

Association Affairs

The Cleveland Meeting, December 26-30, 1950

II—The Programs in Mathematics, Physics, Astronomy, and Chemistry

LAST week we described briefly some of the high lights of the **Annual Science Exposition**, which is so important a part of the Annual Meetings of the AAAS. This week we offer a preview of the scientific programs to be presented at Cleveland.

PROGRAM OF SECTION A—MATHEMATICS

Sessions 1-6. Section A will cosponsor with The Biometric Society, Eastern North American Region, the following six-session symposium on *Mathematical Biology and Biometry*:

Part I. Wednesday morning, December 27, Nicolas Rashevsky, Committee on Mathematical Biology, University of Chicago, presiding.

1. "The Kinetics of Reactions in Biological Systems." Herman Branson, Department of Physics, Howard University.

2. "On Some Thermodynamic Aspects of Stationary Systems." J. Z. Hearon, Department of Physiology, University of Chicago.

Part II. Wednesday afternoon, December 27, Leslie Nims, Biology Department, Brookhaven National Laboratory, presiding.

1. "Geometry, Statistics, Biophysics." Karl Menger, Department of Mathematics, Illinois Institute of Technology, Chicago.

2. "Applications of Random Net Theory to the Mathematical Biology of the Nervous System and to Epidemiology." Anatol Rapoport and Alfonso Shimbil, Committee on Mathematical Biology, University of Chicago.

3. "The Application of Latent Structure Analysis to Some Social Science Problems." Paul F. Lazarsfeld, Department of Sociology, Columbia University.

Part III. Thursday morning, December 28, Karl Menger presiding.

1. "Mathematical Biology of Social Phenomena." Nicolas Rashevsky.

2. "On Dominance Relations and the Structure of Animal Societies." H. G. Landau, Committee on Mathematical Biology, University of Chicago.

Part IV. Thursday afternoon, December 28, Herman Branson presiding.

1. "A Physical Theory of Decompression Sickness." Leslie Nims.

2. "Near Balance Rectangular Lattices." Boyd Harshbarger, Statistical Laboratory, Virginia Polytechnic Institute, Blacksburg.

Part V. Friday morning, December 29, Anatol Rapoport presiding.

1. "Theoretical and Experimental Aspects in the Removal of Airborne Matter by the Human Respiratory

Tract." H. D. Landahl, Committee on Mathematical Biology, University of Chicago.

2. "Two Opposite Aspects of the Dose-Frequency Curve in Radiobiology." I. Opatowski, Committee on Mathematical Biology, University of Chicago.

Part VI. Friday afternoon, December 29, Boyd Harshbarger presiding.

1. "A Formula for the Velocity of Conduction of Excitation." I. Opatowski.

2. "The Interpretation of Lethality Statistics in Terms of a Continuous Stochastic Process." George Sacher, Division of Biological and Medical Research, Argonne National Laboratory.

Sessions 7-8. Section A has arranged a two-session symposium on *Mathematics in Applied Science*.

Part I. Saturday morning, December 30, Robert F. Rinehart, Department of Mathematics, Case Institute of Technology, presiding.

1. "Operations Research and Mathematicians." Philip M. Morse, Department of Physics, Massachusetts Institute of Technology.

2. "Finite Difference Methods in the Theory of Structures." Oscar Hoffman, Department of Civil Engineering, Case Institute of Technology.

3. "Deformations and Stresses in Bourdon Tubes." Robert A. Clark, Department of Mathematics, Case Institute of Technology.

4. "Numerical Solution for Nonlinear Elliptic Partial Differential Equations." L. R. Turner, Lewis Flight Propulsion Laboratory, Cleveland.

Part II. Saturday afternoon, December 30, Sidney W. McCuskey, Department of Mathematics, Case Institute of Technology, presiding.

5. "Noncalculational Mathematics in Engineering." Brockway McMillan, Bell Telephone Laboratories.

6. "On the Use of Mappings in Designing Cascades for Compressible Flows." George R. Costello, Lewis Flight Propulsion Laboratory, Cleveland.

7. "Theory of Geodesics Applied to Electromagnetic Propagation between Curved Plates." Kaiser Kunz, Department of Electrical Engineering, Case Institute of Technology.

PROGRAM OF SECTION B—PHYSICS

Session 1. Wednesday morning, December 27, symposium on *Fifty Years of Quantum Theory*, Robert B. Brode, Department of Physics, University of California at Berkeley, presiding.

