Sixtieth Annual Meeting Papers

Symposium on

DETERMINATION OF GASES IN METALS



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

ASTM Special Technical Publication No. 222

SYMPOSIUM ON DETERMINATION OF GASES IN METALS

Presented at the SIXTIETH ANNUAL MEETING Atlantic City, N. J., June 18, 1957 AMERICAN SOCIETY FOR TESTING MATERIALS



Reg. U. S. Pat. Off.

ASTM Special Technical Publication No. 222

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 1958

Printed in Baltimore, Md. March, 1958

CONTENTS

| Introduction—Robert M. Fowler | age 1 |
|--|----------|
| Two Apparatus for the Determination of Gases in Metals—D. L. Guernsey and R. H. Franklin. Discussion. | |
| The Application of Vacuum Fusion to Gas-Metal Studies—A. L. Beach and W. G. Guldner | 13 |
| Oxygen Determinations Using a Platinum Bath and Capillary Trap—W. B. Smiley | |
| Bromination-Carbon Reduction Method for the Determination of Oxygen in Metals—Maurice Codell, George Norwitz, and Silve Kallmann | |
| Emission Spectrometric Determination of Oxygen in Metals—V. A. Fassel, W. A. Gordon and R. W. Tabeling | 41 |

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

FOREWORD

The papers and discussion in this Symposium on Determination of Gases in Metals were presented at the Sixtieth Annual Meeting of the American Society for Testing Materials, held in Atlantic City, N. J., June 18, 1957.

This Symposium was sponsored by Committee E-3 on Chemical Analysis of Metals. The papers were presented at the seventh session of the Annual Meeting. The chairman of the session was F. M. Fowler, Electro Metallurgical Co., Niagara Falls, N. Y.

