Seventh Cleveland Meeting

Additional program notes, hotel headquarters, and housing for the Cleveland meeting.

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The preliminary announcement of the seventh Cleveland meeting of the AAAS, to be held 26-30 December 1963 [Science 140, 907 (24 May 1963)], was principally an outline of the many sessions of the 20 AAAS sections and of some 70 participating organizations. It was apparent not only that this year's meeting in downtown Cleveland will be well balanced in its coverage with every principal field of science well represented—but also that the programs, including the special sessions, will be particularly attractive. Since virtually all the sessions will be held in one or another of four large hotels located within walking distance of each other, the meeting will also be a con-

Additional details of the program of this 130th AAAS meeting have been received since publication of the preliminary announcement. In several instances symposia have been expanded, speakers of prominence have accepted invitations, and program chairmen have raised their original attendance estimates. The following supplementary information about various programs can be announced at this time.

Special and General Sessions

26 December, evening. AAAS board member Mina Rees will preside at the general session "Moving Frontiers of Science," part I, at which Andrew M. Gleason and Gordon J. F. MacDonald (University of California, Los Angeles) will be the speakers. The latter, not previously announced, will speak on "The deep structure of continents and ocean basins."

28 December, afternoon. AAAS board member Bentley Glass will preside at part II of the AAAS general session, "Moving Frontiers of Science."

The speakers will be Arthur L. Schawlow (Stanford University) and Vincent G. Dethier (University of Pennsylvania).

29 December, evening. Wallace Brode will preside at the annual joint address of the Society of the Sigma Xi and the United Chapters of Phi Beta Kappa which will be given by Paul B. Sears (Yale University).

Sectional and Society Programs

Chemistry (C). Program chairman of the American Association of Clinical Chemists is Willard R. Faulkner (Cleveland Clinic). These sessions are scheduled for 27 and 28 December.

Astronomy (D). Arrangements are well under way for a symposium on "Meteorites" jointly sponsored by the sections on Astronomy (D), Physics (B), and perhaps Chemistry (C). John H. Pomeroy (Atomic Energy Commission) is program chairman and Harold C. Urey will preside; the scheduled date is the afternoon of 30 December. Additionally, Hong Yee Chiu (Institute of Space Studies) is planning a symposium on "Degenerate Stars" for the morning of 30 December. This may also be jointly sponsored by the section on Physics.

Geology and Geography (E). The program of the National Speleological Society will include a two-session symposium, "Current Speleological Research in the Karst Region of Central Kentucky," 27 December, arranged by Thomas C. Barr, Jr. (University of Kentucky).

Social and Economic Sciences (K). The program of the American Economic Association, 26 December, arranged by Bert F. Hoselitz (University of Chicago), on "The Economics of Medicine," will have as speakers Manuel Gottlieb (University of Wisconsin),

Harry I. Greenfield (Queens College), and Walter J. McNerney (Blue Cross Association, Chicago).

Dentistry (Nd). The three-session symposium on "Growth and Development of the Face, Teeth, and Jaws," arranged by Stanley M. Garn (Fels Research Institute), 26–27 December, will be followed by a symposium, "Future Research," arranged by Sholom Pearlman (American Dental Association).

Hotel Room Reservations

Beginning with this issue, the advertising pages of *Science* will carry, at frequent intervals, announcements of hotel accommodations and rates, together with a coupon to be filled out and sent, *not* to any hotel directly, but to the AAAS Housing Bureau in Cleveland. The coupon or other evidence that one is attending the AAAS meeting is necessary to secure the special flat rates.

All applications for hotel rooms will be filled in the order of receipt. Those who apply early are assured of accommodations in the hotel of their first choice. Expenses can be reduced if two people share a room, or if three or more people share a suite. Upon request, all hotels will place comfortable rollaway beds in rooms or suites, at a cost of \$3 per night.

Registration

Both the technical, or program, sessions and the special sessions are open to all interested persons. Although registration for these sessions is not mandatory, undoubtedly all who attend will wish to pay the AAAS registration fee of \$5 and thus contribute their proportionate share toward the heavy expenses of the meeting. (The registration fee for the husband or wife of a registrant, if a second General Program is not required, is \$2.)

Each registrant receives the *General Program*, convention literature, a listing in the Visible Directory of Registrants, and a convention badge; the latter assures him all privileges of the meeting. The badge is required for admission to the large-scale exhibits and the AAAS Science Theatre.

In general, since the exhibits and films are at professional and adult levels, the Exposition is open only to



The Olin Laboratory for Materials at Case Institute of Technology.



The Freiberger Library at Western Reserve University.

registrants. Children under 16 are neither registered nor admitted (except in very special instances, and then a parent or other adult must agree to accompany the child throughout).

Advance registration, which costs no more, has some decided advantages: delay at the registration desk upon arrival is eliminated; the advance registrant can determine at his leisure which events and sessions he particularly wishes to attend, since the *General Program* is sent out by first-class mail early in December; and the registrant's name is posted in the Visible Directory of Registrants as the meeting opens (the hotel room may be added later by the registrant himself).

An announcement on advance registration with a coupon, will also be found in the advertising pages of this issue and in later issues.

A detailed list of the headquarters for the various sections and participating organizations follows.

