Table of Contents

Preface and Committees	
Vibration Control of Sandwich Plates B. Basa and S.K. Sarangi	1
Response of Starter Motor of an Engine Subjected to Random Vibrations R. Kendre, S. Prabhune and R. Ghorpade	9
Vibration Analysis of Multi-Disk Multi-Profiled Shaft-Rotor Systems P.M.G.B. Asdaque, R.K. Behera and J.H. Shaik	17
Vibration Analysis of Simply Supported Magneto Rheological Fluid Sandwich Beam S. Kolekar	23
Dynamic Stability of a Motorized High Speed Machine Tool Spindle Supported on Bearings J.H. Shaik and J. Srinivas	29
Investigation of Transverse Surface Crack on Vibration Analysis of Rotating Shaft H.G. Waikar and S.D. Katekar	35
Design Considerations for Automobile Chassis for Prevention of Rolling over of a Vehicle J. Rajpal, S.G. Thorat, B.S. Kothavale and S.S. Hatwalane	41
Kinematic Modeling and Hardware Development of 5-DoF Robot Manipulator K.P. Dharmendra, K. Ramachandra and S. Sartaj	51
Parametric FEA Analysis of Double Flexural Manipulator for Precision Application Z. Khan, H. Zambare, S. Deshmukh and A. Shinde	59
Thermal Mechanics Based Energy Efficient FIR Filter for Digital Signal Processing B. Pandey, T. Kumar, T. Das, S.M.M. Islam and J. Kumar	65
Output Power Comparison of TCT & SP Topologies for Easy-to-Predict Partial Shadow on a 4×4 PV Field S. Pareek and R. Dahiya	71
Multi-Objective Optimization of Photochemical Machining Process Based on Grey Relational Analysis Method for Spray Etching D. Agrawal, K.V. Gurav and D. Kamble	77
Flow Stress Prediction of Ti-6Al-4V Alloy at Elevated Temperature Using Artificial Neural Network N. Kotkunde, A. Balu, A.K. Gupta and S.K. Singh	83
Value Stream Evaluation and Simulation to Improve Material Flow and Productivity B.V. Ramnath, V. Chandrasekhar, C. Elanchezhian, L.B.S. Vinoth and K. Venkatraman	89
Analysis and Optimization of Process Parameters of Abrasive Flow Machining Process for Super Finishing of Non-Ferrous Material Nozzle	0.5
V.B. Patil, A.S. Bhanage and R.S. Patil Effect of Time Scaling and Mass Scaling in Numerical Simulation of Incremental Forming K. Surech and S.P. Regalla	97 105
Performance Evaluation of an Engine Assembly Line through Simulation V.J. Hole and N.R. Rajhansa	111
Analysis of Failure in Adhesively Bonded Joints Using Traction Separation Theory G. Ranjan, R.K. Pandey and A.G. Barman	117
Investigation of the Machinability Characteristics of GFRP / Epoxy Composites Using Taguchi Methodology H. Vasudevan, N. Deshpande and R. Rajguru	123
Imperata cylindrica / Sacred Grass Long Fibre Reinforced Polyester Composites – An Experimental Determination of Properties N. Srinivasababu, J.S. Kumar and K.V.K. Reddy	131
Experimental Optimization of Thickness of Protective Padding for Two-Wheeler Rider's Helmet	101
A.A. Joshi, R.G. Gore and K. Sundaram Selection of Material for Wind Turbine Blade by Analytic Hierarchy Process (AHP)	139
Method I. P. Maskenatil, A. I. Gandigude and S. A. Kale.	145

Effect of Weight Percentage on Mechanical Properties of Boron Carbide Particulate Reinforced Aluminium Matrix Composites S. Dhinakaran and T.V. Moorthy	151
Fabrication and Sliding Wear Behaviour of Metal Matrix Composites U.P. J, T.V. Moorthy and S. Ananth	157
Effect of Graphite Addition on the Mechanical Properties of Stir Cast Particulate Aluminum Metal Matrix Composite Reinforced with Alumina and Silicon Carbide S.R. Kulkarni, P.M. Sonawane and M.G. Karnik	163
Active Control of Thermally Induced Vibrations in Smart Structure Instrumented with Piezoelectric Materials A. Sharma, C.K. Susheel, R. Kumar and V.S. Chauhan	169
Characterisation of the Key Fuel Properties of Oxygenated Diethyl Ether-Diesel Blends K.R. Patil and S.S. Thipse	175
Ecofriendly Refrigerants P.P. Pandav, S.B. Lokhande and S.B. Barve	181
Scavenging of Nickel(II) from Aqueous Wastes by Adsorption with Granular Activated Carbon (GAC) S. Gawhane	187