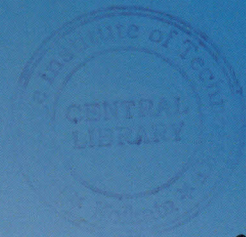


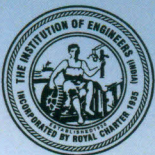
# Journal of The Institution of Engineers (India): Series C

Mechanical Engineering · Production Engineering · Aerospace Engineering ·  
Marine Engineering

For Circulation in India only



✓B  
01/02/2023



The Institution of Engineers (India)

 Springer

# Journal of The Institution of Engineers (India): Series C

Volume 103 · Issue 5 · October 2022

## ORIGINAL CONTRIBUTIONS

**A Study of Tensile Characteristics for Glass and Carbon Fiber Along with Sandwiched Reinforced ABS Composites**

V.A. Radadiya · A.H. Gandhi 1049

**An Experimental-Numerical Investigation for Layer-Wise-Heat-Input Management in GMA-Based Additive Manufacturing**

S. Srivastava · R.K. Garg · A. Sachdeva · V.S. Sharma · S. Singh 1059

**Blind-Spot Monitoring System using Lidar**

K.S. Pawar · S.N. Teli · P. Shetye · S. Shetty · V. Satam · A. Sahani 1071

**Calibrating a Synthesized 3-PRS Manipulator by Minimizing the Errors in Positions of Revolute Joints**

P.S. Rao 1083

**Designing Engineering Solutions to Surgical Problems: How to Translate Physiology to Biomechanics**

O.B. Benyamin · D. Juvinao · T. Berlinsky · A. Salih · E. Solomonov · I. Waksman · S. Biswas 1095

**Development and Characterization of Cu-Al<sub>2</sub>O<sub>3</sub> Nanocomposite Coating using Electrodeposition Process on Copper Substrate**

A. Mogra · P.K. Pandey · K.K. Gupta · S. Shivhare · V. Bagal 1103

**Eco-Friendly Machining of Ti-6Al-4V Alloy: Optimization Using a Hybrid Algorithm (Grey Wolf Algorithm and VIKOR Algorithm)**

V.V.K. Lakshmi · K.V. Subbaiah · K.A. Vikram · Shabana · K. Suresh · R.D.V. Prasad 1111

**Evaluation of the Efficacy in Ergonomically Designed Handsaw to Minimize the Muscular Load on Arm and Shoulder Muscles among Carpenters**

R. Naveenkumar · S. Shankar · R. Nithyaprakash · D. Hariprasath · G. Moulidaman · C. Prakash 1125

**Improvement in Ride Comfort and Vehicle Stability using Hybrid Semi-Active Suspension System**

J. Kumar · G. Bhushan 1133

**Influence of Particle Size on Microstructure and Sliding Wear Response of Fly Ash and Rice Husk Ash Reinforced Al6061 MMCs**

S.S. Panda · A.K. Senapati · P.S. Rao 1143

**Investigation of the Performance of a 660-MW Supercritical Boiler in Terms of NO<sub>x</sub> Emission and Enhancing the Thermal Efficiency by Optimizing the Air Distribution System**

N.K. Gavirineni · E. Gundabattini 1155

**Machinability Aspects of Nano MMT Deposited GFRP Composites to Minimize the Drilling Induced Delaminations**

S.R. Juvvala · K.R. Chebattina · V.S.N. Venkata Ramana · D. Bommana · U.C. Pathem 1169

**Microstructural, Strength and Residual Stress Studies on Single- and Double-Side Single-Pass Submerged Arc Welding of 9Cr-1Mo-V Steel Plate**

S. Suman · P. Biswas 1177

**Microstructural Study and Mechanical Characterization of ECAP Processed C70600 Alloy**

S. Sachin · H.S. Nayaka 1193

**Natural Convection Inside a Square Enclosure with an Array of Cylinders of Different Geometrical Configurations**

S. Pati · N. Goswami · D. Bhattacharya · P. Kalita · P.R. Randive 1203

**Network-of-Things (NoT) in Avionic Systems**

S. Sreedharan Pillai · B. Varghese · S. Sankarattil · V. Padmanabha Rao · M.N. Namboodiripad 1217

**Study of the Polishing Performance of YAG Crystals through the Balance between Chemical and Mechanical Actions**

N.M. Quang · N.T. Tung · L.T.P. Thanh 1223

**Study on the Cost Control of Enterprise Activity Chain Based on Big Data**

X. Wang 1235

**Suitable CFRP Patches to Arrest Crack Growth in Thin Alloy Aluminium Panels**

H.P. Shinde · P. Kumar · M.G. Karnik · S.D. Shinde 1243

**Transition to Electric Mobility in India: Barriers Exploration and Pathways to Powertrain Shift through MCDM Approach**

B. Ashok · C. Kannan · K.M. Usman · R. Vignesh · C. Deepak · R. Ramesh · T.M.V. Narendhra · C. Kavitha 1251

**CASE STUDY**

**Experimental Analysis of Modified Refrigeration Air Dryer for Performance Improvement**

D.C. Gosai · A.K. Gillawat · S.M. Raj 1279

**REVIEW PAPERS**

**3D Printing of Glass Fiber-Reinforced Polymeric Composites: A Review**

K. Badogu · R. Kumar · R. Kumar 1285

**Bone Tissue Regeneration: Rapid Prototyping Technology in Scaffold Design**

A.I. Ansari · N.A. Sheikh 1303

**Processing Techniques, Microstructural and Mechanical Properties of Wire Arc Additive Manufactured Stainless Steel: A Review**

S.K. Sharma · C. Sharma 1325

**ARTICLE OF PROFESSIONAL INTEREST**

**Flare Piping Material Selection for the Offshore Oil and Gas Industry**

K. Sotoodeh 1341

Further articles can be found at [link.springer.com](http://link.springer.com)

Instructions for Authors for *J. Inst. Eng. India Ser. C* are available at <http://www.springer.com/40032>