

Meetings

Physics of Ionic Crystals Summary of Illinois Conference

The presence in this country of Professor Robert W. Pohl of Göttingen University was the occasion for a recent conference on the electrical and optical properties of ionic crystals. About 50 physicists and chemists visited the campus of the University of Illinois at Urbana on October 29 and 30 for discussion of recent advances in this field of research. Sponsored by the University of Illinois in cooperation with the Office of Naval Research, the program was under the joint chairmanship of Professors Frederick Seitz and R. J. Maurer.

After introductory remarks by Seitz, Professor Pohl opened the program with a discussion of recent investigations at Göttingen into the ionic conductivity of alkali halides, and the behavior of absorption bands at low temperatures. Lawson (University of Chicago) followed with a paper on the electrical conductivity of silver bromide at high pressures, and the evidence for the presence of Schottky defects.

Several papers were concerned with the properties of excitons; Apker and Taft (General Electric Research Laboratories) presented evidence on the effects of β -

centers in their photoelectric experiments, and Hebb (G.E.) discussed calculations on the interpretation of the energy distribution of the external photoelectrons. Brooks (Harvard University) presented a generalization of the exciton model of Wannier; and Heller (University of Illinois) discussed excitons in ionic crystals, with reference to their effective mass and their relation to the Lorentz "local field". Dexter (Illinois) described some calculations on capture and collision processes for excitons in the alkali halides.

Investigations of the properties of BaO were the subject of papers by Eisenstein (University of Missouri) and by Sproull and Krumhansl (Cornell University). Eisenstein described his experiments on luminescence, and Sproull the measurements at Cornell on photoconductivity and light absorption. Krumhansl reported on some cellular calculations on the energy bands in BaO by the method of Ewing and Seitz for LiF. Additional papers regarding crystals other than the alkali halides included those by Smakula (Engineering Research and Development Laboratory) on color centers in CaF_2 and quartz, by Schulman, Etzel, and Ginther (Naval Research Laboratory) on color centers in silver activated alkali halides, and by Williams (G.E.) on thallium activated KCl phosphors.

Several new properties of F and other related absorption bands were brought out in experimental papers by Markham and Duerig (Johns Hopkins Applied Physics Laboratory), Burstein (NRL), Dutton and Maurer (Illinois), Scott (Oregon State College), and Pringsheim, Yuster, and Delbecq (Argonne National Laboratory). Most of these workers described measurements in which changes in absorption bands with temperature were important.

As was to be hoped, with such a relatively small group, active discussion was contributed by most of those present. Several social gatherings encouraged informal conversations that helped make the conference of particular value to the participants.

D. L. Dexter
University of Illinois



R. W. Pohl (center), director of the Physical Institute, University of Göttingen, shown with F. Seitz (left) and R. J. Maurer of the University of Illinois, who served as joint chairmen of last October's conference on ionic crystals.

University of Illinois Newsphoto

Optical Society of America

Coming Rochester Section Meetings

The Rochester Section of the Optical Society of America usually holds its meetings on the second and fourth Tuesdays of each month at 8:00 P.M. in the Rochester Museum, 657 East Avenue, Rochester, N. Y. Members of the Institute of Physics who happen to be near Rochester at any of these times have been cordially invited to attend.

On January 8th, the Section will hold a joint meeting with the Photographic Society of America in the Dryden Theater, Eastman House, featuring addresses by J. G. Baker of Harvard College Observatory on "Recent Progress in Optical Systems for Aerial Photography and Astronomy", and J. J. Nassau of Case Institute of Technology on "Photographic Emulsions for the Study of Galactic Structure".

The speaker for the January 22nd meeting at the Rochester Museum is William H. Webb of Bausch & Lomb Optical Company, who will discuss "Progress in Optical Manufacture". The Section meets again on February 5th, the program for which is open, and on February 19th will present Edwin H. Land of Polaroid Corporation, whose subject is to be announced. The meetings in March fall on the 4th and 25th, and will comprise, respectively, a talk by Richard Tousey of Naval Research Laboratories on "Rocket Spectroscopy", and a discussion of "Modern Problems in Colorimetry" by W. D. Wright of the Imperial College of Science and Technology, London. On April 8th Frederick Seitz of the University of Illinois will consider "Mechanism of Darkening of Silver Halides", and on the 22nd a lecture is to be given by George S. Monk of Argonne National Laboratory. On May 6th, Bart J. Bok, of the Harvard Observatory, will speak on "The Center of Our Galaxy". H. W. Leverenz of the RCA Laboratories will discuss "Luminescence in Solids" at the annual dinner meeting on May 20th.

