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SIMULATION OF ELECTROCHEMICAL PROCESSES

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Preface

This book contains the majority of papers presented at the Second International Conference on the Simulation of Electrochemical Processes held in Myrtle Beach, USA in May 2007. The meeting was organized by the Wessex Institute of Technology.

The first ELECTROCOR conference held in 2005 was successful and brought about meaningful interchanges between researchers. As in the first conference, the purpose of the meeting was to bring together researchers from a variety of fields that have a common focus on computational modeling of electrochemical processes. Electrochemical processes are the basis of diverse areas of interest ranging from corrosion to fabrication processes. While computational modeling is stressed, the need to understand the underlying physical phenomena is not forgotten. Also, the linkage between computational and experimental methods is highlighted in several papers in this volume.

The papers in this book are divided into the following main topics:

- Modelling methodologies
- Cathodic protection systems
- Experimental measurements and computer results
- Interference and signature control
- Stress corrosion, cracking and corrosion fatigue
- Detection and monitoring of corrosion

The Editors are indebted to the members of the International Scientific Advisory Committee for their help in reviewing abstracts and papers.

The Editors
Myrtle Beach, 2007

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