

ionic conductivity of silver bromide were discussed by Friauf (Kansas). W. C. Shaw (Iowa State) presented results of a study of the electrical conductivity of single crystals of boron. Because of the minute size of the crystals, micro-techniques were required in the mounting of the crystals and attachment of the electrodes.

In the afternoon session A. J. Dekker (Minnesota) reviewed the theory of the interaction of slow electrons with lattice vibrations in polar and nonpolar crystals with a particular reference to the problem of the escape of secondary electrons from solids. Experiments directed towards a determination of the predominating conduction mechanism in an oxide coated cathode were described by E. Hensley (Missouri). He concluded that, for the particular cathodes studied, pore conduction was dominant for the normal range of operating temperatures. W. T. Peria (Minnesota) summarized the results of a series of experiments on the introduction of color centers into MgO single crystals. Optical absorption spectra characteristic of crystals colored by excess oxygen, excess magnesium and x-ray irradiation were shown. Data by K. C. Nomura showing the effect of excess oxygen on the secondary emission of single crystals were included.

Photoelectric emission studies on barium oxide were described by H. Phillipp (Missouri). A sensitive method of studying the time-dependent creep in metal single crystals was given by E. P. T. Tyndall (Iowa). D. Lazarus (Illinois) presented a paper "Effects of Imperfections on Nuclear Magnetic Resonance in Alkali Metals" based on experiments carried out by T. F. Holcomb and R. E. Norberg of Illinois. Lazarus pointed out that experiments of this type provide for the first time a means whereby the activation energy for the production of a defect and that associated with the motion of the diffusing atom may be separated. C. T. Tomizuka (Illinois) presented the results of a series of diffusion studies, at low concentrations, made using radioactive-tracer techniques. Comparison between the diffusion of silver in silver, cadmium in silver, indium in silver and tin in silver showed a relatively small change in  $D_0$  and in the activation energy.

Professor G. C. Danielson of Iowa State College organized the conference and was host in his home at a social gathering for the conferees on the evening preceding the meeting.

A luncheon was held in the Memorial Union Building at which Dr. F. H. Spedding, Director of the Iowa State College Institute for Atomic Research and the Ames laboratory, gave an interesting description of the program of studies on the rare earths being carried on at Iowa State College. The solid state and rare earth laboratories were open to visitors following the meetings.

The first of these conferences was held at Purdue in 1952. The interest shown in the meetings has been such that it is expected that they will be held annually. Present plans call for holding the 1954 conference at the University of Minnesota and in 1955 at the University of Missouri.

**W. G. Shepherd**  
*University of Minnesota*

## Physics of Metals

The second annual informal conference on the physics of metals was held September 3-5, at the Royal Military College of Canada in Kingston, Ontario. The program included reviews on work on fundamental electronic properties, papers and discussions on the effect of dislocations, lattice imperfections, and impurities on physical properties, and several papers on plastic deformation and recovery effects. T. A. Read of Columbia gave an evening lecture on the crystallography of phase changes in solids, and there were several additional papers on new or improved experimental techniques. In addition to workers from Canadian laboratories and industrial concerns, a number of visitors attended from the U. S. Among these were W. T. Read, Jr., and F. L. Vogel of the Bell Telephone Laboratories, who presented papers on dislocation effects, and R. E. Hoffman from the General Electric Laboratories who spoke on diffusion processes. Arrangements for the conference were carried out by James Reekie, head of the department of physics at the Royal Military College.

## Haverford College Lectures

Lectures on nuclear sciences are being given on one Wednesday evening of each month through next April at Haverford College, Haverford, Pa. Entitled the William Pyle Philips Lecture Series, the talks are held in the Common Room of the Founders Hall of the College. Lectures by Glenn T. Seaborg, Enrico Fermi, and Raymond E. Zirkle have already been presented. The remainder of the program is as follows: January 6, "The Age of the Earth", by Harrison Brown, professor of geochemistry, California Institute of Technology; February 24, "Nuclear Power Development", by Walter H. Zinn, director, Argonne National Laboratory; March 24, "Stellar Evolution", by Martin Schwarzschild, professor of astronomy, Princeton University; and April 14, "The Role of Government in Nuclear Development", by W. Sterling Cole, chairman, Joint Committee on Atomic Energy of the House and Senate.

## High-Energy Nuclear Physics

The 4th annual Rochester conference on high-energy nuclear physics will be held at the University of Rochester January 25-27 with the cooperation of the National Science Foundation and a group of Rochester industries. The purpose of the conference is to bring together a representative group of active workers in the field of high-energy physics for an informal discussion of the latest experimental results and their interpretation. Among the topics to be considered are nucleon scattering, nucleonic production of mesons, multiple meson production, new unstable particles, and photo-meson production. The conference will be under the direction of Joseph B. Platt, acting chairman of the Rochester physics department. The director of the previous conferences, Robert E. Marshak, is on leave of absence from Rochester this year as visiting pro-



fessor of physics at the Sorbonne in France. Participants in the conference will include leading research workers in the high-energy physics laboratories of the United States, Canada, Mexico, England, and Europe. A complete record of the conference proceedings will be made available within a month after the meeting.

### Scintillation Counter Symposium

This month's scintillation counter symposium in Washington, D. C. (January 26-27) is to be held at the Hotel Shoreham and *not* at the Statler as was previously announced. Sponsored by the American Institute of Electrical Engineers, the Institute of Radio Engineers, the Atomic Energy Commission, and the National Bureau of Standards, the conference will be divided into four main sessions covering the following topics: Scintillation Counter Spectrometry, Photomultipliers and Phosphors, General Applications, and Cosmic-Ray and High-Energy Particle Measurements with Scintillation Counters. As nearly as possible, according to the organizing committee, the program is designed to present the recent advances in scintillation counter technology. The design and performance of instruments and components will be considered and the application of the scintillation counter to the solution of both industrial and purely scientific problems will be discussed. For additional information on the program contact G. A. Morton, Chairman, Scintillation Counter Symposium Committee, RCA Laboratories, Princeton, N. J. Advance registration is required for attendance. Those wishing to attend should forward their application and registration fee (\$2) to H. O. Wyckoff, Chairman, Attendance Committee, National Bureau of Standards, Washington 25, D. C.

### Fluid Dynamics Meetings

The regular meeting of the Division of Fluid Dynamics will be held during the Annual Meeting of the American Physical Society in New York, January 28-30, 1954. The tentative schedule of sessions includes a session on shock waves in liquids and solids, two sessions of contributed papers, and a joint session with the Institute of the Aeronautical Sciences. The annual business session of the Division will be held on January 30. The final program of the meeting will be published in a forthcoming *Bulletin* of the American Physical Society.

### High-Speed Computer Conference

A high-speed computer conference will be held January 28-30 on the campus of the Louisiana State University to discuss the uses and applications of computers in scientific and technical analyses, statistical operations, and business office procedures. The conference is being sponsored by the University in cooperation with a number of business, accounting, research, and engineering organizations. Those desiring more detailed information should write to Dr. Leon Megginson, chairman of the conference, Louisiana State University, Baton Rouge, Louisiana.



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