Scintillation Counter Symposium

To be Held at Bureau of Standards

A symposium on scintillation counters, which will include papers on photomultipliers and multiplier performance, liquid and crystal phosphors, time resolution, and associated electronic equipment, will be held at the National Bureau of Standards in Washington on January 29-30. It will be held under the joint auspices of the American Institute of Electrical Engineers, the Institute of Radio Engineers, the Atomic Energy Commission and the NBS. Attendance at the meeting will be limited, it has been announced. Those desiring invitations may communicate with R. W. Johnston, Radiation Inst. Branch, Atomic Energy Commission, Washington 25, D. C.

Pittsburgh Conference

On Analytical Chemistry and Applied Spectroscopy

The Analytical Chemistry Group of the Pittsburgh Section of the American Chemical Society and the Pittsburgh Spectroscopy Society have announced another Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy. Extending from March 5 through March 7, the conference will be held at the William Penn Hotel and is expected to cover all phases of analytical chemistry, emission spectroscopy, infrared and ultraviolet spectroscopy, and related fields such as x-ray, microwave and mass spectrometry. An expanded exhibit of laboratory equipment is planned, as well as a conference dinner and social hour. This year's program is in the hands of a committee consisting of J. R. Churchill, P.O. Box 772, New Kensington, Pennsylvania, chairman, Mary E. Warga, University of Pittsburgh, co-chairman on emission spectroscopy, and A. G. Sharkey, Bruceton, Pennsylvania, co-chairman on absorption spectroscopy.

Fluid Mechanics

Second Midwest Conference

The second Midwestern Conference on Fluid Mechanics will take place at Ohio State University March 17-19, 1952. A. N. Tifford of the University's aeronautical engineering department, who is general conference chairman, has announced that the meeting will cover all phases of theoretical or applied fluid mechanics. Papers to be delivered at the meeting should be submitted to the conference editorial committee. Information on the event may be obtained from the conference secretary, Geoffrey Keller, department of physics and astronomy, Ohio State University, Columbus, Ohio.

International Standards

ISO Meets in New York Next June

The International Organization for Standardization (ISO) will hold its triennial meeting at Columbia University in New York City, June 9-21, 1952, according to the American Standards Association, U. S. member of the ISO, which will act as host. Delegates from the 32 member nations will take part in the ISO General Assembly, which last met in Paris in 1949. Meetings of the ISO Council and a number of its technical committees will also be held during the two-week session.

An international clearinghouse for the national standards bodies of most industrial countries, the ISO is recognized by the United Nations as the authoritative channel through which standardization on an international level is carried out. M. Albert Coquot, president of the French Standards Association, is president of ISO. The secretary general is Henry St. Leger, with headquarters in Geneva, Switzerland.

Testing Materials

ASTM to Celebrate 50th Anniversary

The American Society for Testing Materials, officially incorporated as a national technical society in 1902, will celebrate its fiftieth anniversary during the annual ASTM meeting in New York City, June 23-27, 1952. The program will include an exhibit of testing apparatus and related equipment and a photographic exhibit, as well as numerous technical sessions and special symposia. The meeting will be held at the Hotels Statler and New Yorker. The technical program is expected to include sessions on those aspects of the following subjects which have specific reference to methods of testing: fretting corrosion; synthetic fibers; adhesives; direct shear test and exchange phenomena in solids; continuous analysis of water; plastics; conditioning and weathering; methods for determining elastic constants, light microscopy; effect of temperature; powder metallurgy; and other topics. A general committee on arrangements has been appointed for the meeting. It is headed by J. R. Townsend of Bell Laboratories, a past president of the Society.