In one of the separate sessions, R. K. Moore (Cornell) described the anomalous propagation observed by radio amateurs at frequencies of 28 to 148 Mc during displays of the aurora. In another session, H. W. Wells (Carnegie Institution) made an analysis of ionosphere measurements which revealed fluctuations of the F2 region between stations separated by a distance of only 100 to 150 miles. One of the Ionospheric Radio Propagation Commission sessions was devoted almost entirely to discussions and results of the absorption and polarization of low-frequency signals. Most of the work discussed by the Commission on Radio Waves and Circuits was on very-high-frequency and microwave antenna problems, techniques and theories pertaining to beam synthesis, and analysis of problems in microwave optics.

The effects on propagation of irregular and rough terrain and of changes in the refractive index of elevated layers of the atmosphere were discussed at the session on Tropospheric Radio Propagation. Also included were some experimental results of investigations in VHF and microwave propagation phenomena. Within the field of terrestrial radio noise, papers were presented which described atmospheric noise levels and wave forms. A method for studying radio noise objectively and the use of radio teletype equipment was presented. Techniques for suppression of radio interference were also discussed.

Newbern Smith (NBS) was in charge of the technical program and arrangements, while the meeting was under the general direction of L. V. Berkner (Carnegie Institution), who served during 1950 as chairman of the National Committee of the URSI. Newly elected officers are C. R. Burrows (Cornell), chairman; Newbern Smith, vice chairman; and A. H. Waynick (Pennsylvania State College), secretary-treasurer.

The International Scientific Radio Union is one of several world scientific unions organized in 1919 under the general sponsorship of what is now the International Council of Scientific Unions. The aims of the Union are to promote the scientific study of radio communications, to aid and organize radio research on an international scale, and to facilitate agreement upon common methods of measurement and the standardization of measuring instruments. The International Union provides an organizational framework to aid in promoting these objectives, although the actual technical work is largely done by the national sections of the various member countries. The U. S. National Committee is subdivided into six commissions: Radio Measurement Methods and Standards; Tropospheric Radio Propagation; Ionospheric Radio Propagation; Terrestrial Radio Noise; Extraterrestrial Radio Noise; and Radio Waves and Circuits.

The Institute of Radio Engineers is the outgrowth of a union formed by the Wireless Telegraph Engineers, of Boston, and the Wireless Institute, of New York. The two bodies organized the Institute to aid in the advancement of electrical communications. As the scope of the industry gradually expanded, it became necessary to subdivide the membership into groups according to their specialized interests. The professional group on antennas and propagation is one of ten similar organizations within the IRE composed of scientists and engineers who have a mutual interest in specialized fields.

A similar meeting of the two groups will take place next October 8, 9, and 10 on the campus of Cornell University. Cornell's School of Electrical Engineering will be the host. Sessions are planned on radio standards and methods of measurement, tropospheric radio propagation, ionospheric radio propagation, extraterrestrial radio noise, circuit theory, and electronics. Because of limited available housing facilities, it is urged that registration be made in advance of the meeting. Advance registration cards and further information may be obtained from A. H. Waynick, The Pennsylvania State College, State College, Pennsylvania.

MEETINGS TO BE HELD

THE AIP'S TWENTIETH ANNIVERSARY MEETING

A record attendance is expected for this fall's meeting in Chicago of the American Institute of Physics in celebration of its founding twenty years ago. Each of the Institute's Founder Societies will hold their regular meetings during the five-day period from October 23 to 27, and it is anticipated that the technical sessions and various special symposia will attract more physicists than has any previous scientific meeting. The joint banquet on Thursday evening, October 25th, will feature addresses by K. T. Compton and Senator Brien Mc-Mahon; earlier in the same day the meeting's major symposium will review generally recent progress in physics research. Prospective physicist employers and employees should note that the AIP placement register will be in continuous operation during the meeting. Application forms must be received by the AIP not later than October 1st to insure their being included in the register.

POLYMERS AND COLLOIDS

A Conference on the Chemistry and Physics of Polymers and Colloids will be held at Wayne University on Thursday, September 27th. The conference is sponsored by the College of Liberal Arts of Wayne University in cooperation with several local and national industries. Featured lecturers will be: J. J. Hermans of the University of Groningen, Holland; O. Kratky of the University of Graz, Austria; G. G. Overberger and H. Mark of the Institute of Polymer Research, Brooklyn; J. T. Overbeek of the University of Utrecht, Holland; and E. J. W. Verwey of the Philips Research Laboratories, Eindhoven, Holland.

