

the topics receiving the greatest emphasis were photon absorption processes, electron processes, the phenomenological theory of photoconductivity, and photoconductive materials. The final session was devoted to current research on photoconductivity in indium antimonide, germanium, tellurium, lead sulfide films and single crystals, and lead telluride films.

The conference was substantially enriched by the participation of several European scientists, including P. Aigrain, R. P. Chasmar, E. Mollwo, T. S. Moss, and J. Pincherle. Regrettably G. A. Busch was prevented by illness from attending.

Papers presented at this conference, together with significant comments from the floor, will be published. This volume, which is being prepared by John Wiley and Sons under the auspices of the American Institute of Physics, is expected to appear next summer.

Solid State Conference

Graduate students should occasionally have the opportunity to meet with fellow students of their geographic region and discuss the state of physics and their own particular problems. That is the motive prompting the holding of the Annual Mid-West Solid State Conferences. The third of these one-day meetings took place on October 23rd, 1954, on the campus of the University of Minnesota with an attendance of 73 persons from seven universities and eight companies and research institutions, the majority coming from that part of the country flexibly termed the Middle West.

The formal program consisted of fourteen papers: five by graduate students on work connected with thesis problems, five by university faculty members, and four by research workers from nonacademic laboratories. Of the first group, work in progress was described on the electrical properties of thin metallic films, semiconducting metallic compounds and high-temperature thermal conductivity measurements on uranium by D. G. Worden, C. R. Whitsett, and G. J. Pearson, all of Iowa State College.

From the University of Missouri: work on infrared absorption of thin films deposited on magnesium oxide was described by W. Brouillette and a second paper by E. B. Hensley attempted a synthesis of the band model for BaO from these and other data on this material. Work done at the University of Illinois on an extended series of diffusion measurements in pure silver of elements closely associated in atomic number was described by L. Slifkin, now of the University of Minnesota.

Vivian Johnson, Purdue University, discussed the present approaches to the theory of thermoelectric power in semiconductors and H. T. Minden of Chicago Midway Laboratories described some properties of evaporated PbS films when exposed to an oxygen atmosphere. Work being undertaken at the host University on critical single domain size in ferrite granules was described by A. H. Morrish.

Other papers contributed included a discussion of



BRITISH INSTRUMENT INDUSTRIES EXHIBITION

EARLS COURT LONDON
JUN. 28 - JUL. 9 '55
OPEN DAILY FROM 10 A.M.
EXCEPT SUNDAY

The world's most comprehensive display of Instruments

NOWHERE ELSE WILL YOU FIND AN EXHIBITION SPECIALISING IN INSTRUMENTS AND INSTRUMENTATION, OF THE SIZE AND SCOPE OF THE BRITISH INSTRUMENT INDUSTRIES EXHIBITION

Every field of instrumentation in Power Supply, Industry, Medicine, Research and Education is covered. You will be able to see all classes of temperature pressure and flow controllers for industrial use, electrical measurement and control, complete equipment for sea and air navigation and land surveying, scientific instruments and equipment for all laboratories, electronic instruments for all applications and precision equipment in such diverse fields as metrology, photography and engineering design.

The full scope of the products of the British Instrument Industry will be revealed at this exhibition—conveniently displayed all on one floor! Evidence has shown that production can be considerably increased and quality greatly improved by the use of appropriate instrumentation and control. Industrialists will find a visit to the exhibition extremely rewarding.

Make your reservations now

During the last few days of this exhibition, IPEX—the 10th International Printing Machinery and Allied Trades' Exhibition will be opening at nearby OLYMPIA. Hotel accommodation will be in great demand. Book yours now. If you require any assistance, or an official catalogue of the British Instrument Industries Exhibition when published, write to the Organisers.

F. W. BRIDGES & SONS LTD.

Grand Buildings, Trafalgar Sq., London, W.C.2

Phone: WHITEHALL 0568

Telegrams & Cables: BEGDIB, RAND, LONDON.

