MEETINGS

Cryogenics

The Ninth International Conference on Low Temperature Physics will be held in Columbus, Ohio, during the week from August 31 to September 4. The meeting will be sponsored by the International Union of Pure and Applied Physics, and Ohio State University and the Battelle Memorial Institute will act jointly as hosts. Invited and contributed papers on superconductivity, liquid and solid helium three and helium four, and the properties of matter at low temperatures will be presented.

Further information is available from Dr. J. G. Daunt, Physics Department, Ohio State University, Columbus 10, Ohio.

Ultralow Frequencies

The National Bureau of Standards Central Radio Propagation Laboratory and the National Center for Atmospheric Research will hold a symposium on Natural Ultralow-Frequency Electromagnetic Fields (30 c/s to 0.001 c/s) from August 17 to 20.

The meeting will take place in Boulder, Colo., and will be divided into four sessions, of which the first three will consist of invited papers and the fourth of contributions. The opening session, entitled The Environment, will cover the quiet and disturbed boundary of the magnetopause and transport of energy through the boundary, the composition and disturbed variations of the magnetosphere, and electron density, currents, and auroral-zone effects in the ionosphere. The Theory of EM Sources will deal with the magnetosphere resonance in existing boundary conditions and resonance implications, hydromagnetic propagation, its general conditions, and its specific application to the magnetosphere in the ultralow frequencies, hydromagnetic propagation within the ionosphere, absorption of energy in transmission through the ionosphere, currents which lead to field fluctuations on the earth's surfaces, earth-ionosphere resonances related to the Schumann cavity-mode resonances, and ultralow-frequency field perturbation by high-altitude nuclear explosions. Field Observations will consider the 7-8 c/s band with higher harmonics in the Schumann resonances, and the unique features, polarization, region coherence, world distribution, and solar-activity dependence related to regular oscillations near 1 c/s in the 5-30 second and 1-7 minute ranges. The types of events associated with particle bombardment in ionospheric absorption will be discussed, including equatorial, auroral-zone, conjugate-point, and solar-eclipse path effects. A resume of the latest techniques of instrumental recording will close the session. The last session will be a forum dealing with the contributed papers selected by the forum chairman.

Further information can be obtained from either Dr. W. H. Campbell of the NBS Laboratories or Dr. S. Matsushita of the National Center for Atmospheric Research, both in Boulder, Colo.

Atmospheric Radiation

The International Radiation Commission of the International Association of Meteorology and Atmospheric Physics will hold a conference on atmospheric radiation in Leningrad during the period from August 10 to 15.

It is expected that invited and contributed papers will deal with infrared spectroscopy of the atmosphere; theory of radiative transfer in planetary atmospheres; energy balance in the earth's atmosphere, including (1) experimental investigations of the radiation field in the free atmosphere, and (2) radiation problems as related to atmospheric dynamics and the general circulation; radiation climatology; and surface and network instrumentation.

Further information can be obtained from Prof. J. London, Department of Astrophysics and Atmospheric