

compared to the effects produced by the earth's magnetic field and the electrostatic forces between the ions and electrons.

Professor C. Störmer, Institutt for Teoretisk Astrofysikk, Oslo, Norway, presented a paper on "Sunlit Aurorae." The remarkable phenomenon of aurorae in the sunlit atmosphere has been observed in southern Norway on numerous occasions from 1911 to 1951. The heights of the lower border of the sunlit aurorae were found to lie between about 200 and 800 km above the earth, while summits have occasionally reached heights exceeding 1000 km. On a few occasions these aurorae have been divided with one part in sunlight and another in the earth's shadow, the two parts being separated by a dark space. The spectra of sunlit aurorae are observed to be different from those of common low lying aurorae. The intensities of the oxygen line of 6300Å and the nitrogen bands at 4278 and 3914Å are very much stronger than that of the line 5577Å. The spectral difference is usually observable visually. The color of sunlit rays is generally a feeble violet white, in contrast to the common yellow-green color of ordinary aurorae. Professor Störmer concluded by recommending the study of sunlit rays to all who are interested in the uppermost layers of the atmosphere. Professor Störmer is one of the real pioneers in the field of auroral physics, and many references were made to his invaluable contributions, both theoretical and observational. His presence at the Conference added measurably to its success.

A change from the technical meetings was provided by the dinner session on 24 July. The Conference was fortunate in having as its after-dinner speaker Professor B. W. Currie of the University of Saskatchewan, who portrayed in a very interesting and comprehensive fashion the development of "Geophysics in Canada". On the following evening, the delegates were honored at a civic banquet tendered by the Corporation of the City of London, Ontario, at which time they were given an opportunity to meet His Worship, Mayor Allan J. Rush.

A. L. Aden

Air Force Cambridge Research Center

ICSU Executive Board

Third Annual Meeting Held in Washington

The governing body of the International Council of Scientific Unions held its third annual meeting in the rooms of the National Academy of Sciences in Washington on October 16th and 17th at the invitation of Detlev W. Bronk, president of the Academy. The meeting, which was presided over by ICSU president Alexander von Muralt, distinguished Swiss physiologist and a lifelong friend of Dr. Bronk, was held to carry out current business of the Board and to prepare the way for the next General Assembly of the ICSU, which will be held next September in Amsterdam. New statutes will be adopted at that time, and new ICSU officers will be elected.

Under the heading of current business, the Council's main actions had to do with the creation of an international abstracting service to facilitate the work of existing abstracting journals, the formation of a special committee to coordinate scientific research during the Polar Year 1957-58, and the agreement of the Council to participate with Unesco in deciding upon the annual award of the Kalinga Prize for contributions toward the popularization of science.

It was decided that an International Abstracting Service (to be known as IAS) should be established under ICSU, of which abstracting journals in any part of the world may become members. The service is designed to facilitate the exchange of page proofs, summaries, scarce or nonperiodical publications, etc. between established abstracting journals.

The year 1957-58 will be a period of minimal sun spot activity, and the Council's action in this regard had chiefly to do with the possibility of planning special observations on the ionosphere in the polar regions and with special observations in the equatorial belt. Purposes of the coordination program would be primarily to study the number and nature of electrified particles emitted by the sun and to observe the circulation of air in the earth's atmosphere.

As has been announced previously, the Kalinga Prize (valued at one thousand pounds sterling annually) was established by Sir B. Patnaik of Tulsipur, Cuttack, India, for work in disseminating knowledge of science, whether by books, newspaper articles, films, radio talks, or television. The first award, for 1951, is expected to be made in the spring of 1952, and will be presented to a candidate chosen by Unesco and ICSU. The successful candidate will be invited to visit India at the expense of the Kalinga Prize Fund.

Members of the ICSU Executive Board who attended the meeting in Washington included, in addition to Professor von Muralt: H. Solberg, vice president (Norway); John A. Fleming, the retiring president (United States); F. J. M. Stratton, ICSU general secretary (Great Britain); J. N. Mukherjee (India); B. Lindblad (Sweden); B. Stromgren (Denmark); S. Chapman, and H. Munro Fox (Great Britain); G. Laclavere, R. Delaby, and P. Fleury (France); H. A. Kramers (Netherlands); and J. Murray Luck, J. Dillinger, George B. Cressey, Stuart Mudd, P. P. Ewald, H. L. Dryden, and G. Sarton (United States). Ronald Fraser, liaison officer between the International Council of Scientific Unions and Unesco, who has his office at Unesco House in Paris, also attended the meeting.

