

Table of Contents

Preface

Chapter 1: Properties and Processing Technologies of Structural Metals

Optimizing Hot Forging of 38MnSiVS5 Steel: A Multi-Objective Approach with Grey-Fuzzy Method M.I. Equbal, A. Kumari and R. Ohdar	3
Research Progress towards the Machining of Titanium Alloy Using CNC Milling: A Technical Review M. Kumar and P.S. Rao	11
Experimental Analysis of the Behavior of Multiple Adhesive on the Single Lap Joint Strength C.R. Desai, D.C. Patel, C. Desai and M.A. Hasan	19

Chapter 2: Recycling and Applications of Bio-Based Materials

Antifeedant Nanosuspension Formula of <i>Tithonia diversifolia</i> Leaf Extract by Emulsion Inverse Method to Control <i>Crocidolomia pavonana</i> Cabbage Pest Insect W. Hermawan, M. Melanie, Z. Maulidah, D.M. Malini, M. Miranti and M. Madihah	31
Exploring the Potential of Pangasius Catfish Oil as a Base Oil for Nanoemulsion Products: Optimization and Characterization A.A.S.I.C. Putri, C.A.J. Tanaya, P.S. Yustiantara, E.I. Setiawan, N.N. Rupiasih and I.M.A.G. Wirasuta	41
Kinetic Studies on MB Adsorption by Graphene like Material from Coconut Shell Charcoal D.A. Affandi, B.L. Najati, N. Syakir, I.M. Joni and F. Fitrilawati	61
The Effectiveness of Concentration of Chitosan Extracted from Tiger Shrimp Shells as a Natural Preservative of Kenyar Fish N.N. Rupiasih, Y.Y. Tandu, N. Wendri, I.K. Putra and P.B. Vidyasagar	77
Fabrication of a PETG-Based Biocarrier Using Additive Manufacturing for Moving Bed Biofilm Reactor (MBBR) Applications R.K.H.K. Widjaya, F. Faizal, I.M. Joni and C. Panatarani	85