

sonic variety) has been announced respectively by the Massachusetts Institute of Technology and the Johns Hopkins University. MIT's tunnel, part of the recently dedicated Naval Supersonic Laboratory in Cambridge, has already been operated at a Mach 2 level, and is expected to reach approximately four times sound velocity. Constructed under the auspices of the Navy's Bureau of Ordnance, the tunnel was designed under the direction of John R. Markham, director of the laboratory. The wind tunnel will be operated under the administration of MIT's department of aeronautical engineering headed by Jerome C. Hunsaker.

The Johns Hopkins wind tunnel is now being constructed with student assistance and under the sponsorship of the Office of Naval Research; it will be in operation within the next few months. Making use of four 1600 horsepower aircraft engines, air velocities in the tunnel are expected to reach about twice the speed of sound. The tunnel was designed by Francis Clauser and Leslie Miller, of the University's department of aeronautics.

RADIAC SYMPOSIUM

HELD AT SIGNAL CORPS ENGINEERING LABS

A decade or so ago the instrumentation needs of radiologists, of x-ray technicians, and of persons working in industrial radiography were met largely by a few manufacturers working in close cooperation with the x-ray division of the National Bureau of Standards. The special problems then encountered in physics laboratories were made relatively minor by taking sensible safety precautions. More recent developments in work with high energy particle accelerators and with nuclear reactors and weapons have extended the physicist's problem with regard to the energy range over which the instrument must give true dosage readings, the radiological intensity ranges which must be covered, and the numbers and types of personnel it may be necessary to protect—or risk, if such an occasion should arise.

The problem has now reached such proportions as to require the combined attention of government, industrial, and university groups. As a means of encouraging the interchange of information among such groups, a radiac symposium was sponsored by the Signal Corps Engineering Laboratories and held at Fort Monmouth, New Jersey during September 14–16, 1949. The topics discussed at this symposium (one of a series initiated by the Atomic Energy Commission) fall roughly into the following categories: design problems and instrument types; calibration problems; and investigations of components.

Although counting type instruments came briefly into discussion, the emphasis was in general limited to ionization chamber instruments, including personnel dosimeters. Francis R. Shonka of the Argonne National Laboratory discussed quartz fibre techniques and the use of these fibres in electrostatic instruments. He discussed in detail a personnel dosimeter of the direct reading type which was developed at Argonne and after outlining certain design problems which had to be solved in the development of such a dosimeter, Dr. Shonka mentioned briefly certain other instruments employing quartz fibre indica-

tors. Other papers covering special design features of specific ionization chamber instruments were presented by Robert W. Schede of the Oak Ridge National Laboratory and by Marvin G. Schorr of Tracerlab.

Calibration problems were discussed by Bureau of Standards personnel. Lauriston S. Taylor led this phase of the program with a discussion of the measurement of the roentgen by means of standard chambers. He discussed in some detail the problem of designing standard chambers for the measurement of dosage arising from hard x-rays or gamma rays. The types of calibration equipment that should be included in a production engineering laboratory also received some consideration. Other topics dealing with thimble chambers, secondary standard chambers, and results of calibration tests on AEC instruments were discussed by H. O. Wyckoff, H. F. Gibson, and F. H. Day, all of the NBS.

The discussion of components was divided somewhat as follows: high performance insulators by A. J. Warner of Federal Telecommunications Laboratories, Inc.; characteristics and measurement of high megohm resistances by K. E. Burmaster and R. K. Abele, both of the Oak Ridge National Laboratory; and problems associated with electrometer tube design by P. T. Weeks and H. F. Starke of Raytheon.

Lt. Colonel D. T. Griffin of the Signal Corps acted as chairman of the symposium, and G. Failla of the Radiological Research Laboratory, Columbia University, served as moderator. Of particular interest to those in attendance were the comments of Dr. Failla regarding certain new physiological aspects of gamma and x-radiation and their significance with respect to the design of equipment for military use.

—W. S. McAfee

ICI ON PARLE FRANÇAIS

CELSIUS, CENTÉSIMALE, AND CENTIGRADE

The decision of the Ninth General Conference on Weights and Measures, to substitute the name Celsius for the centigrade system has apparently caused some confusion and the Bureau of Standards recently issued a report explaining the confusion in which the decision was born.

The action had not been proposed in advance of the Conference and the decision arose from a question regarding preferred usage in French, the sole official language of the Conference, the Bureau report stated.

In preparation for the General Conference the National Bureau of Standards submitted a revised text defining the International Temperature Scale to supersede that adopted in 1927. The proposed text was drafted in English and, in accordance with common English practice as well as the official French text adopted in 1927, it used the name "centigrade." This name was carried over into the French translation prepared for consideration by the Advisory Committee on Thermometry in May, 1948. However, in the printed report of that meeting, the term "centigrade" had, in most cases, been changed to "centésimale," the term that is used in the French law governing weights and measures. When asked to choose between the two the International Committee on Weights and Meas-