

128th Annual Meeting: Program Summary

Physics

Wednesday 27 December

Physics Research in the Rocky Mountain Area. Part I, arranged by Wayne B. Hales, Brigham Young University, who will preside. Molecular excitation of air by nuclear explosions, D. Westervelt and H. Hoerlin. Detection method for nuclear explosions in space, D. Westervelt and H. Hoerlin. Energy deposition spectrum of gamma rays in very large organic scintillators, M. Van Dilla. Magnetic resonance research, John Hale Gardner. High pressure physics, Tracy Hall. Solid state research at the Martin Company, William J. Veigele. Recent progress in wide-angle optical diffraction, W. B. Hoenig, D. H. Brownell, H. J. Woodford, W. T. Silfvast, and Franklin S. Harris, Jr. Laboratory studies on heterogenous ice nucleation, R. G. Layton, D. C. Sparks, and Franklin S. Harris, Jr.

Part II: Mario Iona, University of Denver, presiding. Scattering of an elastic disturbance by a random medium, Frank Hadsell. The University of Colorado cyclotron: department of physics: (i) general description and operational experiences during startup, D. A. Lind, J. J. Kraushaar, M. Rickey, and W. R. Smythe; (ii) magnetic field measurements and orbit calculations, D. A. Lind, M. Rickey, B. Bardin, and C. Hoot; (iii) radio frequency system, P. W. Allison, P. Henning, W. R. Smythe, and D. C. Witte. An atomic definition for the unit of time, John M. Richardson. Nuclear magnetic relaxation, Burton H. Muller. Relationship problems of altimetry, John C. Bellamy. Recent research in biochemistry: (i) studies on selenium; (ii) metabolism of lipids, Robert McColloch.

Physicists' Luncheon. Joint session of AAAS Section B-Physics and Sigma Pi Sigma, arranged by Mario Iona, University of Denver. Stanley S. Ballard, president, Sigma Pi Sigma, presiding.

On doing research with space probes and satellites, Charles P. Sonett, chief, Lunar and Planetary Sciences Program, National Aeronautics and Space Administration.

Thursday 28 December

Interdisciplinary Symposium in the Physical Sciences: Physics of the Upper Atmosphere. Joint program of AAAS Sections B-Physics and D-Astronomy, cosponsored by the American Astronomical Society, the American Geophysical Union, the American Meteorological Society, and Sigma Pi Sigma. Arranged by Stanley S. Ballard, University of Florida, and Alan H. Shapley, National Bureau of Standards, Boulder Laboratories, Boulder, Colorado. Alan H. Shapley will preside. The atmosphere above 50 kilometers, William G. Stroud. Atmospheric winds and diffusion coefficients in the 100-kilometer region, Edward Manring. The invisible aurora, Franklin E. Roach. Scatter sounding of the high atmosphere, Von R. Eshleman.

American Astronautical Society

Program Chairman: Marvin Pitkin, Martin-Denver, Denver, Colorado.

Thursday 28 December

A guided tour of the Martin Company Research and Development Facility, Waterton, and an organization meeting of the society's Rocky Mountain section of American Astronautical Society, arranged by Raymond Wiltshire, Advanced Missile and Booster Department, Martin-Denver, will be held.

Friday 29 December

Manned Lunar Flight, Session I: Lunar Space Craft. Program of the American Astronautical Society, cosponsored by the National Aeronautics

and Space Administration and arranged by George W. Morgenthauer, Space Mathematics Laboratory, Martin-Denver. George M. Low, National Aeronautics and Space Administration, presiding. Propulsion capability for lunar missions, Yuan C. Lee. Lunar space craft designs, George R. Arthur. Lunar navigation and guidance, Wilhelm Elfers. Communication and power supply aspects of lunar missions, Frederick W. Brown. Lunar landing problems, William Duke. Re-entry from lunar missions, Arthur Kantrowitz.

Session II: Physiological Factors in Manned Lunar Flight. Joint program of the American Physiological Society and the American Astronautical Society. Arranged by Robert E. Smith, University of California, Los Angeles. Loren D. Carlson, University of Kentucky, presiding. Neurophysiological aspects of space flight, W. D. Winters. Hemodynamic evaluation at null gravity, Nello Pace. Panel: Space physiologists: Their role, availability, and training; Loren D. Carlson, chairman. Panel Members: William Purdy, The Martin Company, Denver; J. H. U. Brown, National Institutes of Health; and Robert E. Smith, University of California, Los Angeles.

