

MAJOR SYMBOLS ix STANDARD ABBREVIATIONS xix

- 1 ► INTRODUCTION AND OVERVIEW OF ELECTRODE PROCESSES 1
- 2 >> POTENTIALS AND THERMODYNAMICS OF CELLS 44
- 3 >> KINETICS OF ELECTRODE REACTIONS 87
- 4 ▶ MASS TRANSFER BY MIGRATION AND DIFFUSION 137
- 5 >> BASIC POTENTIAL STEP METHODS 156
- 6 >> POTENTIAL SWEEP METHODS 226
- 7 > POLAROGRAPHY AND PULSE VOLTAMMETRY 261
- 8 M CONTROLLED-CURRENT TECHNIQUES 305
- 9 ► METHODS INVOLVING FORCED CONVECTION—HYDRODYNAMIC METHODS 331
- 10 ▶ TECHNIQUES BASED ON CONCEPTS OF IMPEDANCE 368
- 11 M BULK ELECTROLYSIS METHODS 417
- 12 ELECTRODE REACTIONS WITH COUPLED HOMOGENEOUS CHEMICAL REACTIONS 471
- 13 ► DOUBLE-LAYER STRUCTURE AND ADSORPTION 534
- 14 M ELECTROACTIVE LAYERS AND MODIFIED ELECTRODES 580
- 15 >> ELECTROCHEMICAL INSTRUMENTATION 632
- 16 **SCANNING PROBE TECHNIQUES** 659
- 17 SPECTROELECTROCHEMISTRY AND OTHER COUPLED CHARACTERIZATION METHODS 680
- 18 PHOTOELECTROCHEMISTRY AND ELECTROGENERATED CHEMILUMINESCENCE 736

APPENDICES

- A MATHEMATICAL METHODS 769
- B > DIGITAL SIMULATIONS OF ELECTROCHEMICAL PROBLEMS 785
- C > REFERENCE TABLES 808

INDEX 814