

# Meetings

## *Low-Energy Reactions*

A CONFERENCE on Low-Energy Nuclear Reactions was held in Moscow, November 19–27, 1957. The sessions had the following titles: Reactions with Light Nuclei, Polarization Effects, Neutron Reactions, Deuteron Reactions, Coulomb Excitation and Proton Reactions, Weak Interaction Problems, Photoneuclear Reactions, Nuclear Reactions Induced by Heavy Ions, and Nuclear Models. There were about 600 nuclear physicists at the meetings of whom 35 were foreign guests of the Soviet Academy of Sciences, about half of them from Eastern Europe. Other countries represented were Canada, China, Denmark, Egypt, France, Great Britain, India, Italy, Sweden, and the United States. The foreign visitors were shown many research laboratories and two physics departments in universities. The visitors had a choice of visiting Kiev or Leningrad in addition to Moscow. Most of the visitors were shown the following accelerators: four cyclotrons, two electrostatic accelerators, three Cockcroft-Walton accelerators, three electron synchrotrons, a synchrocyclotron, and the synchrophasotron. In addition they saw two reactors, an isotope separation plant, and a metallurgical hot laboratory.

The foreign visitors were perhaps most impressed by the amount and quality of experimental equipment available in the universities for the training of physics students and by the large number of physicists being trained. For example, the University of Leningrad graduates 250 students a year from a 5-year physics curriculum, in the later parts of which the students specialize in one of the physics research fields, at Leningrad primarily in  $\beta$ -ray spectroscopy.

The extensive program of entertainment and the cordial reception reported by previous visitors to Russia were given to the foreign visitors to this conference also.

H. H. Barschall

*University of Wisconsin*

## *Second Geneva Conference*

IN recognition of the impressive results of the 1955 International Conference on Peaceful Uses of Atomic Energy, the United Nations General Assembly passed a resolution in December 1955 recommending that a second such conference be organized under UN auspices within two or three years. Planning is already far advanced for the Second International Conference on Peaceful Uses of Atomic Energy, which is to be held

September 1–13 of this year in Geneva, Switzerland, and the United States has accepted an invitation to take part in the program.

Primary responsibility for planning and directing United States technical participation has been assigned by the Department of State to the Atomic Energy Commission. The AEC has established an office for that purpose (Office for International Conference, US Atomic Energy Commission, Washington 25, D. C.) and has appointed a technical director who will plan and coordinate all technical aspects of the role to be played by the United States in the 1958 Geneva conference. The newly appointed US technical director is L. D. P. King of the Los Alamos Scientific Laboratory. Dr. King, a physicist, has been a member of the scientific staff at Los Alamos since 1943. Before being named to his new post he was a group leader in the Laboratory's K Division, which is concerned with research and development of experimental power reactors. He is on loan to the AEC from Los Alamos.

Several thousand invitations to submit abstracts of scientific papers for presentation at the conference were distributed to research and academic institutions late last year by the AEC's office for United States participation in the conference. It has been emphasized that the number of papers that can be presented at Geneva is limited, and organizations have been urged to provide as comprehensive a coverage of subject material as possible in the papers to be submitted for consideration. In addition to the program of technical papers, the United States is planning to develop "an outstanding technical exhibit, a highly informative technical film program, and a collection of representative technical publications for distribution to the conference delegates".

The provisional agenda for the conference provides for a number of general sessions to consider such topics as the planning and development of nuclear power plants, the use of radioisotopes and the employment of nuclear energy for purposes other than the generation of electricity, operational experience in health and safety, recent developments in fundamental physics, and the possibility of developing controlled fusion reactors.

The program will also include four separate groups of parallel technical sessions.

Series 1, consisting of thirteen sessions, will deal with reactor technology, basic applications of chemistry in atomic energy, properties of reactor materials, processing of irradiated fuel elements, treatment of radioactive wastes, handling of highly radioactive materials, and experience in radioactivity problems arising from the operation of reactors and chemical plants.

Series 2 (sixteen sessions) will include information on problems in nuclear fusion, physics of elementary particles, physics of fission, nuclear data, reactor theory and calculation, fuel cycles and economics of nuclear power, prototype power reactors, use of research and test reactors, and reactor experiments.