Hotel Headquarters in Detail

AAAS sections are listed alphabetically, and societies are listed alphabetically within each discipline.

Sheraton-Cleveland (1000 rooms), Public Square.

AAAS; AAAS Office; AAAS Pressrooms.

AAAS Main Registration-Information Center; Visible Directory of Registrants; AAAS Annual Exposition of Science and Industry; AAAS Science Theatre.

AAAS Business Sessions (Board of Directors, Council), General Events, and Special Sessions.

AAAS Committee on Desert and Arid Zones Research; AAAS Committee on Meetings; AAAS Committee on Science in the Promotion of Human Welfare; Science Council of Japan.

AAAS Sections B-Physics, D-Astronomy, F-Zoological Sciences, H-Anthropology, N-Medical Sciences, and Nd-Dentistry.

- (B) American Astronautical Society, Sigma Pi Sigma.
- (C) American Association of Clinical Chemists.
 - (E) National Geographic Society.
- (F) American Society of Zoologists, Herpetologists' League, Society of Systematic Zoology.

(FG) American Society of Naturalists, Beta Beta Beta Biological Society, Biomedical Information-Processing Or-

ganization, Ecological Society of America, Mountain Lake Biological Station "alumni."

- (H) American Anthropological Association.
- (N) American Dietetic Association, American Physiological Society.
- (Nd) American College of Dentists; American Dental Association; International Association for Dental Research, North American Division.
- (T) National Association of Science Writers.
- (X) American Geophysical Union, Scientific Research Society of America, Sigma Delta Epsilon, Society of the Sigma Xi, United Chapters of Phi Beta Kappa.

Statler-Hilton (1000 rooms), Euclid Avenue at East 12 Street.

AAAS Cooperative Committee on the Teaching of Science and Mathematics, AAAS Section Officers Lunch-

AAAS Sections C-Chemistry, K-Social and Economic Sciences, L-History and Philosophy of Science, M-Engineering, Np-Pharmaceutical Sciences, O-Agriculture, P-Industrial Science, T-Information and Communication, and U-Statistics.

(K) American Economic Association, American Political Science Asso-

- ciation, American Society of Criminology, American Sociological Association, Metric Association.
- (L) Philosophy of Science Association, Society for General Systems Research.
 - (M) American Society for Metals.
- (N) American Psychiatric Association.
- (Np) American Association of Colleges of Pharmacy; American College of Apothecaries; American Pharmaceutical Association, Scientific Section; American Society of Hospital Pharmacists; National Association of Boards of Pharmacy.
- (O) American Society for Microbiology.
- (P) The Institute of Management Sciences.
- (T) Society of Technical Writers and Publishers.
- (U) American Statistical Association; Biometric Society, Eastern North American Region.
- (X) National Science Foundation, Science Organization and Management Program, Office of Economic and Political Studies.

Manger (450 rooms), East 13 and Chester Streets.

AAAS Sections E-Geology and Geography and I-Psychology.

- (B) American Meteorological Society.
- (E) Association of American Geographers, East Lakes Division; Geological Society of America; National Speleological Society.

Pick-Carter (600 rooms), 1012 Prospect Avenue.

AAAS Academy Conference.

AAAS Sections A-Mathematics, G-Botanical Sciences and Q-Education.

- (A) Association for Computing Machinery, National Council of Teachers of Mathematics, Society for Industrial Mathematics.
 - (G) Botanical Society of America.
- (Q) American Educational Research Association, American Nature Study Society, Central Association of Science and Mathematics Teachers, Council for Exceptional Children, National Association of Biology Teachers, National Association for Research in Science Teaching, National Science Teachers Association, Science Service.

The following hotel provides additional convenient sleeping accommodations.

Auditorium (300 rooms), St. Clair Avenue at East 6 Street.

Guests in this hotel should register for the AAAS meeting at the Sheraton-Cleveland.

Meetings

Astronomical Constants

The system of astronomical constants was the subject of a symposium organized by the International Astronomical Union with the cooperation of COSPAR (Committee of the International Council of Scientific Unions for Space Research) and held in Paris 27–31 May 1963. Participating were 27 experts in astronomy, geodesy, and space research, from nine different countries.

The system of constants comprises

about two dozen constants, numerical values of which must be known before the apparent positions and motions of celestial objects (natural or artificial) can be calculated from the general law of gravitation. Among them are the velocity of light; the constants describing the size, shape, and gravitational field of the earth; the constants of precession and nutation, which describe the motion of the earth's axis of rotation in space; the constant of aberration; and the astronomical unit. Numerous

theoretical relations exist among the various constants, such that if the values of eight of them are known, all the others can be derived from them.

Experience has shown that the progress of astronomy is much facilitated if the calculations made in various places and at different times are based upon the same values of the constants, and equally important, if the values of the various constants used are consistent with one another. These criteria, although universally approved, have never been completely satisfied because of continual improvements in both theory and observations which produce refinements in the theoretical relations and in the numerical values.

Among the more important subjects of discussion were the recent contributions of space research to the values of certain constants. Two orders of magnitude appear to have been gained in the precision of the mass ratio of Earth to Moon, one order in the mass ratio of Sun to Venus, and two or three orders in the astronomical unit of dis-