Table of Contents

Preface

Chapter 1: Materials and Technologies in Geotechnical Engineering

The Study of Improved Silty Sand with Stone Columns under Consolidation Condition A. Noorak, M. Jamnongwong and U. Rochanavibhata	3
Performance of Using Geocell for Slope Erosion Control Compared in Different Geocell	
Installing Areas S. Chuenjaidee, N. Thanasisathit and U. Rochanavibhata	13
Influence of Temperature on Strength and Elastic Stiffness Behaviours of Ottawa Sand under Triaxial Compression Test	1.6
K. Jariyatatsakorn and W. Kongkitkul Enhancing the Machanical Proporties of Coment Stabilized Soil Using Microsoffulese and	19
Enhancing the Mechanical Properties of Cement-Stabilized Soil Using Microcellulose and Styrene-Butadiene Emulsion P. Pongmuksuwan and W. Kitisatorn	27
Effect of Microcellulose Modified Styrene-Butadiene Emulsion on Mechanical and Hydraulic Properties of Cement-Stabilized Soil W. Kitisatorn	35
Chapter 2: Sustainable and High-Performance Building Materials	
Effect of Adding Natural Latex Mixed Adhesive on the Shear Strength of Aluminum - Cocofiber Composite Single Lap Join	
S. Hastuti, N. Mulyaningsih, I. Taufik, X. Salahudin, I.N. Hadi, T. Triyono, F. Paundra and R.A.P. Tarigan	45
Morphology and Acoustical Properties of Sago Pith Waste Reinforced Polyester Composites L. Luthfi	53
The Study of Mechanical Properties and Chemical Groups of Composite Concrete A. Yusra, M. Hasan, H. Husin, T.B. Aulia, B. Baharuddin, S. Ramadhan, F. Fachruddin and S. Sanusi	65
Use of Cement and Aggregates Substitution for Production of Hybrid Cost-Effective and Sustainable High-Strength Concretes	75
T.B. Aulia, M. Zardan, N. Abdullah, A. Yusra, Z. Jalil, E. Handoko and C. Rahmawati The Influence of Service Live Factors on Concrete Mixed with Sea Sand and Seawater with	77
the Addition of Zeolite on the Mechanical Properties of Concrete W. Wahyuni, A. Abdullah, Y. Hayati and S. Mulyati	85
Flow Degree and Mechanical Properties of PVA/Basalt Fiber Composite Gentil Material under Different Complex Ratios J. Chen, L.Q. Liu, J.S. Wang, G. Zhao, M. Jiang, K.X. Guo and Y. Cui	95
Effect of Antifreeze on the Low-Temperature Properties of Magnesium Phosphate Cement))
Concrete Z.J. Wang, W.J. Li and M.L. Zhao	103
Optimization of Tensile Strength in PVA Fiber Reinforced Toughness-Concrete for Reinforcement Applications B.Y. Shi and M.F. Xiong	111
Study on the Mechanical Properties of High-Toughness Concrete Hollow Wall Panels	111
Prepared with POM Fiber B.Y. Shi, B.J. Cheng, M.F. Xiong, F.T. Wang and F. Ao	119