Series 3 (fifteen sessions) will cover dosimetry and

**MAGNETICS SPECIALIST**

Ph.D. or M.S. level. To conduct theoretical and experimental investigations into the computer applications of vacuum evaporated magnetic films. Background in existing magnetic computer technology and logic is desired.

**PHYSICAL CHEMIST**

Ph.D. level in physical chemistry or Solid State Physics. To direct a program of basic research on Semiconductor surface problems.

**PHYSICIST**

Ph.D. in Solid State Physics or Physical Chemistry with experience in semiconductor devices. For development programs on transistors.

**VACUUM COATING SPECIALIST**

To apply known techniques and materials to the production of complex vacuum evaporated computer devices and do research into new materials and production techniques.

**RESEARCH PHYSICIST**

Ph.D. in Solid State Physics or Metallurgy. To set up and administer a program in Crystal growing techniques.

**SOLID STATE PHYSICIST**

To do research into the properties and applications of vacuum evaporated conducting, insulating, semiconducting, and ferromagnetic films.

*Above assignments are Senior Technical positions in Laboratories located in suburban Los Angeles. Liberal benefits include relocation allowances. Direct inquiries to W. W. Coupon, International Airport Station, Los Angeles 45, California.*

Creating a  
new world  
with  
ELECTRONICS

**HUGHES PRODUCTS**

## SCIENTISTS AND ENGINEERS For ACOUSTIC RESEARCH

The expanding and diversified work of our Acoustics Group offers unusual opportunities for versatile and imaginative research scientists. Positions are available for experienced personnel, as well as recent Electrical Engineering, Mechanical Engineering or Physics graduates, in the following fields of applied acoustics.

Architectural Acoustics  
Electroacoustics  
Ultrasonics  
Machinery Noise Reduction  
Industrial Area Quieting  
Vibration Problems  
Properties of Materials  
Acoustical Calibration  
Sound Propagation

Currently we have over 30 industrial and government projects in operation. Professional development is encouraged through publication of papers, participation in professional activities and our educational program providing tuition free graduate study.

*If you are interested in this outstanding opportunity to advance professionally, besides receiving an excellent salary, write:*

A. J. Paneral  
**ARMOUR RESEARCH FOUNDATION**  
of Illinois Institute of Technology  
10 W. 35th St., Chicago 16, Illinois

## PIONEERS IN NUCLEAR TRACK PLATE MICROSCOPY

Complete Line  
of KORISTKA  
Microscopes  
and Optics  
(New Model  
R4 shown)



- MS2: High precision scattering microscope for work up to 100 BeV or more, patented magnetic clamping, hydraulic drives, motion on blades, automatic programming, cell selector, Michelson interferometer.
- R4: Scanning and scattering, extra large plates, axial and doubly linear reiterator, speed change, memories, triple z-reading.
- Long Working Distance Objectives (fit all standard microscopes, available separately)  
26x, dry; 30x, o.i., w.d. 3000 $\mu$ ; 55x, o.i., w.d. 1350 $\mu$ ;  
65x, o.i., w.d. 700 $\mu$ ; 100x, o.i., w.d. 530 $\mu$
- Micrometric eyepieces (drum and memory, 0.06 $\mu$ )
- Goniometric eyepieces (accuracy of 20')
- Poohstrolino eyepieces (accuracy of 0.01 $\mu$ )
- All precision optical parts for your laboratory-built microscopes: condensers, illuminating systems, reticules, binocular bodies, objectives, oculars, interferometers.

Exclusive Distributors for North America:

**NEW ENGLAND SCIENTIFIC INSTRUMENT CO.**  
Box 408 Cambridge 39, Mass.

## POSITIONS OPEN

### PHYSICIST—SENIOR STAFF POSITION

Primary responsibility to supervise routine isotope laboratory and some resident training. Research is encouraged and supported. Desire experience in clinical uses of radioisotopes. Ph.D. preferred, not essential. Salary dependent upon qualifications. For application or further information, please write: Dr. J. S. Laughlin, Department of Physics, Memorial Center for Cancer and Allied Diseases, 444 East 68th Street, New York 21, New York.

