CONTENTS

Preface	. vii
---------	-------

I-Radio Frequency/Radiation Processing

1/Development of Technology for Industrial Applications
of Radio Frequencies
D. Bialod
2/Industrial Microwave Applications
N. W. Lord
3/Selected Applications in High Frequency and Microwave
Heating—An Economic Commentary
K. W. Peterson, J. R. Button, and D. A. Annett
4/Directions in Microwave Food Processing
R. E. Mudgett
5/Conveyorized RF Drying Systems
J. M. Holland
6/Radiation Processing Today and Tomorrow
K. M. Morganstern
7/Using Electric, High Intensity Infrared for Coating
Curing and Specialized Heating Applications
M. Eeg
8/The Use of Infrared Radiation in France
M. Baumann

CONTENTS

9/Electron Beam Curing of Coatings and Adhesives	
J. Weisman and E. P. Tripp, III	
10/Applications of High Power Density Beams (Laser and	
Electron Beams) in Welding and Heat Treating of Metals	
G. Sayegh	

II—Plasma Processes

11 / Thermal Plasma Systems for Industrial Processes
M. S. Fey, T. N. Meyer, W. H. Reed, and W. O. Philbrook
12/Chemical Processing in Plasmas
C. W. Clump
13/A 1 MW Prototype Arc Reactor for Processing
Coal to Chemicals
A. J. Patrick, Jr. and R. E. Gannon
14/Plasma Arc Heater Design Techniques for Commercial
Process Applications
T. Foster and G. Liu
15 / Electric Arc Heaters in Cement Manufacturing
S. Sood
16/The Application of Plasma Techniques to the Production
of Nitrogen Oxides in the U.S
L. M. Kushner
17 / Plasma Technology in Acetylene Production in the U.S
L. M. Kushner
Index