

Foundation are scheduled as follows: Dr. C. F. Kettering, of the General Motors Corporation, Detroit, Michigan; Dr. Julius Stieglitz, of the University of Chicago; Dr. James F. Norris, of the Massachusetts Institute of Technology; Dr. Gilbert N. Lewis, of the University of California; Dr. Irving Langmuir, of the General Electric Company, Schenectady, N. Y.; Professor Alfred Stock, of the Technische Hochschule, Chemisches Institut, Karlsruhe, Germany, and Professor Simon, of the University of Breslau.

THE LOWELL LECTURES

THE Lowell Institute program of free public lectures for 1931-32, the ninety-second year of the Boston foundation, is announced by President A. Lawrence Lowell, trustee, and Professor W. H. Lawrence, curator. The lectures began on October 26, and will end during the latter part of March.

According to a statement in the Boston *Evening Transcript*, there are nine courses scheduled, a total of sixty-one lectures, or about the usual number. The opening date is nearly four weeks later than the opening of the season of last year and two weeks later than the season of two years ago. Five of the lecturers are coming from abroad and two are from Harvard University.

The first course, to be given on Mondays and Thursdays at five o'clock in the afternoon, began on Monday October 26. It is by Dr. F. van Bemmelen, formerly professor of zoology at the University of Groningen, the Netherlands, on "Color and Shape in the Living World." The topics are as follows:

1. The Development of the Color-Pattern and the Veins on the Wings of Butterflies.

2. The Relations of Skin-Design between Caterpillar, Pupa and Butterfly.

3. A Natural Explanation of the Origin of Mimicry in Butterflies.

4. The General Plan of Skin-Design in Mammals.

5. The Phenomenon of Second-Self in Man, Explained by Heredity of Family Likeness.

6. The Heredity of Curly Hair in Man, Studied by Means of Portraits.

7. The Ancestral Table and the Parentela: the Two Principal Methods for the Study of Human Family Descent.

8. Sexual and Asexual Propagation, in Their Relation to the Cell Theory.

Second on the list is a course of six lectures with illustrations by Dr. W. de Sitter, director of the observatory and professor of astronomy at the University of Leiden, on "The Development of our Insight into the Structure of the Universe." This course will be delivered on Tuesdays, Fridays and Saturdays at 8 P. M., and began on Tuesday, November 3. The topics are as follows:

1. Aims and Methods of Scientific Research. The Ancients. Ptolemy and Copernicus.

2. The Birth of Modern Astronomy: Kepler, Galileo, Newton. The Eighteenth Century.

3. The Beginning of Sidereal Astronomy: William Herschel and His Successors.

4. Further Observational Advances. The Survey of the "Local System": Lifework of J. C. Kapteyn.

5. Photography and Spectroscopy. The Great Telescopes. Extragalactic Systems.

6. Relativity and Modern Theories of the Universe.

SCIENTIFIC NOTES AND NEWS

THE Nobel Prize in medicine and physiology for 1931 has been awarded to Professor Otto Warburg, head of the department of biology of the Kaiser Wilhelm Institute, for his work on cellular metabolism.

THE Perkin Medal Committee of the American section of the Society of Chemical Industry has awarded the Perkin Medal for 1932 to Dr. Charles F. Burgess, of the Burgess Laboratories, Madison, Wisconsin, for his achievements in the field of electrochemistry. The medal will be presented to Dr. Burgess at a meeting in New York on January 8.

MASANI NAGATA, the Japanese melon farm foreman and amateur astronomer, has been awarded the Donohoe Comet Medal by the Astronomical Society of the Pacific for his discovery last July.

DR. WALDEMAR C. BRÖGGER, professor emeritus of geology at the University of Oslo, Norway, will celebrate his eightieth birthday on November 10.

DR. H. FOSTER BAIN, who resigned recently as secretary of the American Institute of Mining and Metallurgical Engineers to become managing director of the Copper and Brass Research Corporation, received a gold watch from the officers and directors of the institute at the monthly dinner and meeting of the New York section at the Hotel Commodore on October 28. The speakers included Mr. J. V. W. Reyners and Mr. E. DeGolyer, past presidents of the institute, Mr. A. B. Parsons, the incoming secretary, and Dr. Bain.

AFTER a letter from Lord Beauchamp to the University of London Graduates' Association announcing his resignation as chancellor of the university had been read at a meeting of the council, it was resolved unanimously to invite Lord Moynihan, president of the Royal College of Surgeons of England, and a graduate of the university, to accept the association's nomination for the office of chancellor.

