

Contents

Preface	ix
2008 PEI Officers	xi
2009 PEI Officers	xii
2008 Technical Forum Committee	xiii
2009 Technical Forum Committee	xiv
Past Chairs of PEI Technical Forums	xv
2008 PEI Tech Forum	
Dense Phase Pumping and Spraying of P/E Powder Ken Kreeger	3
Development of the Cold Roll RP45 Grade for Water Heater Tank Bodies Stan Lipkowski	9
Energy Cost in Washer Systems Brian Rozdilsky	15
Comparison of Cobalt and Nickel in Frit Formulations Mike Wilczynski and Roger Wallace	17
Raw Materials and Energy: Influence on Enamels Market Bruce Hanna	23
LustReflex Coatings for Porcelain Enamel E.A. Axtel III and Klaus-Dieter Fritsche	29

Bulk Enamel Distribution System Jeff Walker and Steve Sloan	33
Porcelain Enamel Reclaim Technology Review Mike Horton	41
Progress in the Use of Specialized Enamel Coatings to Bond Concrete to Steel Philip Malone, Sean W. Morefield, Charles A. Weiss, Earl Baugher and Cullen Hackler	45
Performance Coatings for Energy Efficiency Holger Evele, Charles Baldwin, Terry Detrie and Dan Swiler	51
From Decorative to Functional Printing Colors Christian Schlegel	59
ISO 9001:2000—Why Do It? Kara Kopplin	67
New EU Chemical Regulations Will Significantly Impact USA and Global Businesses: <i>REACH</i> Jack Waggener	71
A Heat Resistant Label Material and Its Application in High Temperature Processing Huimin Yang	77
Furnace Moisture Issues Jason Butz	79
Furnaces and Firing Mike Horton	85
Making Porcelain Enamel More Competitive with Stainless Steel: A Holistic Approach to Process Improvement Ken Kaluzny	91
Requirements for the Use of Porcelain Enamel in Industrial Coatings Hemant Dandekar	97
Reactive Vitreous Enamel Coatings for Concrete Reinforcing Steel Cullen Hackler	103
 2009 PEI Tech Forum	
Energy Costs in Washer Systems Brian Rozdilsky	109

21st Century Cleaning Systems Ken Kaluzny	111
Using Control Systems to Go “Green” While Saving You Money! John O’Connor	115
Porcelain Enamel Powder Coating Systems for Oven Cavities Worldwide Jeff Hale and Phil Flasher	119
Dense Phase Pumping of Porcelain Enamel Powder—Part II Ken Kreeger	125
Case Study: Process Rheology of Cover Coats at Engineered Storage Products Company Greg Budnick	133
Water Heater and Inside Coating with Wet Enamel, Usable for Solar Energy Brigitte Riester-Alt	135
Sustainability—More Than a Buzz Word W. Mark McGinley	139
Decorating with Ceramic Decal Michael McCall	149
Digital Ceramic Printing Ron Manwiller	155
Preliminary Evaluations of Functional Coatings for Improved Chemical and Water Resistance Charles Baldwin and Lou Gazo	157
Improving the Covering Power of Titanium White Cover Coat by Controlling Bubble Structure Koichi Tanaka	163
Chemically Resistant Enamel Eckhard Voss	169
The Who, What, Why, Where and When of Cast Iron Enameling Steve Pew	177
Author Index	187