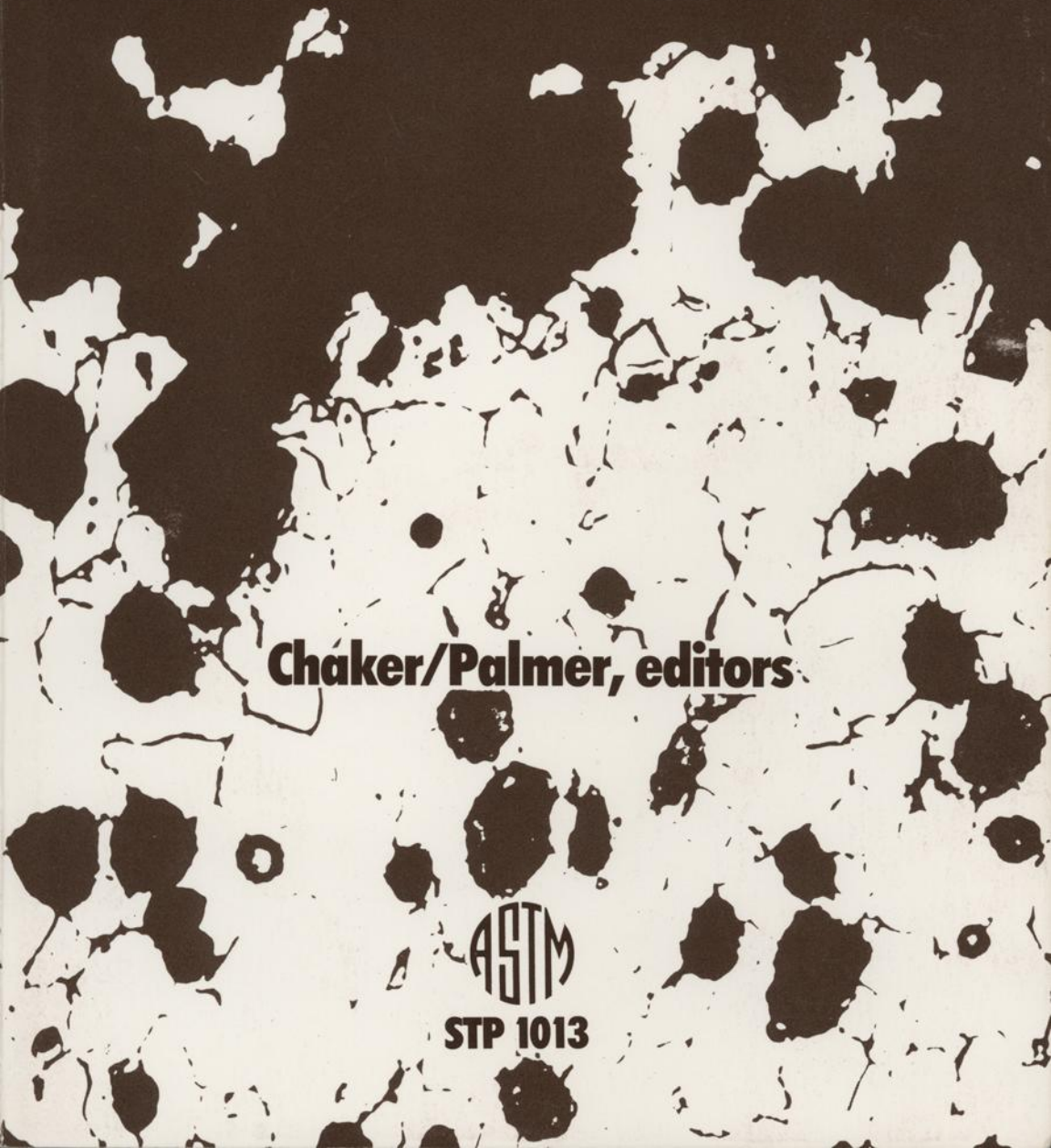
Effects of Soil Characteristics on Corrosion



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Foreword

This publication, *Effects of Soil Characteristics on Corrosion,* contains papers presented at the symposium of the same name held in Cincinnati, OH on 12 May 1987. The symposium was sponsored by ASTM Committee G-1 on Corrosion of Metals. Victor Chaker, The Port Authority of New York & New Jersey, and J. David Palmer, Corrosion Control Engineering, Ltd., presided as symposium chairmen and were coeditors of this publication.

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Introduction

Corrosion of metals in soils is responsible for a large percentage of corrosion worldwide. Several individual characteristics have been used to indicate the corrosivity of soils. However, no documentation describes the synergistic effect of several soil characteristics. This led Subcommittee G1.10 on Corrosion in Soils to create a task group to discover the answer. The task group decided to sponsor an international symposium to find the latest activities in the field of corrosion of metals in soils. The symposium was held 12 May 1987 in Cincinnati. Eleven papers were presented, followed by question and answer sessions.

The symposium revealed specific projects that are being carried on. Several papers expanded the knowledge of one parameter: oxygen concentration cells and their effect on concentric neutral cables. The most promising work was in a paper in which many soil characteristics were correlated using statistical analysis. The technical contributions of each paper are highlighted in the Summary in the back of the book.

More work is needed in the field of corrosion of metals in soils. Such information could be very important in identifying the synergistic effect of all the synergistic parameters, leading to more technically and economically effective methods of corrosion control.

On behalf of ASTM Committee G-1, Subcommittee G1.10, and the Task Group, I wish to express my sincere gratitude to the authors and technical reviewers who made this publication possible.

Victor Chaker

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