

Table of Contents

Preface

v

Chapter 1: Polymers, Composites and Ceramic Materials

Feasibility Study of Bio-Composite Foam Preparation from Poly(Butylene Succinate) with Spent Coffee Grounds Using Compression Molding

T. Sritapunya, A. Rattanapan, P. Sapsrithong, S. Tuampoemsab, P. Suksompoom, C. Lagjaroensakul and P. Dechsiri..... 3

Utilization of Waste Non-Metallic Printed Circuit Boards in Polymer Composites from Acrylate-Styrene-Acrylonitrile

P. Sapsrithong, A. Rattanapan, T. Sritapunya, S. Tuampoemsab and M. Nithitanakul..... 11

Preparation and Characterization of Natural Rubber Foam Filled with Bagasse Fiber

A. Rattanapan, P. Sapsrithong, S. Tuampoemsab and T. Sritapunya..... 19

Acid-Activated Organobentonite-Based Highly Porous Foams via Polymerized High Internal Phase Emulsion: Preparation, Characterization and Machine Learning Prediction

N. Keasangam, J. Chungprempree, J. Preechawong, M. Nithitanakul and P. Sapsrithong..... 27

Physical, Mechanical and Thermal Insulation Properties of Foam Made from Natural Rubber Compounded with Ground Rice Husk

S. Tuampoemsab, A. Rattanapan, P. Sapsrithong, T. Sritapunya and L. Buranasean..... 35

Biodegradation of UV Curing Thermochromic Prints with Respect to Printing Substrate

M. Vukoje, M. Rožić, T. Cigula, R. Kulčar, K. Itrić Ivanda, S.P. Pasanec and T. Hudika..... 41

Impact of the Xanthan Gum on Rheological and Mechanical Properties of Slip of Ceramic

S.H. Daouadji, L. Hammadi and A. Hazzab..... 49

Research Progress of Ceramic and Metal Welding Technology

C.N. Li and S.H. Yin..... 59

Chapter 2: Additive Manufacturing

Effect of Line Width and Wall Count on the Compressive Strength of Single and Functionally Graded Additively Manufactured ABS Gyroid Structure

S.A.C. Arañez, B.A. Basilia, A.K. Collera and M.T. Margarito..... 71

Predictive Modeling of Out-of-Plane Deviation for the Quality Improvement of Additive Manufacturing

H. Wang, H.A.A. Shraida and J. Yu..... 79