living at sea level. Next, Serge A. Korff, of New York University, described the establishment of the Mt. Wrangell cosmic-ray observing station at 14 006 feet in Alaska. The establishing of the station was almost entirely an air-support operation, with the buildings and heavy supplies and equipment being airdropped and the personnel and lighter apparatus being ferried in an airplane which landed on the summit. Vernon H. Goerke, of the Central Radio Propagation Laboratory at Boulder, Colorado, described progress in radio astronomy and high-altitude solar observations. Grant Athay, of the High Altitude Observatory of Harvard and the University of Colorado, described the research program of that observatory, which included coronograph work and some cosmic-ray studies. Finally Dr. Menzel showed some films of the station at Sacramento Peak, New Mexico, depicting both the observing station and some of the excellent films taken to show the motion of solar prominences.

On the following days the persons attending the conference were taken for a visit to the Mt. Evans laboratories and some of them also visited the Climax observatory. The commission devoted a considerable amount of time to considering organizational problems, and recommended that, as ICSU proposes to dissolve JCHARS, the work be continued by a similar commission or committee directly under ICSU and not as at present under IBU. In this way it was felt that JCHARS or its successor organization could most effectively serve various diverse fields of science. Further, they recommended the publication of a guide to high-altitude laboratory facilities.

The main purpose of the meeting was to discuss the present situation regarding high-altitude research facilities, and to disseminate information about such facilities to as many organizations in diverse fields of science as might wish to make use of them. The research results obtained at the various stations were discussed in order to familiarize persons in one field of research with the problems existing in other fields, and with the requirements of these other fields for such high-altitude facilities. Thus, for example, most physicists present found that the papers presented by the biologists showed that a much wider interest exists in high-altitude biological work than they had hitherto realized. On the other hand, many biologists had not been aware of the existence of some of the high-altitude stations established by cosmic-ray observers. An interchange of knowledge among the various sciences as to facilities open to any science seems to be of the utmost usefulness, both in permitting a better formulation of research programs and in stimulating further work by disseminating the knowledge that certain facilities exist.

The problems common to the administration of highaltitude research stations were also discussed. In this connection it was remarked that some workers, used to extensive laboratories and elaborate accommodations, were slow to adapt to the sometimes primitive facilities at some mountain stations. It was noted that some persons whose entire experience had been with wellequipped facilities were not very adept at improvising in order to meet a less favorable situation with such facilities as were actually at hand. Also, it was pointed out that some experiments were not sufficiently wellplanned before being taken to the high-altitude station. It was insufficiently appreciated that a high-altitude station is not a good place in which to do development work but rather is more efficiently used if the apparatus taken there is adequately checked at the home base before the expedition is started. The hope was expressed that research directors, before sending their men to such stations, would explain to them that facilities were often less good than at home, that improvization and field repairs might be necessary, that test equipment and spare parts be carefully considered, and that apparatus taken be thoroughly tested beforehand.

Several of the members of the Commission expressed their feeling that the meeting had taught them much, not only about the existence of facilities but also about the extensive interest shown by those in fields other than their own. The meeting adjourned after passing resolutions thanking the various hosts.

> Serge A. Korff New York University

#### Selenium and Tellurium

A one-day conference on the properties and applications of selenium and tellurium will be held in conjunction with the American Institute of Electrical Engineers meeting in New York City's Statler Hotel, January 18–22. The conference is sponsored by the AIEE subcommittee on semiconductors and transistors, whose chairman is W. C. Dunlap, Jr., General Electric Co., Research Laboratory, P. O. Box 1088, Schenectady, N. Y.

# Instrumentation for Biology

The Sixth Annual Conference on Electronic Instrumentation and Nucleonics in Medicine will be held November 19th and 20th at the Hotel New Yorker in New York City. Arranged under the joint sponsorship of the American Institute of Electrical Engineers, the Institute of Radio Engineers, and the Instrument Society of America, the meeting will cover some of the recent advances in instrument technology intended to facilitate medical and biological research and clinical application. S. R. Gilford, National Bureau of Standards, Washington 25, D. C., is chairman of the conference.

## Operations Research Society

The fall meeting of the Operations Research Society of America is to be held at the Statler Hotel in Boston on Monday and Tuesday, November 23–24. Registration will begin on Sunday evening, November 22. Four sessions will be held for contributed papers on military operations research (unclassified), industrial operations research, theoretical developments, and case histories. In addition, two sessions will be held for invited pa-

pers, one on the theory of search, and one on inventory control and production scheduling. The chairman of the Program Committee is Professor P. M. Morse, Room 6-109, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

#### Scintillation Counters

A Scintillation Counter Symposium is to be held in Washington, D. C., January 26 and 27, under the sponsorship of the American Institute of Electrical Engineers, the Institute of Radio Engineers, the Atomic Energy Commission, and the National Bureau of Standards. The meeting will be held at the Statler Hotel and will consist of four sessions on energy spectrometry, cosmic-ray and high-energy particle measurements, scintillation counter applications, and phosphors and photomultipliers. The design and performance of instruments and of components of scintillation counter instruments will be discussed, as will the application of such counters to the solution of both industrial and purely scientific problems. Those wishing to contribute 15-minute papers to the symposium should submit titles and abstracts to the chairman of the program committee, R. K. Swank, Argonne National Laboratories, Chicago, Illinois, before December 15. Advance registration (fee, \$2) is required for attendance and applications should be directed to the chairman of the attendance committee, H. O. Wyckoff, National Bureau of Standards, Washington 25, D. C. Requests for further information about the meeting should be sent to G. A. Morton, RCA Laboratories, Princeton, N. J., chairman of the Scintillation Counter Symposium Committee.

## Crystallography

As was mentioned earlier, the Third General Assembly and International Congress of the International Union of Crystallography will be held in Paris from July 21 to 28, 1954. Full details of the meeting and registration forms for those planning to attend are now available from the general secretary of the Union (R. C. Evans, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England), from the secretary of the program committee (A. J. Rose, Laboratoire de Minéralogie, 1 rue Victor Cousin, Paris 5, France) or in the United States from a representative of that committee: J. D. H. Donnay (The Johns Hopkins University, Baltimore, Maryland). Papers will be presented on all aspects of crystallographic research, and after the Congress two specialized symposia will be held on "The Location and Function of Hydrogen" and "The Mechanism of Phase Transitions in Crystals". There will also be an exhibition of crystallographic apparatus and books, and there will be visits to localities of mineralogical interest. Papers submitted for the Congress and Symposia and applications to attend must reach the secretary of the program committee by February 15, 1954. All general correspondence should also be addressed to the secretary of the program committee.

### POSITION OPEN

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