Session III: Lunar Environment Basing. Program of the American Astronautical Society, cosponsored by the National Aeronautics and Space Administration. Arranged by George W. Morgenthauer, Space Mathematics Laboratory, Martin-Denver. Walter Orr Roberts, National Center for Atmospheric Research and High Altitude Observatory, presiding. Lunar topography, E. Whitaker. Lunar basing, John Denike. Lunar missions, Krafft Ehrlicke. Lunar exploration vehicles and equipment, Jack Froehlich.

Luncheon. Alfred Mayo, National

Program notes for some sections ("Chemistry" and "Mathematics and Related Programs") appeared in the 27 October issue of *Science*, page 1376. Reports on other sections will appear in succeeding issues.

On page 1442 of this issue appears a coupon which readers can mail in to obtain hotel reservations for the annual meeting.

Aeronautics and Space Administration, presiding. Strategic implications of manned lunar flight, Herman Kahn, Rand Corporation, Santa Monica, California.

Banquet. Marvin Pitkin, Advanced Technology, Martin-Denver, presiding. The national and international significance of the lunar exploration program, Hugh L. Dryden, National Aeronautics and Space Administration, Washington, D.C.

Astronomy

Wednesday 27 December

Vice Presidential Address of Section D. Frank Bradshaw Wood, Flower and Cook Observatory, University of Pennsylvania, Philadelphia, presiding. Speaker: Nicholas U. Mayall, Lick Observatory, Mt. Hamilton, California.

American Astronomical Society

All program sessions of the AAS are jointly sponsored by AAAS Section D—Astronomy. Sessions for contributed papers will be held on Wednesday 27 December (morning and afternoon) and Friday 29 December.

Thursday 28 December

A demonstration of the public programs of Chamberlin Observatory, University of Denver, will be held.

Society Dinner. Speaker, Walter Orr Roberts, National Center for Atmospheric Research and High Altitude Observatory, Boulder, Colorado.

Friday 29 December

Magnetic Fields in the Solar System. Program of the American Astronomical Society, cosponsored by AAAS Section D—Astronomy. Arranged by R. Grant Athay, High Altitude Observatory, Boulder, Colorado, who will preside. The sun's magnetic field, Horace W. Babcock. Recent measurements of the solar interplanetary magnetic field, J. P. Heppner. Interplanetary magnetic fields as inferred from energetic solar particles and galactic cosmic rays, Leverett Davis, Jr. Jupiter's magnetic field, J. W. Warwick.

Saturday 30 December

Contributed Papers. Concurrent Session for Contributed Papers.

Forthcoming Events

November

14-16. American Meteorological Soc., Tallahassee, Fla. (Executive Secretary, AMS, 45 Beacon St., Boston 8, Mass.)

14-16. Electronics Research and Engineering, 15th annual, Boston, Mass. (L. Winner, 152 W. 42 St., New York 36)

14-17. Corrosion in Nuclear Technology, symp., Paris, France. (European Federation of Corrosion, Société de Chimie Industrielle, 28 rue St. Dominique, Paris)

14-18. Puerto Rico Medical Assoc., Santurce. (J. A. Sanchez, P.O. Box 9111, Santurce)

15-17. Eastern Analytical Symp., New York, N.Y. (A. Rekus, EAS, Research Dept., Baltimore Gas & Electric Co., Pratt St., Baltimore, Md.)

15-18. Action for Mental Health, 11th annual, Miami Beach, Fla. (H. Milt, Natl. Assoc. for Mental Health, 10 Columbus Circle, New York 19)

15-18. Society of Naval Architects and Marine Engineers, annual, New York, N.Y. (W. N. Landers, SNAME, 74 Trinity Pl., New York 6)

16-18. American Psychiatric Assoc., Milwaukee, Wis. (J. D. McGucken, 756 N. Milwaukee St., Milwaukee 2)

16-18. Etiology of Myocardial Infarction, intern. symp. (by invitation), Detroit, Mich. (T. N. James, Section on Cardiovascular Research, Henry Ford Hospital, Detroit)

16-18. Southern Thoracic Surgical Assoc., Memphis, Tenn. (H. H. Seiler, 517 Bayshore, Blvd., Tampa 6, Fla.)

16-19. American Anthropological Assoc., Philadelphia, Pa. (S. T. Boggs, 1530 P St., NW, Washington, D.C.)

17-18. Southern Soc. for Pediatric Research, Atlanta, Ga. (W. G. Thurman, Dept. of Pediatrics, Emory Univ. School of Medicine, Atlanta)

17-31. National Soc. for Crippled Children and Adults, annual conv., Denver, Colo. (NSCCA, 2023 W. Ogden Ave., Chicago 12, Ill.)

