666 FORm

CONTENTS

Material Selection for Compacting Tools	1
Dry-Bag Isostatic Pressing and Contour Grinding of Technical Ceramics	4
Tooling Desing for Wet-Bag Isostatic Pressing	16
Improved Fabrication of Al2O3 Tubing for Sodium Vapor Lamps	32
Effect of Humidity on the Pressing Characteristics of Spray-Dried Alumina	38
Three Indices for Characterizing the Tableting Performance of Materials	47
Binder Hardness and Plasticity in Granule Compaction	58
Role of Powder Agglomerates in Ceramic Processing	67
Slip Casting and Casters	76
Mechanics of Colloidal Filtration	85
Microstructure Control Through Colloidal Filtration	94
Casting of Monodisperse Colloidal Silica	105
Fabrication of Electromechanical Transducer Materials by Tape Casting	115
Tape Casting-Future Developments	140
Particle Size Distribution Effects on Tape Casting Barium Titanate	150
Ultrasonic Dispersion of BaTiO3 Tape Casting Slurries	158
Dispersants for Tape Casting Pure Barium Titanate	164
Extrusion of Electrical Porcelain Bodies	184
Body Parameters Affecting Extrusion	193
Porosity in Extruded Cellular Ceramics	201
Hot Ceramic Extrusion Process	212
Ceramic Components by Injection Molding	220
Machinery for Injection Molding of Ceramic Shapes	234
Tooling for Ceramic Injection Molding	239
Rate-Controlled Thermal Extraction of Organic Binders from Injection-Molded Bodies	241
A Method for Determining Critical Ceramic Powder Volume Concentration in the Plastic	
Forming of Ceramic Mixes	246
A Practical Approach in Relating Capillary Viscosity and Spiral-Length Data for Molding	
Ceramic Mixes	251
Computer Modeling of Fluid Flow	259
Vacuum Injection Molding of Glass-Metal Electrical Components	265