

ning, in cooperation with the association, it will present as its speaker for its twentieth annual Sigma Xi Lecture Dr. Edwin P. Hubble, of the Mount Wilson Observatory, who will deliver an address on "The Expanding Universe Theory."

United Chapters of Phi Beta Kappa (December 31) on Wednesday evening will present as the speaker for its seventh annual Phi Beta Kappa lecture Dean Christian Gauss, of Princeton University, who will deliver an address on, "Can We Educate for Democracy?"

American Science Teachers Association (December 30) will hold sessions on Tuesday, the morning session jointly with the American Nature Study Society. On Tuesday noon the society will hold a luncheon at which Irving Langmuir, president of the association, will speak.

American Nature Study Society (December 30, 31) will hold four sessions for the presentation of papers and a breakfast on Wednesday morning. The session on Tuesday morning will be held jointly with the American Science Teachers Association, at which

Irving Langmuir, president of the association, will speak.

The Honor Society of Phi Kappa Phi (December 30) will hold its biennial meeting at 1:30 P.M. on Tuesday and on Wednesday morning. On Wednesday a breakfast will be held at 8:00 A.M., followed by a short business session. At 5:00 P.M. on Wednesday the society will provide a public lecture by Dr. Rufus B. von KleinSmid, president of the University of Southern California and president of Phi Kappa Phi.

Gamma Alpha Graduate Scientific Fraternity (December 30) will hold a meeting of its executive committee on Tuesday morning, its convention luncheon on Tuesday noon and a business meeting of the council and the election of officers on Tuesday afternoon.

Sigma Delta Epsilon, Graduate Women's Scientific Fraternity (December 29-January 1) will hold its national council meeting on Monday morning, a luncheon for all women in science at noon on Tuesday, a breakfast and its annual business meeting on Wednesday morning and a second national council meeting on Thursday afternoon.

OBITUARY

CHARLES PECHER

IN the death of Charles Pecher at the age of twenty-eight experimental medicine has lost a brilliant investigator who already had made important contributions in the application of nuclear physics to biology and medicine.

Dr. Pecher was born in Antwerp, Belgium, on November 26, 1913, his father being the Minister of Colonies. In 1923 he graduated from the Athenée Royal of Antwerp, and in 1939 received his doctor's degree from the University of Brussels with great distinction. From 1935 to 1939 he was laboratory assistant in physiology under Professor Rylant, and it was during this period that he did his first experimental work in biophysics. Also during this time he became interested in the biological applications of the newly discovered radioactive substances. Because of his interest in this field and because of his high standing in his class at medical school (having been awarded the Armand Kleefeld Prize, which is awarded each year to the medical student who has had the highest average in his course) he was awarded the fellowship of the Belgian American Foundation to study in the United States.

During the fall of 1939 he worked in association with Professors Edwin Cohn, Kistiakowsky and J. Wyman at Harvard, and later in 1940 he came to the Radiation Laboratory at the University of California, where he was appointed research fellow.

Because of his thorough training in both physics and medicine, and due to his industry and brilliance, he soon made important contributions in the new field of artificial radioactivity. He was instrumental in putting on a practical basis the production of large quantities of radioactive yttrium, which proved to be very valuable as a gamma ray source for radiography of metallic flaws. He added much to our knowledge of calcium metabolism and in his work using radioactive strontium he showed that strontium acts physiologically in a manner similar to calcium in the animal body and because of its localization in bone is now being used experimentally in the treatment of neoplastic disease of bone. Mrs. Pecher assisted him in some of this work. At the time of his death, Dr. Pecher was serving with the Belgian Army in Canada, preparatory to embarkation to join the Belgian Army in England, and his death cut short the life of a young man who already had made lasting and worthwhile contributions to science.

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DEATHS AND MEMORIALS

DR. KENNETH DANIEL BLACKFAN, since 1923 professor of pediatrics at Harvard University, died on November 29 at the age of fifty-eight years.

WALTER MATHEW DUNAGAN, associate professor of theoretical and applied mechanics at the Iowa State

College, died on November 24 at the age of forty-seven years.

