

DETERMINATION OF SMALL AMOUNTS OF SULFURIC ACID IN THE ATMOSPHERE. PAUL P. MADER, WALTER J. HAMMING and ANTHONY BELLIN, *Analyt. Chem.* **22**:1181 (Sept.) 1950.

A method was developed for determining small amounts (0.03 to 0.005 p.p.m.) of sulfuric acid mist in the atmosphere. For collection of the mist Whatman no. 4 filter papers were used in a glass holder. The filter papers had been previously washed with distilled water and air dried to remove any traces of acid and alkali. After the aerosol sample had been collected, the filter paper was macerated in water, and the p_H of the solution was determined. The solution was then titrated with 0.002 normal sodium hydroxide. The end point was the p_H of carbon dioxide-free distilled water corrected for the filter paper acidity or alkalinity determined for the batch of filter paper used. A Beckman p_H meter was used for the titration. The method gave recoveries of 90 to 97 per cent. With the aid of this method it is possible to measure variations of the sulfuric acid content of air on an hourly basis.

MARY O. AMDUR, Boston

SAMPLING OF LIQUID AEROSOLS BY WIRES, CYLINDERS, AND SLIDES, AND THE EFFICIENCY OF IMPACTION OF THE DROPLETS. H. D. LANDAHL and R. G. HERRMANN, *J. Colloid Sc.* **4**:103 (April) 1949.

A method of sampling aerosols is presented, which relies on the measurement by chemical analysis of the amount deposited by a cloud on selected surfaces. With such a method a source of power is not needed; moreover, it is not necessary to prepare samples for microscopic examination. Wires, cylinders or slides may be used as collecting surfaces. The theory and the factors influencing accuracy are discussed at length, and numerous results are given.

INDUST. HYG. DIGEST.

PROCEEDINGS OF THE FIRST NATIONAL AIR POLLUTION SYMPOSIUM, Nov. 10 and 11, 1949, Los Angeles, sponsored by Stanford Research Institute. Paper. Pp. 149. Price \$2.50. Stanford Research Institute, Public Relations Office, Stanford, Calif., 1950.

The purpose of the meeting was to bring together workers in the field of air pollution to promote interchange of thought and comparison of ideas and methods. The ultimate objective was the establishment of a better understanding of the tolerable limits of air contamination from the point of view of community health.

The published transactions are a collection of short papers, by authors from the United States, on technics of sampling and analysis, sources and control of air-borne matter, meteorological influences and visibility, biological effects of air-borne matter, national trends in air pollution and the economics of air pollution.

The papers are excellent, well presented and exceptionally well edited and printed.

PHILIP DRINKER, Boston.

NIFE AEROSOL INDICATOR, A NEW AID FOR RAPID DETERMINATION OF DUST CONTENT IN THE AIR (IN SWEDISH). GUSTAF LJUNGGREN AND TORSTEN WILNER, *Teknisk Tidskrift* (Stockholm) **80**: (June 10) 1950.

The apparatus is essentially a small ultramicroscope in which particles are seen by cross illumination against a dark background. The equipment is easy to handle and is carried in a convenient kit.

The authors claim that it is useful particularly for particles in the size range ordinarily associated with production of silicosis. It makes possible the counting of particles the size of those in common smokes as well as those in dusts and fumes.

The original article is well illustrated.

PHILIP DRINKER, BOSTON.

Ventilating, Air Conditioning and Engineering Control

THE DISPOSAL OF OIL AND VARNISH FUME. J. C. DITTMER, *Am. Paint J.* **33** (Dec. 12) 1949.

The National Lead Company has made an extensive study of the problem of fume disposal, dust removal and air conditioning, with special application to linseed oil fume. The following types of equipment were considered inadequate: fume condensers, entrainment scrubbers, counter-