Association Affairs

Gordon Research Conferences

June 18–August 31, 1951

Since the schedule of conferences was announced on April 27 (*Science,* **113,** 496 [1951]), detailed programs for the conferences on Coal and on Proteins and Nucleic Acids have been completed. Inquiries concerning attendance, registration, and housing should be addressed to W. George Parks, Colby Junior College, New London, N. H. In the case of the Coal Conference, communication by telephone or telegraph is advised. Both conferences will be held at New Hampton School, New Hampton, N. H.

COAL

G. D. Creelman, *Chairman*

June 25: L. J. E. Hofer, "Structure of Coal, X-Ray and Infrared Measurements;" R. B. Anderson, "Colloidal Properties of Coal, Surface, Porosity, State of Water."

June 26: G. H. Cady, "Coal Petrography;" F. W. Smith, "Thermal Decomposition;" H. H. Lowry, "Solvent Extraction."

June 27: M. Orchin, "Hydrogenation;" H. C. Howard, "Oxidation."

June 28: Coal Gasification—C. C. Wright, "Oxygen Exchange Reaction in Coal Gasification;" H. C. Hottel, "Kinetics of Carbon Gasification Reactions."

June 29: H. H. Lowry, "Significance of Chemistry in Utilization of Coal."

PROTEINS AND NUCLEIC ACIDS[1]

Ralph W. G. Wyckoff, *Chairman*; Kurt G. Stern, *Vice Chairman*[2]

August 27: Nucleic Acid Structure—*Chairmen*: Max Lauffer and M. Stacey.

Erwin Chargaff, "Problems in the Structure and Function of Nucleic Acids;" M. Stacey, "Nature of the Linkages in Desoxypentose Nucleic Acid;" Gerhard Schmidt, "The Enzymatic Hydrolysis of Ribonucleic Acids and its Bearing on the Concepts of their Structure;" Stig Claesson, "Recent Advances in Adsorption Analysis;" Waldo Cohn, "The Application of Ion Exchange to the Problem of Nucleic Acid Structure and Composition;" H. S. Loring, "The Isolation, Properties, and Significance of the Isomeric Nucleotides from Yeast Ribose Nucleic Acid."

August 28: Proteins—*Chairmen*: Kurt G. Stern and Paul Doty.

K. Linderstrom-Lang, "The Volume Change in Proteolysis;" F. J. W. Roughton, "Recent Experiments in the Mechanism of Reaction of Hemoglobin with Oxygen and Carbon Monoxide and their Bearing on the Problem of Protein Individuality;" F. Sanger, "The Structure of Insulin;" J. C. Kendrew, "The Structure of Hemoglobin and Myoglobin;" D. Harker, "Remarks on the Problem of Protein Structure from the Point of View of X-Ray Data."

August 29: Virus Metabolism—*Chairmen*: H. Neurath and J. P. Greenstein.

F. W. Putnam, "Precursors of Bacteriophage Nucleic Acid and Protein;" S. J. Singer, "Studies of the Proteins of Normal and Virus-infected Plants and Bacteria;" C. G. Hedén, "The Nucleic Acid Metabolism of the Host Cell in Tracer Studies on Bacteriophage Production;" L. W. Labaw, "The Origin of Phosphorus in *E. coli* Bacteriophages."

August 30: Physical Studies on Viruses—*Chairman*: Ralph W. G. Wyckoff.

Max A. Lauffer, "The Hydration of Viruses;" Howard K. Schachman, "Studies on the Degradation of Tobacco Mosaic Virus;" M. H. F. Wilkins, "Physical Studies on Nucleic Acids and Crystals of Tobacco Mosaic Virus Nucleoprotein."

Radiation Effects—*Chairman*: Alexander Hollaender.

J. Weiss, "Effects of Ionizing Radiations on some Substances of Biological Importance;" Ernest Pollard, "The Action of Primary Ionization on Enzymes and Viruses."

August 31: Radiation Effects (cont.)—*Chairman*: Elkan R. Blout.

J. A. V. Butler, "The Action of X-Rays and some Radiomimetic Chemicals on Desoxyribose Nucleic Acid;" Virgil L. Koenig, "Physicochemical Changes in Proteins and Nucleic Acids upon Irradiation."

[1] Through the generosity of the Rockefeller Foundation, it has been possible to invite a number of distinguished workers from abroad and thus to maintain the international viewpoint established last year.

[2] Inquiries dealing with the program and related matters should be sent to Dr. Kurt G. Stern, Polytechnic Institute of Brooklyn, 99 Livingston St., Brooklyn 2, N. Y.

Meeting of the Southwestern Division

C. W. Botkin

New Mexico College of Agriculture and Mechanical Arts, State College, New Mexico

THE 27th annual meeting of the Southwestern Division of the AAAS was held in El Paso April 29–May 3, with Texas Western College as host. The first meeting of the division was held in El Paso thirty years ago, with 70 registrants and 27 papers. At the 1951 meeting 200 registered, and 96 papers were presented. The Texas and New Mexico Academies of Science, the Herpetologists League, and the El Paso Archaeological Society were also participants in the program.

Papers in the biological sciences made up half the sectional programs. The botanists held two separate sessions and a third jointly with the zoologists who, in addition, held one session and two joint sessions with the Herpetologists League. Although many of the papers were concerned with problems peculiar to the Southwest, there were also subjects of wide scientific interest in each of these fields.

