Robert Baboian, Editor

ROBERT BABOIAN, Editor

Robert Baboian is a corrosion consultant with BB Consulting, a consulting firm in Allentown, Pennsylvania. He received his B.S. in Chemistry from Marshall University and his Ph.D. in Physical Chemistry from the University of Cincinnati. He is the recipient of the ASTM Award of Merit, the ASTM Committee G-1 Francis L. LaQue Memorial Award, the ASTM Committee G-1 Certificate of Appreciation, and the NACE Fellow Award, and is currently Vice-Chairman and the Editorial Review Chairman of ASTM Committee G-1 on Corrosion of Metals. He has served on the Board of Directors of NACE International and is currently serving on the NACE MR0175/ISO 15156 Maintenance Panel. He has extensive experience in alloy development for chemical processes, flue gas desulfurization, marine, and oil field applications. He has written widely on materials applications and corrosion topics in these fields and has four patents and 60 publications. In addition to ASTM International, he is a member of the International Desalination Association, the Society for Petroleum Engineers, ASME International, NACE International, and the Naval Submarine League.

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Foreword


Preface

CORROSION CONTINUES to be a problem of worldwide importance. The second edition of this manual has been prepared and published to address this form of degradation. Corrosion is often neglected, but it seriously impacts our economy, jeopardizes human health and safety, and impedes technological progress. The most important factors in addressing corrosion and its control are: (1) recognizing and understanding the mechanisms, (2) developing solutions to the problems, and (3) implementing those solutions. Corrosion tests and standards are very significant in addressing each of these factors. Therefore, this manual includes guidelines for recognizing types of corrosion as well as fundamentals of testing and provides the tools required for making calculations, interpretations, and correlations. It serves as a source book of procedures, equipment, and standards used in testing.

The editor and section editors have coordinated the revision and update of this book so that most recent technologies are included in each section. In most cases, the original authors of chapters have made the revisions. In some cases, new authors needed to be chosen, or the editors performed that task. Users of the manual will find that it is an invaluable and instructive tool, as well as a source book on how to conduct corrosion tests, interpret results, and use standards.

The second edition of the manual is the result of a massive effort of planning, writing, reviewing, editing, production, and marketing. It would not have been possible without the outstanding efforts of the ASTM staff and the valuable and competent work of the editors and over 400 experts in the field that donated their time as authors and reviewers. They represent industrial, educational, and government organizations, and their contributions are greatly appreciated.

Robert Baboian
Editor
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