APS DIVISION OF ELECTRON PHYSICS

A Fall Meeting of the Division of Electron Physics of the American Physical Society will be held on Thursday, Friday, and Saturday, November 1, 2, and 3, 1951.

The meeting will convene at the National Bureau of Standards, Washington, D. C., at the invitation of the Bureau and in honor of the fiftieth anniversary of its founding. The meeting replaces the one usually held in New York in January. The program will consist of invited and contributed papers on or related to the subject "Electron Emission from Surfaces." The papers should pertain to the physics of electron emission, avoiding processes, manufacturing problems, and details of application. The subjects falling within the scope of the meeting are thermionic emission, photo emission, secondary emission, field emission, ion bombardment emission, and vacuum techniques. Other phases of electron physics will be covered at the Division's Conference on Gaseous Electronics to be held at Schenectady on October 4, 5, and 6. Abstracts of papers will be published in the Physical Review, and they should conform to the rules usual for the Physical Society. They should be received by the chairman of the program committee, Dr. J. B. Johnson, Bell Telephone Laboratories, Murray Hill, N. J., before September 28. Contributed papers will be allotted about 15 to 20 minutes with some flexibility to suit author and subject. Ample time will be allowed for discussion. There will be no concurrent sessions and no papers will be given Saturday afternoon unless it becomes necessary.

Tours of the National Bureau of Standards and other scientific laboratories in the vicinity will be scheduled if it is possible to arrange them.

CONFERENCE ON ELECTRICAL INSULATION

The Conference on Electrical Insulation of the National Research Council is holding its 20th annual meeting on October 29-31 at the National Bureau of Standards, Washington, D. C., in connection with the celebration of the Bureau's Semicentennial. Authors who plan to present papers should send the title and a brief abstract of the subject matter to W. G. Amey, chairman of the Committee for Program and Arrangements. at Leeds & Northrup, 4901 Stenton Avenue, Philadelphia 44. Pennsylvania, at an early date.

DIFFRACTION CONFERENCE

The Ninth Annual Pittsburgh Diffraction Conference will be held at Mellon Institute, Pittsburgh, Pennsylvania, on November 29 and 30, 1951. Sessions are tentatively being arranged on "Instrumentation and Methods" and "Metals and Alloys". Papers are solicited on these and related subjects, and will be considered in the order in which they are received. Titles should be sent to the Program Chairman, R. W. Turner, Carnegie Institute of Technology, Pittsburgh 13, Pennsylvania, before September 1st. The Conference will also include a symposium of invited papers on the subject of "Diffraction and Thermomagnetic Studies of Reactions of Metastable Carbides of Iron". For further information, and for a copy of the preliminary program when available, write to C. W. Cline, Aluminum Research Laboratories, P. O. Box 772, New Kensington, Pennsylvania.

PLACEMENT SERVICE REGISTER

AMERICAN INSTITUTE OF PHYSICS

to be held in connection with the

20th Anniversary Meeting, October 23–27, 1951 Hotel Sherman, Chicago, Illinois

LOOKING FOR PHYSICISTS?

Universities, institutions, and companies wishing to post notices of positions may send descriptions of the openings on 8 ½ x 11 paper in multiple copies (15 required) to the Institute office, or post them upon arrival at the meeting.

SEEKING A NEW POSITION?

Applicants may obtain registration forms and further information from the Institute office. Preregistration is essential. Completed registration forms must be received at the Institute office by October 1, 1951 to insure their inclusion at this Register.

INTERVIEWS.

It is to the advantage of registrants to be present. Interviews will be arranged between employers' representatives and applicants attending the meeting.

PLEASE REPORT TO THE PLACEMENT OFFICE UPON ARRIVAL AT THE MEETING

AMERICAN INSTITUTE OF PHYSICS 57 EAST 55 STREET, NEW YORK 22, N.Y.

CARGILLE MICRO BEAKERS



Leaflet on Request

Price: \$7.50 per Gross; Plastic Holder \$.50; or send \$2.00 for 24 assorted Beakers with Plastic Holder as illustrated.

R. P. Cargille

118 Liberty St. New York 6, N.Y.

POSITIONS FOR

Physicists with advanced degrees in varied fields of industry. High salaries. CONFIDENTIAL SERVICE

Mail or bring in 3 resumes including recent snapshots to

POSITION SECURING BUREAU INC. Agency Established 1922

45 John Street

New York 38, N. Y.

GLASS TECHNOLOGIST

Leading manufacturer in the Newark, N. J. area requires graduate physicist specialized in glass technology, good basis in glass optics, familiar with production and handling of hard technical glasses, to do research on glass problems. Send complete details of education and experience in communication to Box \$951, 57 East 55 Street, New York 22, New York.