

Table of Contents

Preface

Nano Biomaterial Coating of Stainless Steel Alloys (316 and 304) as a Corrosion Inhibitor in Saliva Medium

S.A. Jasim, A. Ayesha and A. Kadeem 1

The FTIR Test and Behavior Mechanical Concrete with Pozzolan Substitution

A. Yusra, H. Husin, S. Samsunan, M. Hasan, T.B. Aulia, F. Fachruddin and B. Tripoli 13

Augmenting Material Characterisation via Numerical Analysis to Improve Robustness in Mechanical Property Evaluation

R.K. Mishra, B. Venugopal and S.P. Mathew 27

Enhancing Structural Vibration Damping in Marine Machinery: A Comprehensive Numerical Investigation with Modal and Harmonic Analysis

G. Sharma, A. Kumaraswamy and S. Rath 39

Development of the Extrusion Based Food 3D Printer Machine by Modifying Fused Deposition Modelling (FDM) 3D Printer

F. Bestiara, K. Saptaji, T.K. Dewi, F. Triawan, A.I. Ramadhan and A. Azhari 57

Experimental Study of the Liquid Cold Plate Cooling System for Lithium-Ion Battery in Electric Vehicle

M.R. Hilmy, M.A. Rahman, I. Pranoto, K. Khasani and J. Waluyo 67

Research on the Effect of Thermal Coating Temperature on the Fatigue Performance of Wind Turbine Blade Bolts

S.J. Wu, H. Wei, G. Xiong, W. Feng and H. Ban 75