

CONTENTS

CORONA PHENOMENA

Corona Discharge Physics and Applications.	1
R. S. Sigmond and M. Goldman	

DISCHARGES

Modeling of a Glow Discharge	65
L. Vriens, A. H. M. Smeets, and H. J. Cornelissen	
The Glow-To-Arc Transition	119
E. Marode	
Arc Discharge Electrode Phenomena.	167
G. Ecker	
Dynamics of Arc Discharges	181
J. Hackmann	

DIAGNOSTICS

Diagnostic Techniques for Discharges and Plasmas.	203
R. T. Waters	
Spectroscopic Diagnostics in Gas Discharges.	267
F. Bastien	

PLASMA CHEMISTRY

Plasma Chemistry	293
A. Goldman and J. Amouroux	

HIGH FREQUENCY DISCHARGES

Microwave Discharges.	347
J. Marec, E. Bloyet, M. Chaker, P. Leprince, and P. Nghiem	

APPLICATIONS

Plasma Applications	383
M. Kristiansen and A. H. Guenther	

SEMINARS

Diffuse Discharge Opening Switches.	415
K. Schoenbach, G. Schaefer, M. Kristiansen, L. L. Hatfield, and A. H. Guenther	
The Electroluminescence of Pure Noble Gases Below the Threshold for Electron Avalanche	429
C. A. N. Conde, M. F. A. Ferreira, T. H. V. T. Dias, and A. D. Stauffer	
Plasma Formation in a Tokamak	443
R. D. Bengtson and J. F. Benesch	

APPENDIX

Notes on Symbols, Units and Nomenclature in Gas Discharge Physics.	451
R. S. Sigmond	
PARTICIPANTS	459
INDEX	467