approximately 20°C. At the lower work rates rectal temperature fell toward new levels, depending on the work rate. Muscle temperatures and clothing insulation were also investigated. The findings are discussed in relation to accidental hypothermia in outdoor activities.
-- J. Am. Med. Assn. References & Reviews

784 Hearing in the Mabaans; a Critical Review of Related Literature. M. Bergman. Arch. Otolaryngol. 84, 411-415 (1966).

The author corrects a popular but erroneous summarization of studies on the Mabaan tribe in the Sudan. It has been said that the studies indicate that these people, who are exposed to a minimum amount of noise, have better hearing at all ages than, for example, Americans. Bergman shows that instead there is no essential difference between young people in the two cultures, and that even in the oldest age groups, the best 10% of the listeners are completely comparable. He speculates that the mean differences in the oldest groups are due to the greater heterogeneity of the American culture. -- J. Occ. Med. Absts.

785 Noise. L.L. Beranek. Sci. Am. 215, 66-74, 76 (Dec., 1966).

The author suggests the problem of noise can be solved by instituting and enforcing noise codes, by improving design and operation of industrial machinery and vehicles, by interposing buffer zones to separate residential areas from airports and superhighways, and by sealing buildings against noise where proximity to noise is unavoidable. -- Public Health Eng. Absts.

ENVIRONMENTAL MEASUREMENTS

786 Portable Battery Powered Instrument for Measuring Concentrations of Airborne Halogenated Hydrocarbon Compounds. C.B. Avera, Jr. Rev. Sci. Instr. 37, 1711-1715 (Dec., 1966).

A lightweight, portable instrument for detection and measurement of halogenated hydrocarbon concentrations in ambient air has been developed. The detection principle is a form of the Beilstein flame test; with the addition of certain refinements, notably regulation of fuel delivery and sampling rates, precise optical filtering, and solid state optical detection and readout, a fully quantitative response has been achieved. There are 7 references.
-- Public Health Eng. Absts.

787 Calibration of Limed Filter Paper for Measuring Short-Term Hydrogen Fluoride Dosages. The Effect of Temperature, Humidity, WindSpeed, and Dose. W.L. Wilson, M.W. Campbell, L.D. Eddy, and W.H. Poppe. Am. Ind. Hyg. Assn. J. 28, 254-259 (May-June, 1967).

Limed filter papers were exposed to analyzed concentrations of hygrogen fluoride under controlled conditions of temperature, dew point, concentration, windspeed, and time. The exposed papers were analyzed for their fluoride content. Within the limits of accuracy of the test setup, the following conclusions are made: Temperature, dew point, concentration, and time have little or no effect on absorption. Dose has little or no effect on absorption until dosages in excess of 400 to 600 ppm min, dependent on windspeed, are reached. Within the limits of 3 to 18 mph, absorption varies with dosage according to the following equation: $\mu g/dm^2/ppm\ min = 1.07 \times windspeed\ (mph) + 11$. -- Authors' abst.

788 Evaluation of Teflon Permeation Tubes for Use With Sulfur Dioxide. F.P. Scaringelli, S.A. Frey, and B.E. Saltzman. Am. Ind. Hyg. Assn. J. 28, 260-266 (May-June, 1967).

Use of permeation tubes has been proposed as a simple technique for preparing accurate primary standard low concentrations of gaseous air pollutants. Liquefied gas is sealed in FEP Teflon tubes with glass or metal balls. The gas permeates through the walls of the tube at a rate fixed by the geometry of the system and by the properties of the compound. At constant temperature the permeation rate is constant. This study of tubes containing sulfur dioxide includes comparison of the gravimetric method of calibration with more specific methods of analyses for sulfur dioxide. Comparison of the average rates determined colorimetrically and coulometrically with the average rates computed from weighing the tubes over a period of 600 hours gave ratios of 95.5% for the thin-walled (0.012-inch) and 97.5% for the thick-walled (0.030-inch) tubes. These results indicate that Teflon permeation tubes are extremely useful for preparing accurate concentrations of atmospheric pollutants, for calibrating instruments, and for developing or comparing analytical methods. Temperature is a critical variable that must be controlled within $\pm$ 0.1°C. There are 19 references. -- Authors' abst.

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