made to the collections and the rearrangement of rooms. During the year 901,209 persons visited the British Museum, of whom 159,177 were reading room students. Visitors to the Natural History collections in Cromwell Road numbered 479,476.

Preliminary announcements by the Australian Research Council indicate the scope of the Pan-Pacific Scientific Congress to be held in Australia in August, 1923. The program calls for organized conferences on fundamental topics in anthropology, agriculture, botany, entomology, geography, geology, geodesy and zoology. Among the discussions in geology formulated by E. C. Andrews are "Relation of coral reefs to glaciation," "Structure of the Pacific," "Mountain building and igneous intrusion," "Carboniferous and Permian stratigraphy" and "Mineral resources of the Pacific." Arrangements are being made for excursions to the desert, to the tropical jungles and to living coral reefs. By request of the Australian committee, headed by Sir T. Edgworth David, the National Research Council, which organized the First Pan-Pacific Scientific Conference at Honolulu in 1920, is cooperating to insure a profitable meeting for 1923.

REPORTS from Commander J. C. Thompson and Hans G. Hornbostel, representing the Bishop Museum, indicate successful outcome of the explorations in Guam and in the southern Marianne Islands. Much information has been obtained regarding the culture of vanished Chamorros, a flourishing race, at the time of Magellan's visit in 1521. Under the direction of M. F. Malcolm, assisted by the governor of Saipan, the remarkable ruins on the Japanese island of Tinian, visited by Anson (1749), Mortimer (1791) and Freycinel (1817), are being studied with a view to enlarging the knowledge of migration routes and inter-relations of Pacific peoples.

HARVARD UNIVERSITY has come into possession of the Farlow botanical library, one of the most valuable collections of books dealing with cryptogamic botany in the world, quarters having been provided for it which meet satisfactorily the conditions of gift contained in the will of Professor William G. Farlow, who died in 1919. Under Prorfessor Farlow's will, this collection, comprising 11,000 volumes, was given to Harvard on condition that, within three years after the testator's death, suitable arrangements should be made for placing it in fireproof quarters in proximity to the Farlow herbarium of cryptogamic plants, already owned by the university. These conditions have been met by the decision of the Harvard Corporation to house both the Farlow library and the herbarium in the Divinity Library building.

THE expedition sent last July by the American Museum of Natural History to the island of Santo Domingo to secure, if possible, specimens of the rhinoceros iguana and the giant tree frog, has returned to New York with a large collection, including over two hundred living specimens in addition to the preserved material. The expedition was financed by the Angelo Heilprin Fund and the materials which it collected will be installed in the museum's new Hall of Reptiles, at present under construction. Under the leadership of Dr. and Mrs. G. Kingsley Noble, both of the museum staff, the party crossed the entire length of the Dominican Republic while pursuing its investigations. After exploring the Espuela, an outlying mountain range in the northeastern part of the island, the expedition crossed to Constanza, in the heart of the central Cordillera. From there it pushed on to Barahona, and finally to Los Lajas on the Haitian border.

The Sigma Xi Club of Southern California held its first regular meeting in Los Angeles on the evening of October 28. About eightysix persons were present including members from numerous Southern California towns. Dr. W. L. Hardin, president of the club, presided. Professors R. A. Millikan, C. G. Darwin and Paul Epstein, of the California Institute of Technology, were guests of the club and

were elected honorary members. Professor Millikan told of the activities of the scientific committee of the League of Nations, of which he is a member, and discussed what is desirable in international cooperation in scientific matters. Professor Darwin addressed the club on "The nucleus of the atom." The following officers were elected for the ensuing year: President, W. L. Hardin, Mt. Washington, Los Angeles; vice-president, L. S. Weatherby, University of Southern California; secretary, P. W. Merrill, Mt. Wilson Observatory; treasurer, E. E. Chandler, Occidental College.

Nature notes the assignment to science of the proceeds of the first performance of a great play by a leading dramatist. The play was the tragedy "Judith," by M. Henri Bernstein, produced at the Gymnase Théatre, Paris, on October 12, before a brilliant and distinguished assembly, which comprised ministers of state and the chief social and intellectual leaders of the city. The receipts were for the benefit of the French Confederation of Scientific Societies, and amounted to about \$5,000. M. Bernstein gave his royalty as author, and Mme. Simone, who took the title part and is said to have obtained the greatest triumph of her career, devoted her fee to the same purpose.

WE learn from the Journal of the American Medical Association that the national alliance to promote an increase in population in France is planning a competitive contest with prize awards totaling 120,000 francs for the best essays setting forth the critical demographic situation and the best means of combating the danger. The first prize is 50,000 francs; the second, 10,000 francs; the third, 8,000 francs, while the balance of the 120,000 francs will be distributed in small sums. The essay which is awarded the first prize will be printed by the national alliance and 500,000 copies will be distributed throughout the country. The competitors will deal more especially with the following topics, but they will not be confined to these: (A) The evil as it exists: (1) the decrease of the birth rate in France, during the past century; the inevitable further decrease in the future if the most energetic measures are not adopted, and (2) the dangers that lurk in

the fall of the birth rate and the catastrophe that threatens not only the life of the nation but also of the individual. (B) The proposed remedies: (1) the respect due to large families and the advantages that they deserve; (2) the reforms needed to raise the birth rate—at the price of financial sacrifices, if necessary; if by the expenditure of certain sums an increase in the number of births can be brought about, no money could be better expended, and (3) instruction in the matter of the moral, social and patriotic duty of paternity and maternity—their joys and their rewards.

UNIVERSITY AND EDUCATIONAL NOTES

The University of Pennsylvania will receive \$200,000 for the establishment of a department of clinical surgery from the estate of Edmund A. W. Hunter. The bequest was made with the provision that the addition to the university be known as "The Agnew and Hunter Department of Clinical Surgery," in memory of Dr. D. Hayes Agnew and Dr. Charles D. Hunter. The latter was the son of the donor.

A FUND of \$60,000 for establishing a chair at Tulane University of tropical diseases and hygiene, and one amounting to \$30,000 for constructing an isolation building for the Charity Hospital will eventually be available to these institutions under the will of the late William G. Vincent.

The trustees of Hamilton College have authorized the erection of a biology-geology and museum building to cost approximately \$225,000, and the construction of an addition to the chemistry building the estimated cost of which is \$60,000. It may be noted further that the board of trustees, by unanimous vote, with twenty-five of the twenty-eight members of the board present, authorized the fixing of four hundred as the ultimate and maximum number of undergraduates in the college, and directed that all building plans take that number into account as the total for which provision should be made.

RUTH OKEY, Ph.D., has resigned from the biochemical laboratory of the University of