1. "Fifty Years of Quantum Theory." Karl K. Darrow, Bell Telephone Laboratories.

2. "Developments from Wave Mechanics." Edward U. Condon, National Bureau of Standards.

Session 2. Wednesday afternoon, December 27, joint symposium of Section B and Section D—Astronomy on *Fifty Years of Quantum Theory in Astronomy*, Alfred H. Joy, Mount Wilson Observatory, presiding.

1. "Atomic Spectra for Astrophysics." Charlotte Moore Sitterly, National Bureau of Standards.

2. "Interpreting Spectra of Stellar Atmospheres in Gaseous Nebulae." Lyman Spitzer, Jr., Princeton University Observatory.

3. "Energy Sources in the Stars and their Influence on Stellar Structure." Geoffrey Keller, Perkins Observatory, Delaware, Ohio.

Session 3. Thursday morning, December 28, joint symposium of Section B and Section E—Geology and Geography on *The Implications of Nuclear Phenomena in Geology*, Edward Teller, Institute of Nuclear Studies, University of Chicago, presiding.

1. "Origin of the Universe and the Earth." Harrison Brown, Institute of Nuclear Studies, University of Chicago.

2. "Geologic Processes in the History of the Earth." Patrick M. Hurley, Massachusetts Institute of Technology.

3. "Existing Distributions of Materials on the Earth." George Bain, Amherst College.

Session 4. Thursday afternoon, December 28 (will be reported next week).

AMERICAN METEOROLOGICAL SOCIETY

Wednesday afternoon, December 27, Conference of
Midwestern Meteorologists.

OAK RIDGE INSTITUTE OF NUCLEAR STUDIES JOINT PROGRAM WITH THE OAK RIDGE NATIONAL LABORATORY

Session 1. Thursday morning, December 28, William G. Pollard, Oak Ridge Institute of Nuclear Studies, presiding.

1. "The Stockpiling and Rationing of Scientific Manpower." H. D. Smyth, U. S. Atomic Energy Commission, Washington, D. C.

2. "Impact of the Developments in Atomic Energy on the Sciences." E. P. Wigner, Princeton University and Oak Ridge National Laboratory.

3. "The Role of Chemistry in the Development of Atomic Energy." J. A. Swartout, Oak Ridge National Laboratory.

Session 2. Thursday afternoon, December 28, seminar on *Ten Years of Atomic Energy—A Review of Progress*. Alvin M. Weinberg, Oak Ridge National Laboratory, presiding.

Members of the Seminar Panel: M. C. Leverett, NEPA Project, Fairchild Engine and Airplane Corporation; Philip Sporn, American Gas & Electric Service Corporation; C. G. Suits, General Electric Company; J. A. Swartout, Oak Ridge National Laboratory; E. P. Wigner; and W. H. Zinn, Argonne National Laboratory.

Among the specific topics to be discussed in this seminar will be the outlook for the development of atomic power (led by Zinn); the role of military developments

of atomic power (led by Leverett); and the question of how private industry can best participate in the development of atomic energy (led by Sporn and Suits).

PROGRAM OF SECTION D—ASTRONOMY

Session 1. Tuesday morning, December 26, contributed papers (to be announced), J. J. Nassau, Warner and Swasey Observatory, Case Institute of Technology, presiding.

Session 2. Tuesday afternoon, December 26, contributed papers (to be announced), Alfred H. Joy presiding.

Session 3. Tuesday evening, December 26, address of the retiring vice president of Section D. "Stellar Explorations with the Spectrograph." Alfred H. Joy.

Session 4. Wednesday morning, December 27. Inspection of the equipment of the Warner and Swasey Observatory, and possible session for papers.

Session 5. Wednesday afternoon, December 27, symposium on *Fifty Years of the Quantum Theory in Astronomy*; joint session of Section B—Physics and Section D—(See program of Section B.)

PROGRAM OF SECTION C—CHEMISTRY

The programs of Section C are given only in part; programs in chemistry concerned mainly with biology and medicine will appear next week.