DR. F. N. GUILD, for thirty-four years professor of mineralogy at the University of Arizona, has retired from active work and has been made professor emeritus of optical mineralogy.

A DIVISION of graduate study, coordinate with the other major divisions of the institution, has been established at the Kansas State College of Agriculture and Applied Science. Dr. James E. Ackert, professor of zoology and since 1923 chairman of the graduate council, has been made dean of the new division.

DR. HORACE B. ENGLISH, formerly professor of psychology at Antioch College, has been appointed professor of psychology at the Ohio State University.

MISS KATHERINE HARING, of New Haven, Connecticut, a graduate of the class of '29 at Mount Holyoke College, has become the recipient of the Loomis fellowship of \$1,500 in chemistry at Yale University. Miss Haring is the first woman to receive this fellowship, which is made on the basis of the results of two years of graduate work.

THE Mellon Institute of Industrial Research announces the foundation of an industrial fellowship by the Green Bag Cement Company of Pittsburgh, a subsidiary of the Davison Coke and Iron Company. The investigational work of this fellowship, which will be carried on by Mr. Raymond C. Briant, will be concerned with studies of the chemical and physical properties of Portland cement and with the development of certain new cement products.

DR. WALTER B. CARVER, professor of mathematics at Cornell University, will become editor-in-chief of the *American Mathematical Monthly*, beginning in January, 1932.

DR. CLARENCE O. CHENEY, formerly superintendent of the Hudson River State Hospital at Poughkeepsie, N. Y., has been appointed director of the New York State Psychiatric Institute. He succeeds Dr. George H. Kirby, who recently retired.

DR. GUY R. STEWART has been appointed senior forest ecologist with the U. S. Forest Service, and is attached to the Northeastern Forest Experiment Station at Amherst, Massachusetts. He is project leader on an ecological study of the factors associated with the success or failure of forest plantations in the northeastern United States.

DR. GEORGE GRANT MACCURDY, director of the American School of Prehistoric Research, represented Yale University at the celebration of the fiftieth anniversary of the opening of the Natural History Museum Building, held in the museum, South Kensington, London, on September 29 and 30, 1931.

DR. JOHN RICE BALL, associate professor of geology and paleontology in Northwestern University, is spending a sabbatical year abroad. He will devote a large part of his time to a study of the Silurian formations and to the museums which contain considerable collections of Silurian fossils.

DR. WORTH H. RODEBUSH, professor of physical chemistry at the University of Illinois, recently returned from a summer trip through Europe. Most of his time was devoted to visiting universities in Germany and other countries.

DR. MATILDA MOLDENHAUER BROOKS, research associate in biology at the University of California, has returned from the South Seas, where she spent several months on scientific research under a grant from the Bache fund of the National Academy of Sciences.

IN announcing in *SCIENCE* for October 16 the appointment of Dr. Louis B. Slichter, of the California Institute of Technology, as associate professor at the Massachusetts Institute of Technology, it should have been said that it was of geophysics in the department of geology.

ON October 18, at the Auditorium Hotel, Chicago, Dr. E. H. Volwiler, chief chemist of the Abbott Laboratories and former chairman of the Chicago section of the American Chemical Society, was guest of honor and speaker of the evening at the regular monthly dinner meeting of the Chemistry and Physics Society of De Paul University. Dr. Volwiler selected for his topic "Chemistry and its Relation to Medicine."

DR. E. D. ADRIAN, fellow of Trinity College, Cambridge, and Foulerton research professor of the Royal Society, will deliver the second Harvey Society lecture at the New York Academy of Medicine, on November 19. His subject will be "The Messages in Sensory Nerve Fibers."

THE twelfth Pasteur lecture of the Institute of Medicine of Chicago will be given on November 27, at the City Club, Chicago, by Dr. Rufus I. Cole, director of the Hospital of the Rockefeller Institute for Medical Research. Dr. Cole will speak on "The Nature of Pneumonia."

DR. WILLEM DE SITTER, director of the Leiden Observatory, gave a series of three lectures at the University of Pennsylvania, on October 19, 20 and 21, on "The Extent of the Universe." These lectures were made possible by the Tobias Wagner Fund, devoted to lectures on astronomy. Dr. de Sitter delivered an address on "The Origin of the Planetary System" at a joint meeting of the Washington Academy of Sciences and the Society of the Sigma Xi in Washington on October 26.

