

- 125 Microanalytical Determination of Mercury in Organic Compounds.
M.O. Korshun and E.V. Lavrovskaya. Zhur. Anal. Khim. 3, 322-328 (1948).

The method is a modification of the Boetius procedure (C.A. 33,1628). The changes made in the packing of the combustion tube make it suitable for determining mercury regardless of other elements present. The method is described in detail. -- Condensed from Chem. Absts.

- 126 Photoelectric Measurement of Coal Dust Stains on Filter Paper.
C.N. Davies and Mary Aylward. Brit. J. Ind. Med. 6, 254-258 (1949).

Airborne dust is frequently assessed by aspiration through a filter paper followed by photoelectric measurements of the resulting stain. This account of experiments with coal dust shows how the calibration depends on particle size, and the low sensitivity of the method for small particles, when large ones are also present, is exposed. The work was carried out with a hand-pump and densitometer developed by the Pneumoconiosis Research Unit of the Medical Research Council. The theoretical basis of the measurement is discussed. The increase in resistance to air flow through the filter paper, due to the deposition of coal dust, was also studied. -- Authors' Summary

- 127 The Determination of Gamma-Benzene Hexachloride in Insecticide Products.
T.H. Harris. J. Assoc. Offic. Agr. Chemists. 32, 684-690 (1949).

The method described is a modification of that of Munter and others, given in C.A. 42, p. 6981 f. The advantages of the method are fewer fractions collected, simplified apparatus, and more rapid analysis. -- Condensed from Chem. Absts.

Preventive Engineering

- 128 How to Control Fumes in Nonferrous Melting. R.H. Haley.
Foundry. 77, 118,121 (Sept. 1949).

The problem is discussed with special regard to the laws of California, which are extremely rigid in requirements concerning emissions from non-ferrous metal melting. The author describes the procedure used at his plant, where crucibles are used regularly. In his summary he says, "these points have been emphasized: (1) the need for correct furnace construction; (2) the maintenance of a clean and orderly workshop; (3) the care employed in selecting exactly the right temperature to withdraw the metal and prevent flaring; (4) the utilization of the flux and slag as a crucible cover to prevent contamination of the molten metal and the emission of oxides; and (5) the necessity for a furnaceman with qualifications equal to the requirements of the job.