DR. ROBERT RANDOLPH JONES, JR., assistant professor of surgery at Duke University, was shot and killed on November 18 in the private clinic at Duke Hospital at Durham, N. C. It is reported in the press that Dr. Jones had performed a plastic operation on the assassin about six months ago, but that the operation had been unsatisfactory to the patient and he had brooded over this until he became obsessed with the delusion that he had been mistreated. Dr. Jones was fifty-three years old.

FRIENDS at the University of Edinburgh of Dr. Stefan Kopeć, professor of biology in the University of Warsaw, have received word of his death from Polish sources. *The Ameryka-Echo*, a Polish newspaper, published in Chicago, carried last summer an announcement that he had been killed by the Germans. According to this announcement, Professor Kopeć was arrested with a hundred and fifty other citizens, every tenth of whom was executed. These were said to be in reprisal for the unsolved murder of the director of a Polish theater who had accepted service for German propaganda.

SCIENTIFIC EVENTS

ATKINS INSTITUTION OF THE ARNOLD ARBORETUM

ACCORDING to the *Journal* of the Arnold Arboretum, in the planting expansion program of the Atkins Institution at Soledad, Cienfuegos, Cuba, a number of palms were moved into the palm section, and several hundred shrubs and trees were transplanted into the newly acquired areas. In the additional area transferred to the garden in February, 1939, by the Soledad Sugar Company, the last cane crop has been harvested, so that all the land is now available for planting and development. Naturally with a restricted and modest income, as the planted areas are increased, a higher percentage of the income has to be used for maintenance purposes, so that the expansion of the plantings must of necessity be slow. It has been necessary to extend the nursery area, and Dr. Mangelsdorf's tropical American corn varieties being grown at Soledad have required the preparation of land for this purpose. A new entrance to the gardens was made at the corner of the recent addition below Casa Catalina, thus making the approach more direct. During the year 340 packets of seeds and 750 living plants were received and 433 packets of seeds, 46 living plants and 53 lots of cuttings were distributed. Mr. Sturrock's book on tropical fruits for southern Florida and Cuba and their uses was published through the cooperation of the Arnold Arboretum in 1940, the income from sales being impounded for the use of the Atkins Institution. About forty individuals enjoyed the hospitality of Harvard House for varying periods of time, the most that have taken advantage of the facilities available in any one year since the institution was organized. These included fourteen representatives of Harvard University working on various botanical and zoological problems. Other educational institutions represented include Wilson College, the University of Colorado, the University of Ohio, Skidmore College, the University of

Montreal, Colegio de la Salle and the University of Havana. Other institutions and organizations represented were the Fairchild Tropical Garden, the New York Botanical Garden, Montreal Botanical Garden, the Cleveland Museum of Natural History, the Ohio Division of Plant Industry, United Fruit Company and Cuban Agricultural Experiment Station. A group of four, under the leadership of Mr. and Mrs. Warren H. Corning, representing the Cleveland Museum of Natural History, made the Atkins Institution their headquarters for about a month while collecting natural history material for that institution. Among the Harvard staff members and students were Messrs. Gunckel, Salvin, Dahl, Howard, Hodge and Godfrey, who spent extended periods in the summer of 1940 working on various botanical problems, and Messrs. Dethier and Greenway, prosecuting zoological work. An extensive series of botanical specimens representing Cuban species was presented by José Carabia. The comprehensive collecting campaign initiated by Dahl, Howard, Godfrey and Hodge in the summer of 1940 will be continued during the summer of 1941, the objective being to secure the material on which a reasonably comprehensive flora of southern Santa Clara Province may be based.

SYMPOSIA ON EQUINE ENCEPHALOMYELITIS AND MOSQUITO CONTROL

THE twelfth annual conference of the California Mosquito Control Association will be held at the University of California at Berkeley, on December 15 and 16.

Speakers and their subjects will be:

- I. *Opening Address*, President Earnest Campbell, superintendent, Contra Costa Mosquito Abatement District.
- II. *Symposium on Equine Encephalomyelitis*
 - A. *Introduction*, Professor W. B. Herms, head of