19-22. International College of Surgeons, Western regional, San Francisco, Calif. (W. F. James, 1516 Lake Shore Drive, Chicago 10, Ill.)

22-27. Automation and Instrumentation, 5th conf., Milan, Italy. (Federezione delle Societa Scientifiche e Tecniche di Milano, via S. Tomaso 3, Milan)

22-1. Radioisotopes in Animal Biology and the Medical Sciences, conf., Mexico City, D.F. (International Atomic Energy Agency, 11 Kärntner Ring, Vienna 1, Austria)

23-25. Central Assoc. of Science and Mathematics Teachers, Chicago, Ill. (J. Kennedy, Indiana State Teachers College, Terre Haute)

24-25. American Soc. of Animal Production, Chicago, Ill. (C. E. Terrill, Animal Husbandry Research Div., U.S. Dept. of Agriculture, Beltsville, Md.)

24-25. National Council for Geographic Education, Philadelphia, Pa. (L. Kennamer, Dept. of Geography, Univ. of Texas, Austin)

25-26. American College of Chest Phy-

sicians, annual interim session, Denver, Colo. (M. Kornfeld, ACCP, 112 E. Chestnut St., Chicago 11, Ill.)

26. Medical Aspects of Sports, 3rd natl. conf., Denver, Colo. (F. V. Hein, AMA Committee on the Medical Aspects of Sports, 535 N. Dearborn St., Chicago 10, Ill.)

26-1. American Soc. of Mechanical Engineers, winter, New York, N.Y. (L. S. Denegar, ASME, 29 W. 39 St., New York, N.Y.)

26-1. Radiological Soc. of North America, annual, Chicago, Ill. (R. P. Barden, 713 E. Genesee St., Syracuse 2, N.Y.)

27-28. Agricultural Meteorology, 4th conf., St. Louis, Mo. (K. C. Spengler, American Meteorological Soc., 45 Beacon St., Boston 8, Mass.)

27-29. American Soc. of Hematology, annual, Los Angeles, Calif. (J. W. Rebuck, ASH, Henry Ford Hospital, Detroit 2, Mich.)

27-30. American Medical Assoc., Denver, Colo. (F. J. L. Blasingame, 535 N. Dearborn, Chicago 10, Ill.)

27-30. American Soc. of Agronomy, jointly with Crop Soc. of America, Council on Fertilizer Application, and Soil Science Soc. of America, St. Louis, Mo. (ASA, 2702 Monroe St., Madison, Wis.)

27-30. Entomological Soc. of America, Miami, Fla. (R. H. Nelson, 4603 Calvert Rd., College Park, Md.)

29-1. Communication Wires and Cables, symp., Asbury Park, N.J. (H. Kingsley, U.S. Army Research and Development Laboratory, Fort Monmouth, N.J.)

29-1. Western Surgical Assoc., San Francisco, Calif. (W. W. Carroll, 700 N. Michigan Ave., Chicago 11, Ill.)

30. American Geographical Soc., New York, N.Y. (C. W. Bastable, Columbia Univ., New York 27)

30-1. Conference on Graduate Medical Education, Philadelphia, Pa. (P. Nemir, Jr., Dean, Graduate School of Medicine, Univ. of Pennsylvania, Philadelphia)

30-1. Vehicular Communications, Minneapolis, Minn. (J. Kahnke, Minneapolis-Honeywell, Aero Div., 1541 Edgewater Ave., St. Paul 13, Minn.)

30-2. Purest Substances in Science and Technology, intern. symp., Dresden, Germany. (Sekretariat, Chemische Gesellschaft in der Deutschen Demokratischen Republik, Unter den Linden 68/70, Berlin W.8, Germany)

December

1. Symposium on Insulin, New York Diabetes Assoc., New York, N.Y. (New York Diabetes Assoc., 104 E. 40 St., New York 16)

1-2. Linguistic Circle of New York, 7th annual conf., New York, N.Y. (L. Urdang, Random House, Inc., 501 Madison Ave., New York 22)

2. International College of Surgeons, intern. executive council, Chicago, Ill. (H. E. Turner, 1516 Lake Shore Dr., Chicago)

2. New York State Registry of Medical Technologists, annual seminar, New York, N.Y. (S. H. Keeling, 1719 Midland Ave., Syracuse, N.Y.)

(See issue of 20 October for comprehensive list)