
Symposium on

INSTRUMENTATION IN
ATMOSPHERIC ANALYSIS



Published by the
AMERICAN SOCIETY FOR TESTING MATERIALS
1916 Race St., Philadelphia 3, Pa.

ASTM Special Technical Publication No. 250

SYMPOSIUM ON INSTRUMENTATION IN ATMOSPHERIC ANALYSIS

Presented at a meeting of
COMMITTEE D-22 ON METHODS OF ATMOSPHERIC SAMPLING AND ANALYSIS
AMERICAN SOCIETY FOR TESTING MATERIALS
Boston, Mass., June 23, 1958



Reg. U.S. Pat. Off.

ASTM Special Technical Publication No. 250

Price \$2.25; to Members \$1.80

Published by the
AMERICAN SOCIETY FOR TESTING MATERIALS
1916 Race St., Philadelphia 3, Pa.

© BY AMERICAN SOCIETY FOR TESTING MATERIALS 1959
Library of Congress Catalog Card Number: 59-10962

Printed in Baltimore, Md.
May, 1959

FOREWORD

The papers in the Symposium on Instrumentation in Atmospheric Analysis were presented at the meeting of Committee D-22 on Methods of Atmospheric Sampling and Analysis held in Boston, Mass., June 23, 1958. The Symposium was sponsored by the subcommittee on instrumentation of Committee D-22. Mr. Moyer D. Thomas, Stanford Research Institute, acted as Symposium Chairman and presided at the session.

NOTE.—The Society is not responsible, as a body, for the statements
and opinions advanced in this publication.

CONTENTS

	PAGE
Introduction—Moyer D. Thomas.....	1
Light Scattering Instrumentation for Particle Size Distribution Measurements— C. T. O'Konski, M. D. Bitron and W. I. Higuchi.....	2
Filtration Methods for Evaluation of Aerosol Contaminants—Morris Katz and H. P. Sanderson.....	29
Relative Merits of Gas Chromatography, Colorimetry and Spectrometry for Air Pol- lution Studies—Lewis H. Rogers.....	42
An Atmospheric Fluoride Recorder—Moyer D. Thomas, Gilbert A. St. John and Saul W. Chaiken.....	49

THIS PUBLICATION is one of many issued by the American Society for Testing Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Much of the data result from the voluntary contributions of many of the country's leading technical authorities from industry, scientific agencies, and government.

Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the ASTM technical committees, or compilations of data developed in special Society groups with many organizations cooperating. A list of ASTM publications and information on the work of the Society will be furnished on request.