THE Mineralogical Society of Southern California was formed recently and held its first meeting on June 23 at the Pasadena Library, with an attendance of 175. The following were elected to hold office until June, 1932: *President*, Mr. John A. Renshaw; *vice-president*, Mr. W. S. Morton; *secretary*, Mr. Edwin Van Amringe; *treasurer*, Miss Helen Fowler.

A SYMPOSIUM on poliomyelitis, sponsored by the New York state department of health and a group of pediatricians from New York State and adjacent territory in Canada, will be held in the auditorium of the College of Pharmacy, in Albany, on Thursday, November 12, at 10:00 A. M. The program, which was arranged by Dr. H. L. K. Shaw, program chairman for the pediatricians, and Dr. Thomas Parran, Jr., state commissioner of health, will include addresses by a number of experts in poliomyelitis control and research. Among the speakers are Commissioner Parran, Dr. Lloyd W. Aycock, director, Harvard Infantile Paralysis Commission; Dr. George Draper, professor of clinical medicine, Columbia University; Dr. William H. Park, director, bureau of laboratories, New York City department of health; Professor J. G. FitzGerald, director, Connaught Laboratories, University of Toronto, and Dr. Simon Flexner, director, the Rockefeller Institute for Medical Research. In view of the recent epidemic of poliomyelitis and the wide-spread interest it aroused, it is believed that this symposium will be of special value in summarizing present knowledge of the various phases of the subject. The district consultants in poliomyelitis, health officers and physicians are cordially invited to attend.

SECRETARY OF AGRICULTURE ARTHUR M. HYDE was the principal speaker and guest of honor at the opening of the Florida Citrus Products Laboratory of the Bureau of Chemistry and Soils at Winter Haven on October 23. The buildings, grounds and certain other facilities required for the station were furnished by the citrus interests of Florida, in accordance with a proviso in the appropriation act which provided federal funds for the laboratory's work. The laboratory was dedicated at a luncheon given by the city of Winter Haven and its chamber of commerce. Representative H. J. Drane, of the first congressional district of Florida, presided. Following the address by Secretary Hyde, addresses were made by Dr. Henry G. Knight, chief of the U. S. Bureau of Chemistry and Soils; Dr. W. W. Skinner, assistant chief of the chemical and technological research unit of the bureau, and Dr. F. C. Blanck, chief of the food research division of the bureau. The department officials explained the functions of the laboratory and the relation of the research work of the department to the citrus industry.

THE eleventh annual meeting of the highway research board, National Research Council, will be held on December 10 and 11, in Washington, D. C. The meetings will be in the auditorium of the National Academy of Sciences. The sessions will be devoted to discussions of reports of research activities in relation to highway finance, transportation, design, materials and construction, maintenance and traffic.

AN International Federation of Societies of Tropical Medicine and Hygiene has been organized in Paris. The president is Professor C. Achard, and the secretary general is Dr. M. Zeitoun. This federation is intended to include the societies of tropical medicine and hygiene throughout the world and is for the purpose of collaboration and coordination of study and research in these subjects. Colonel Charles F. Craig, professor of tropical medicine and director of the department of tropical medicine at the School of Medicine, at Tulane University, of Louisiana, has been elected a member of the international council of the federation and secretary general of the commission for scientific study of tropical diseases. The American Society of Tropical Medicine has been invited to become a member society of the international federation.

IN recognition of its work in forest research, the school of forestry of the University of Idaho has been elected to membership in the International Union of Forest Research Organizations. Notification came from Dr. Sven Petrini, the secretary-general at Experimentalfaltet, Sweden. The International Union was established in 1929 and has as its aim the promotion of international cooperation in the various branches of forest research. It comprises more than 80 forest research organizations in 30 countries. Seven other institutions in the United States in addition to the Idaho School of Forestry now belong to the union.

COLBY COLLEGE has received \$250,000 under the will of Professor Julian D. Taylor under the condition that the college raise the balance of a \$3,000,000 fund.

DAMAGES of \$390,000 have been awarded the trustees of Boston University for the taking of about 130,000 feet of land along the Charles River, Bay State Road and Chilmark Street, Boston, for the purpose of building a state highway along the river bank. A jury in the Suffolk Superior Court made the award.

THE committee on drug addiction of the National Research Council has granted the sum of \$14,220 for research work to be conducted at the University of Michigan during the present academic year. This is an increase of \$4,020 over the amount allocated for

1930-31. The work is to be carried on as previously under the direction of Dr. C. W. Edmunds and Dr. Nathan B. Eddy.

