### Sixty-third Annual Meeting Papers

Symposium on

## NUCLEAR METHODS FOR MEASURING SOIL DENSITY AND MOISTURE



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

ASTM Special Technical Publication No. 293

# SYMPOSIUM ON NUCLEAR METHODS FOR MEASURING SOIL DENSITY AND MOISTURE

#### Presented at the

# SIXTY-THIRD ANNUAL MEETING AMERICAN SOCIETY FOR TESTING MATERIALS Atlantic City, N.J., June 27, 1960



Reg. U.S. Pat. Off.

ASTM Special Technical Publication No. 293

Price \$4.00; to Members \$3.20

Published by the

AMERICAN SOCIETY FOR TESTING MATERIALS

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Printed in Baltimore, Md.

March, 1961

#### FOREWORD

Newly developed nuclear methods for measuring moisture and density of soil were the subject of this Symposium on Nuclear Methods for Measuring Soil Density and Moisture. The papers presented described the apparatus in detail, presented data obtained on specific projects, and evaluated the methods by comparing results with those obtained by the conventional sand-cone and oven drying methods.

The symposium, sponsored by Subcommittee R-8 on Research on Special and Construction Control Tests of ASTM Committee D-18 on Soils for Engineering Purposes, was held on Monday, June 27, 1960, during the Fourth Session of the Sixty-third Annual Meeting of the Society.

Mr. H. F. Clemmer, of the Government of the District of Columbia Department of Highways, served as symposium chairman. Mr. Bonner Coffman, Consulting Engineer on Soils, presided over the session which was held in the form of a panel discussion with the authors serving as panelists. Mr. Coffman presented digests of the papers, following which the individual authors answered questions pertaining to their papers. Mr. Abraham Schwebel, of the National Bureau of Standards, acted as panel consultant.

<sup>&</sup>lt;sup>1</sup> Since deceased.

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

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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.