The three sessions in the social sciences were concerned, for the most part, with recent archaeological studies in the Southwest. Jesse L. Nusbaum, of the U. S. Department of the Interior, Santa Fe, gave a background report on the conservation of antiquities,

which was followed by the papers of Fred Wendorf, of the Laboratory of Anthropology, Santa Fe, on the Pipe-Line Archaeological Project, and Erik Reed, of the National Park Service, Santa Fe, on the River Basin Salvage Program. The pipe-line cross section through the Navajo country disclosed 146 sites, 15 of which have been excavated. The materials recovered date from A.D. 600 to 1200. Frank Hibben and associates, of the University of New Mexico, reported on excavations of sites along the Rio Grande, where Ancient Man appears to have been an inhabitant as long ago as late Pleistocene.

The physical science program opened with a symposium on polarography, which covered applications ranging from the analysis of ore and determination of complex ions to studies in nerve metabolism and tests for syphilis. The later sessions included a wide variety of subjects. H. A. Winkler, of the New Mexico School of Mines, proposed a method and apparatus for determining the energy dissipated at interfaces, for use in studying high-frequency seismic energy transmission. C. S. Yu, of the High Altitude Laboratory, Boulder, reported on the Solar Flare Patrol in the Sacramento Mountains, for which a camera was devised to take sun photographs automatically every five minutes. A knowledge of sun flares is important, since they are associated with fade-out in radio and radar. Data were presented correlating low protein and increased sulfur-containing amino acids of aortic tissue with the degree of arteriosclerosis (R. D. Strickland, E. L. Martin, and J. L. Riebsomer, of the University of New Mexico).

A high light of the meeting was the Monday luncheon talk on "The Earth and Man Today," by Kirtley F. Mather, president of the AAAS, who spoke optimistically of the future as far as resources and science are concerned, but cautioned that "the man of science joins the man of religion in asserting that intelligence is not enough. To the intelligence of science must be added the good will and discerning love of religion. Only thus can mankind adjust human activities and relationships to the new conditions of this age."

Tuesday evening at the annual dinner, C. W. Botkin, retiring president of the division, spoke on "Contributions of the Desert to Human Welfare." He pointed out that desert conditions are responsible for a high mineral fertility in arid soils, for concentration and conservation of enormous reserves of many different salts, and for favorable conditions for the development of early civilization and of the important religions. Also they have favored research in archaeology, astronomy, biology, geology, meteorology, jet propulsion, and a field that needs much further study —that of solar energy.

Wednesday afternoon was given over to a general symposium on "Potentialities of Desert and Arid Lands." H. L. Schantz, of Santa Barbara, Calif., served as chairman. The climate of the Southwest was reviewed by Ernst Antevs, of Globe, Ariz., and H. J. Dittmer, of the University of New Mexico, discussed the past and present vegetation. Improvement of plants and arid lands was presented by W. G. Whaley, of the University of Texas; revegetating and reseeding were considered by J. E. Fletcher, of the Soil Conservation Service, Tucson; and control of plants encroaching on grasslands was presented by G. E. Glendening of the U. S. Forestry Service, Tucson. Methods of spreading and utilizing natural rainfall comprised the subject of a paper by D. S. Hubbell, of the Soil Conservation Service, State College, N. M. The many and varied products that may be obtained from desert plants were not only discussed but also exhibited by P. C. Duisberg, of the New Mexico College of A. and M. A.

The desert theme was continued Wednesday evening in the John Wesley Powell Memorial Lecture on the "Nature and Question of Rainmaking," by E. J. Workman, president of the New Mexico Institute of Mining and Technology. Dr. Workman stated that the theories regarding the nature of clouds and seeding had been oversimplified, and he stressed the desirability of more basic research. Vincent Schaefer, of the General Electric Laboratories at Schenectady, led the discussion. He stated that the investigation was being extended geographically and that the value of artificial rainmaking would be determined in the next two years.

A most enlightening lecture illustrated by movies and slides was given by C. M. Pomerat, of the Medical Branch, University of Texas, on the use of tissue cultures in experimental biology and medicine. This visualization of cellular activity gave some comprehension of the fundamental activities of living cells—namely, growth, multiplication, mitochondria, mitosis, and activities of the nucleus.

Other high lights of the meeting were the dinner across the border in Juarez Monday evening, and the inspection of the White Sands Proving Grounds near Las Cruces on Thursday. The object and methods of rocket research were explained, and the equipment for firing and tracing the flight was exhibited.

Officers elected for next year are: president, Fred Emerson, New Mexico Highlands University; vice president, Edna Johnson, University of Colorado; members of the Executive Committee, C. W. Botkin, New Mexico College of A. and M. A., and A. R. Mead, University of Arizona. The next meeting will be held May 4–8 at the University of Colorado.

The **American Institute of Nutrition** at its annual meeting in Cleveland elected the following officers: president, Clive M. McCay; vice president, Paul L. Day; secretary, James M. Orten; councilor, Grace A. Goldsmith; associate editors, Alex Black, Floyd S. Daft, and Harry G. Day.

Officers for 1951 of the **Mississippi Academy of Sciences** are: president, A. B. Lewis; vice president, Clay Lyle; secretary-treasurer, Clyde Q. Sheely; editor, Ray J. Nichols; directors, C. E. Lane, William Foster, and R. R. Priddy. R. L. Caylor is AAAS representative on the Council.