**The Departments of Mathematics and of Physics  
The University of Manitoba, Winnipeg, Manitoba, Canada**  
WILL MAKE TWO APPOINTMENTS IN EACH DEPARTMENT

in the ranks of  
LECTURER, ASSISTANT OR ASSOCIATE PROFESSOR  
(initial salaries in the range \$4500-\$7700)

APPOINTMENT TO BEGIN SEPTEMBER 1, 1958

Please write to:

Dr. J. W. Lawson, Chairman, Department of Mathematics.  
Dr. B. G. Whitmore, Chairman, Department of Physics.

Electrical Engineers interested in an academic position combining teaching and fundamental experimental research. Assistant professorship available for a recent Ph.D. or equivalent background, higher rank in accord with qualifications. Write D. C. Drucker, Chairman, Division of Engineering, Brown University, Providence 12, Rhode Island.

*Department Head*—For Physics Department. Applicant must have Ph.D. Minimum salary \$7500 for academic year. Additional dependent upon qualifications. Write Box 258, Physics Today, 335 East 45 Street, New York 17, New York.

**Physicists, Chemists, and EE's**  
for research on nuclear-electric batteries, radiation effects, and dielectrics. Radiation Research Corporation, 1114 First Ave., N.Y. 21, N.Y.

standards, technical applications of high-intensity ionizing radiation, reactor safety and location, oceanographic meteorological aspects of the large-scale use of atomic energy, experience in radiological protection, biological effects of radiation, radioactive and stable isotope production and distribution, and the uses of isotopes in agriculture, medicine, and in biology and physiology, as well as in research, control, and industrial technology.

Series 4 (twelve sessions) will consist of papers on raw material supplies, processing of uranium and thorium ores, separation of isotopes, fabrication of fuel elements, and processing of other materials useful in atomic energy.

In its closing sessions the conference will consider the development of international collaboration in the fields of atomic energy in the last few years and also the supply and training of scientific personnel.

### Optical Society

**T**HE 1958 spring meeting of the Optical Society of America will be held March 27-29 at the Sheraton Park Hotel in Washington, D. C. In addition to the usual sessions of contributed papers, the program committee, under the chairmanship of John A. Sanderson, is arranging a series of invited papers, listed as follows: "An Observational Approach to Solar Hydrodynamics", Leo Goldberg, University of Michigan Observatory; "Atomic Spectra in High-Temperature Shock Tubes", A. C. Kolb, US Naval Research Laboratory; "Interaction of Radiation and Matter", Frederick S. Brackett, Section on Photobiology, National Institutes of Health; "The Control of Plant Growth by Radiation", Sterling B. Hendricks, Mineral Nutrition Pioneering Research Laboratory, US Department of Agriculture; "Obliquity Effects in Interferometry", C. F. Bruce, National Standards Laboratory, Sydney, Australia; "The Photographic Zenith Tube and Dual Rate Moon Camera", William Markowitz, US Naval Observatory; "The Spectroscopy of Excited Gases", G. H. Dieke, The Johns Hopkins University; and "Coatings for Ultraviolet and Infrared Optics and for the Satellite", Georg Hass, US Army Engineer Research and Development Laboratories.

The Society has indicated that nonmembers who are interested in attending the meeting will be welcome; they may receive copies of the final program by writing to Dr. Stanley S. Ballard, Scripps Institution of Oceanography, San Diego 52, Calif.

### Spectroscopy

**S**EMINARS on selected topics in instrumental analysis and papers in the fields of emission spectroscopy, flame spectroscopy, x-ray spectrography, and infrared, near-infrared, visible, and ultraviolet spectroscopy will be offered by the American Association of Spectrographers at its Ninth Annual Symposium on Spectroscopy. The symposium, to be held June 9-11 at the Pick-Congress Hotel in Chicago, will also include "problem panels" and a display of new instrumentation. Further information can be obtained from Henry J. Hettel,

**REX**

**RHEOSTAT CO.**

BALDWIN, L. I. N. Y.

*Rheostats  
Resistors*

**TOROIDAL  
WINDERS**