Tours: Tuesday, December 26, will be devoted entirely to tours of industrial and academic laboratories. Of the 26 tours planned, the following will be of particular interest to chemists and physicists:

Aluminum Company of America
American Gas Association Laboratory
Case Institute of Technology
Ferro Enamel Corporation
The Glidden Company
B. F. Goodrich Company
Harshaw Chemical Company
Lewis Flight Propulsion Laboratory, NACA
Nela Park, General Electric Company
Republic Steel Company
Sherwin Williams Company
Standard Oil Company (of Ohio)
Thompson Products Auto Album and Aviation Museum
Western Reserve University

Sessions 1-2. Symposium on *Advances in Inorganic Chemistry*.

Part I. Friday morning, December 29, W. Conard Fernelius, Pennsylvania State College, presiding.

1. Introductory Remarks. W. C. Fernelius.

2. "The Newer Refractories." L. S. Foster, Ordnance Department, Watertown Arsenal.

3. "The Metallurgy of the Less Familiar Elements." B. W. Gonsor, Battelle Memorial Institute.

4. "The Chemistry of Hafnium and Zirconium." E. M. Larsen, University of Wisconsin.

5. "Recent Developments in the Field of the Rare Earths." L. L. Quill, Michigan State College.

Part II. Friday afternoon, December 29, W. C. Fernelius presiding.

1. "The Use of Magnetic Susceptibility Measurements in Inorganic Chemistry." P. W. Selwood, Northwestern University.

2. "The Importance of Trace Elements in Chemistry." Roland Ward, University of Connecticut.

3. "The Fundamental Chemistry of Glass." W. A. Weyl, Pennsylvania State College.

4. "Recent Developments in the Field of Coordination Compounds." W. C. Fernelius and B. E. Douglas, Pennsylvania State College.

Sessions 3-4. Symposium on *Forensic Science*.

Part I. Saturday morning, December 30, Ralph F. Turner presiding.

1. Introductory Remarks. Ralph F. Turner.

2. "Pathology." Alan Moritz, Western Reserve University.

3. "Pathology." Frank Dutra, University of Cincinnati, School of Medicine.

4. "Pathology." Sam Levinson, University of Illinois, College of Medicine.

5. "Chemistry and Spectroscopy." Charles Umberger, Office of the Chief Medical Examiner, Division of Laboratories, Bellevue Hospital, New York.

Part II. Saturday afternoon, December 30, Ralph F. Turner presiding.

1. "The Petrographic Aspects of Scientific Crime Detection." R. H. Jevons, Special Agent, Federal Bureau of Investigation.

2. "Ballistics." J. H. Mathews, University of Wisconsin.

3. "Toxicology." C. W. Muehlberger, State Crime Detection Laboratory, Michigan State Department of Health.

On Saturday noon, December 30, there will be a *Luncheon for all Chemists*, Edward F. Degering, Miner Laboratories, presiding. Roger Adams, Department of Chemistry, University of Illinois, and President of the AAAS, will be guest speaker.

Additional programs that will appeal to those in the

fields of mathematics, physics, astronomy, and inorganic chemistry are concerned with nuclear engineering and atomic power (Section M—Engineering); a four-session symposium on radiobiology (Section Nm—Medicine); and the annual addresses of the Scientific Research Society of America and the Society of the Sigma Xi. An outline of these and other programs will appear in subsequent issues of *SCIENCE*.

RAYMOND L. TAYLOR

Assistant Administrative Secretary

Life Members

The AAAS Membership Office, 1515 Massachusetts Ave., N.W., Washington 5, D. C., would appreciate receiving information concerning the whereabouts of the following life members. The year indicates when AAAS membership was first obtained, and the address is the last known.

Hugo Blumenthal (1916)

The Sherry Netherlands, 59th St. & 5th Ave., New York City 22

Dr. E. M. Burwash (1922)

20 Wood St., Toronto, Ontario, Canada

A.W. Elliott (1938)

Apartment 2-D, 562 W. 113th St., New York City 25

Miss Mary L. Jackson (1919)

6842 Penn Ave., Pittsburgh, Pa.

Frederick Atkins Johnston (1908)

153 St. Marks Place, New Brighton, Staten Island, N. Y.

Dr. Kwong Yung Kwang (1912)

Lincheng Mines, Lincheng, Chihli Province, Kinkwan Railway via Peking, N. China

Fred I. Lackenbach (1925)

908 Butler Bldg., San Francisco 9, Calif.

Rev. J. D. Marmor

12 E. 115th St., New York City

Dr. Shigeo Yamanouchi (1906)

Department of Botany, University of Chicago, Chicago, Ill.

