Structural Engineering and Materials

Table of Contents

Preface

Chapter 1: Green Building Materials

| Utilization of High-Density Polyethylene (HDPE) and Polypropylene (PP) Plastic Waste as Fine Aggregates in Pervious Paver Block Production S.L. T. Sales, M.R.M. Mabida, M.L. Mamza and K.J.G. Solis Synthesis of Cardava Banana (Musa acuminata x balbisiana) Pseudostem Fiber - Silica Reinforced Composite as Concrete Additive C.I. Oceña and C.P. Lawagon Synthesis of Coconut (Cocos nucifera) Husk Fiber-Silica Composite as Concrete Additive J.D. Manota, R.S. Alvarez and C.P. Lawagon Synthesis of Durian (Durio Zibethinus) Rinds Fiber-Silica Composite as Concrete Additive J.M.M. Gallawan and C.P. Lawagon Thermal Technical Requirements for Wall Materials and Analysis of Thermal Stability of Enclosing Structures under Non-Stationary Heat Flow S. Egnatosyan, M. Badalyan and N. Egnatosyan | 3 11 19 27 35 | | |
|--|---------------------------|--|----------|
| | | Chapter 2: Architecture | |
| | | Design of Foldable Shelter for Post-Disaster Response D.F. Plazos, A.B.I. Cabisay, R.C. Ongcay and R.R.A. Peramide | 47 |
| | | Modeling and Analysis of the Thermal Behavior of Passive Techniques for Residential Apartment Buildings in Tropical Climate: Santo Domingo, Dominican Republic Y.G. Frómeta, I. Cuadrado, I.M. Blanco, V. González and M. Madrid | 53 |
| | | Design of Foldable Shelter for Post-Disaster Response D.F. Plazos, A.B.I. Cabisay, R.C. Ongcay and R.R.A. Peramide Modeling and Analysis of the Thermal Behavior of Passive Techniques for Residential | 47 53 |