255 Spectrophotometric Determination of Cyanamide. D. A. Buyskt and V. Downing. Anal. Chem. 32, 1798-1800 (Dec. 1960).

Cyanamide in blood, urine, and soil is determined by spectrophotometric procedure. The sample is reacted with pentacyanoamminoferrate in a carbonate buffer at pH 10.5. The color produced is measured at 530 millimicrons. The usual impurities and additives found in cyanamide preparations do not interfere. -- AC Briefs

256 Toxic Encephalopathy Apparently Related to the Use of an Insect Repellent. Joyce Gryboski, D. Weinstein and N. K. Ordway. New Engl. J. Med. 264, 289-291 (Feb. 9, 1961).

A case of encephalopathy is reported in a 3-year-old girl that may have been brought about by an agent in an insect repellent. Signs were disorientation, staggering gait, slurred speech and episodes consisting of stiffening into a sitting position, crying out, extending the extremities, flexing the fingers and dorsiflexing the toes. Therapy consisted of intravenous infusion of fluids and anticonvulsant medication. The assumed toxic agent was N-N-diethyl-m-toluamide, which, in considerably higher doses, had produced similar signs and death in laboratory animals. -- Authors' summary

257 Some Effects of Epoxy Compounds on the Blood. J. K. Kodama, et al. Arch. Environmental Health 2, 50-51 (Jan. 1961).

The less complicated polyfunctional epoxides, and monofunctional epoxides with auxiliary active groups, were shown to be capable of producing deleterious effects on the hemopoietic system. Erythrocytes were sharply decreased by 5 of the 13 compounds, one of which did not alter the leukocyte picture or decrease the number of nucleated marrow cells. Six compounds decreased the leukocyte count significantly, and 4 decreased the number of nucleated cells in the femoral marrow. It was possible for a compound to decrease the number of nucleated marrow cells without decreasing the number of circulating leukocytes and vice versa, under the conditions of the experiment. The authors recommend that the radiomimetic effects of these epoxides be considered when assessing the hazards involved in their application and handling. -- Authors' summary

## INDUSTRIAL DUSTS

258 Field Evaluation of Ragweed Pollen Samplers. E. C. Ogden and S. Raynor. J. Allergy 31, 307-316 (July-Aug. 1960).

The authors' experiments have shown that pollen capture by the standard Durham sampler is determined by several factors, in addition to the concentration of pollen in the air. Aerodynamic factors are responsible for the greater collecting ability of the slide when its long axis is placed parallel to the air flow. Orientation of the slide with respect to wind direction may result in a 5 to 1 difference in catch between adjacent slides. It was also found that the amount of pollen captured is a function of the amount of air passing over the slide as well as the concentration of pollen in the air. Thus, an increase of 3 to 4 mph in wind speed may give more than 50% increase in the pollen captured. Since wind speed normally increases with height, elevation of the sampler above the ground determines the wind speed to which the slide is exposed and effects the count. Tests of a filter sampler showed that this device was also affected by wind speed but in an opposite manner, since efficiency in capturing particles in the pollen size range decreases with increasing wind speed. Improvements in the standard sampling technique might include vane orientation of the slide sampler and measurement of the air flow which could be used to correct the count, or the use of round or square slides with similar correction of wind speed. -- Public Health Engr. Abstr.