AAAS in Philadelphia

118th Annual Meeting This Month

Philadelphia, the city in which the American Association for the Advancement of Science was founded in 1848, will again be the scene of the annual AAAS meeting this year from December 26th to 31st. The program will include more than two hundred separate sessions. All eighteen of the Association's sections and subsec-

tions will participate, as will about forty organizations affiliated with the AAAS. The annual exposition of science and industry will be held in the arena of Philadelphia's Convention Hall. The meeting will for the most part be centered in Convention Hall and the adjoining campus of the University of Pennsylvania, although many of the sessions of participating societies will be held in the downtown hotels.

Section B (physics) will feature conferences on problems in pure physics and on the applications of physics; Section D (astronomy) will include four or five sessions of contributed papers and symposia; Section K (social and economic sciences) will meet jointly with Section M (engineering) in a "social physics" session; Section L (history and philosophy of science) will have a program of nine or ten sessions, including a symposium on the history of science, a joint meeting with the American Philosophical Association, and a jointly sponsored program with the Philosophy of Science Association; Section M, in addition to its joint session on social physics, will devote two sessions to nuclear engineering; and Section Q (education) will feature a symposium on the education of teachers in science.

Several science teaching societies, including the National Science Teachers Association, the American Nature Study Society, and the National Association of Biology Teachers, will hold joint sessions during the first three mornings of the meeting and parallel sessions in the afternoons. Among the twenty-five or so participants in the NSTA sessions are Richard M. Sutton of Haverford College, whose topic is reported to be "Putting Some 'Fizz' in Physics Demonstrations", and M. H. Trytten, whose subject will be "Tomorrow's Supply of Scientists, Today's High School Youth".

A conference on scientific manpower has been scheduled as one of the main events of the AAAS meeting. It will take place from Friday, December 28th, through noon on Sunday, December 30th, in the Burgundy Room of the Bellevue-Stratford Hotel in Philadelphia. Organized to bring before the Association some of the crucial problems involving scientific manpower in the fields of physical, biological, engineering and social sciences, the conference is sponsored jointly by the Engineers' Club of Philadelphia, the Engineers' Council for Professional Development, and several groups within the AAAS, including the Sections on Psychology, Social and Economic Sciences, and Engineering, together with the Association's Cooperative Committee on the Teaching of Science and Mathematics. Chairman of the conference will be Ralph M. Hogan of the Manpower Branch, Human Resources Division, Office of Naval Research. Other members of the program committee include T. A. Marshall of the Engineers Joint Council, M. H. Trytten of the National Research Council, and John A. Nagay of ONR.

On December 28th, an all-day symposium on the use of radioisotopes in cancer therapy will be presented by the Oak Ridge Institute of Nuclear Studies with the cooperation of the Isotopes Division of the Atomic Energy Commission.



Gian-Carlo Wick

Elementary Particles

Pittsburgh Physicists Hear Wick

Gian-Carlo Wick, professor of physics at the Carnegie Institute of Technology, spoke before the Physical Society of Pittsburgh on November 1st in the Mellon Institute auditorium. His subject, "Elementary Particles and Mesons", attracted a gathering of more than one hundred Pittsburgh physicists. E. Creutz, chairman of the department of physics at Carnegie Tech, introduced the speaker as one of the world's most talented theoretical physicists, being responsible for much early and important knowledge of neutron diffusion. Professor Wick, who was born in Italy, has taught at Padua, Palermo, and Rome. He came to the United States in 1946 to teach at Notre Dame University. He later joined the staff of the University of California at Berkeley before coming to Carnegie Tech earlier this year to accept a new professorship supported by the Buhl Foundation of Pittsburgh.

Professor Wick introduced the subject of elementary particles by means of a mass chart. This chart showed an analogy with line spectra—in particular, the gross and fine structure. Following this, Professor Wick gave evidence for the tau meson with the characteristic decay into three pi mesons. Evidence for K mesons was discussed along with various modes of decay.

At the meeting's conclusion, refreshments were served in the social room by members of the faculty of Carnegie Tech.

S. J. Angello
Secretary-Treasurer