THE government of Manitoba has awarded a contract for the erection of the new science building of the University of Manitoba. A Winnipeg firm of contractors is to construct the building at a tendered price of \$536,197 for all stone construction.

THE new Harvard astronomical observing station will be built on the highest point between Mount Wachusett and the sea, on Oak Ridge, Harvard, Massachusetts, twenty-seven miles northwest of Cambridge. The land was given to the university by Mr. and Mrs. Alfred C. Fuller, of Belmont. Construction will begin early in the spring, according to an announcement by Dr. Harlow Shapley, director of the observatory. At this station the new 60-inch reflector telescope, the largest astronomical instrument in the East, will be the most important part of the equipment. Five or six of the observatory's other photographic telescopes will also be moved from Cambridge to the new station.

A MODERN dormitory for animals has been completed at Wellesley College. In the new zoology unit there is a fully equipped vivarium, containing airy rooms for the small animals and capacious aquariums and frog and turtle tanks. The animal rooms are separate, insuring complete seclusion. From each room a trap door leads to an outside runway, and these inclosures are separated from each other by concrete walls that extend eight feet underground to prevent burrowing. Each room has two doors, one of glass, the other of wire. The floors are of tile and the walls of concrete, to insure sanitary living conditions. There is a small kitchen where the animals' food is prepared. The department has its own greenhouse in which to raise fish foods and plants for the lice used in experiments. Everything has been done to assure the comfort of the animals while they are awaiting experimentation. The vivarium has eight small aquariums, open on three sides, and two large ones, open on all four sides. For the fish that need fresh water, lake water has been pumped from Lake Waban. Salt water has been stored in the basement for the ocean fish.

ACCORDING to a press report, Dr. George Gaylord Simpson, head of the Scarritt Patagonian expedition, returned on October 28, on the Munson liner, *American Legion*, after an absence of more than a year spent studying fossil mammals in the lower region of Patagonia. Although some of the specimens had been sent up previously for mounting at the American Museum of Natural History, Dr. Simpson said that others would be forwarded later by the government of Argentina. Dr. Simpson left New York in August, 1930,

but only seven months were devoted to collecting specimens, as he had spent several months lecturing at the museum in Buenos Aires. Dr. Simpson was accompanied on the expedition by Mr. Coleman S. Williams of the museum staff, who returned to New York a few weeks ago. The area traversed by the expedition included 5,000 square miles inland from the base camp at Comodoro Rivadavia, which was reached by oil tanker from Buenos Aires.

AN expedition in the interest of fifteen small museums, of which Captain Harry Carpelan is in command, sailed from New York on October 1. The expedition is to cost more than \$330,000 and is to be financed by a group of wealthy persons from various parts of the United States. The cruise will be made in a four-masted schooner with auxiliary motors. The itinerary will include Porto Rico, Haiti, the Galapagos, the Marquesas, Samoa, Society and other Pacific islands, Australia, New Caledonia, the New Hebrides, Dutch New Guinea, Borneo, Java, Sumatra, Siam, French Indo-China and the Hawaiian Islands. The voyage will end in Los Angeles in 1933. Those to make the trip, numbering about thirty-five, include several anthropologists, an ornithologist, an ichthyologist, an oceanographer, a zoologist, a sculptor, several painters, photographers and sound-motion picture operators. One representative will be sent by each of the museums to participate.

EXPLORATION work by Mr. A. F. Moore, of the Astrophysical Observatory, Smithsonian Institution, who is in South West Africa studying sky conditions, has been hindered by many obstacles. The *U. S. Daily* states that Mr. Moore spent about two weeks on the summit of Lord Hill, about 60 miles east of Keetmanshop, South West Africa. Employing instruments for measuring atmospheric humidity and intensity of solar radiation, he has made daily observations, making notes also of the visible appearance of the sky. Great difficulties have been encountered. Mountains there are inhabited only at their bases, where natives live. In their upper regions they are trackless and nearly inaccessible, in some cases rising almost perpendicular, making ascent almost impossible. The observatory's permanent observation peak in that country is Mount Brukkaros. Mr. Moore plans to record observation conditions on other peaks, compare them to those on Brukkaros, with a possibility of finding a better observation station. On Lord Hill, Mr. Moore finds that the haze and dust seldom reaches the summit, and as a result, observations may be made when they would be impossible from a lower elevation. Lord Hill is more than 7,000 feet high. After he has worked in the Lord Hill district, Mr. Moore will go north to Windhoek, visiting Mounts Brandberg and Gansberg on his return to Brukkaros.