SOLID-STATE PHYSICIST OR PHYSICAL METALLURGIST to lead long-term research primarily on metals, including such subjects as diffusion in solids, anelasticity, mechanical and thermal behavior at elevated temperatures, and behavior of single crystals. University operated laboratory, Los Angeles area.

Send summary of qualifications to:

Caltech
JET PROPULSION LABORATORY
4800 Oak Grove Drive
Pasadena 3, California

POSITION OPEN

PHYSICIST

SPECTROSCOPY, SPECTROPHOTOMETRY AND COLORIMETRY

We are seeking a man, BS, MS or PhD, at group leader level for the Physics Department of our Central Research Laboratories in Mid-town New York. He should have 5 to 10 years experience in optical instrumentation as applied to chemical analysis and spectrophotometry. He should also have had some supervisory experience with a small group of people. His responsibilities would entail the supervision of a research program under the Department Director.

In replying, please submit details concerning your present employment, educational and industrial background and salary requirements. Box 255A, Physics Today, 57 East 55 St., New York 22, N. Y.

POSITION WANTED

OPTICAL PHYSICIST — Twenty years experience in the research, design and development of optical instruments. Recent papers and patents. Employed, desires change. Box 255, Physics Today, 57 East 55 St., New York 22, N. Y.

FOR SALE

For Sale: Physical Review, 1929-June 1950, Vol. 33-78, \$300; Review of Scientific Instruments, 1933-50, \$90; Quarterly Trans. of the A.I.E.E., 1925-49, \$55; unbound. Pluto Products Co., Box 1402, Terre Haute, Indiana.

CLASSIFIED ADS

Single insertion \$20.00 per inch

Twelve insertions in one year . \$18.00 per inch

Address Physics Today, Classified Ad Department, 57 East 55th St., New York 22, N. Y.

the four-point system of measuring resistivities of semiconductors by A. Stevenson, Minneapolis Honeywell; a modification of the Korrington method for energy band calculations in crystals by R. J. Harrison, Battelle Memorial Institute; an interesting discussion of methods and techniques for measuring physical properties of microscopic specimens by W. C. Shaw, Midwest Research Institute; and a description of some electrical measurements on grain boundaries in germanium by A. G. Tweet, General Electric Company.

The program included a luncheon with an after-meal talk by Edward P. Ney of the University of Minnesota physics department. Professor Ney discussed the aims and successes of high-altitude cosmic-ray research with special emphasis on the balloon method used at Minnesota. Following the formal presentation of papers, extensive visits were organized to several research activities in the departments of physics and electrical engineering of the University.

Arrangements for the meeting were in the hands of A. J. Dekker and he and his wife entertained at a very pleasant gathering on the evening preceding the conference. Present plans are to hold next year's meeting of the group at the University of Missouri, Columbia, Missouri.

W. Grattidge

G-E Research Laboratory

Fermi Memorial Meetings

A public meeting in honor and memory of Enrico Fermi, organized in the form of a symposium by the Tata Institute for Fundamental Research, was held on December 14, 1954, in Bombay, India. The program included the following speakers: P. A. M. Dirac (The Development of Fermi's Statistical Theory and of the Theory of β -Decay); D. D. Kosambi (Fermi's Theorem in Differential Geometry); K. S. Singwi (Slow Neutron Reactions and Reactor Development); B. Peters (Fermi's Theory of the Origin of Cosmic Rays); and H. J. Bhabha (Fermi's Theory of Meson Production).

At another public meeting held on January 5th at Los Alamos, New Mexico, a lecture entitled "Enrico Fermi and Modern Physics" was given by Hans A. Bethe, professor of physics at Cornell University.

Physics Education

The Central Pennsylvania Section of the American Association of Physics Teachers will hold its second annual spring meeting at Wilson College, Chambersburg, Pennsylvania, April 1-2. Tentative plans for the program provide for contributed papers on Friday afternoon, a dinner meeting Friday evening, and evening address by some outstanding figure in the field of physics, a short business meeting on Saturday morning at which time officers for the following year will be elected, and a panel discussion on the theme of "The Joint Responsibility of High Schools, Colleges, and Industry to Encourage Students to Undertake Careers