

International Journal of Materials, Mechanics and Manufacturing

CONTENTS

Volume 5, Number 4, November 2017

- **Study on Dynamics**

Computation of Hydrodynamic Characteristics of Ships Using CFD.....219

M. M. Karim and N. Naz

Characterising and Predicting on the Mechanical Behaviour of Dissimilar Spot Welded Joints Base on Dual Indenters.....224

I. Nyoman Gde Antara and I. Nyoman Budiarsa

- **Material Science and Processing**

Machining Performance Optimization for Electro Discharge Machining of Inconel 625: A Case Experimental Study.....228

Rahul, Chandramani Upadhyay, Saurav Datta, Bibhuti Bhusan Biswal, and Siba Sankar Mahapatra

Multifunctional Magnetic Iron Oxide Nanoparticles for Intracellular Imaging and Drug Delivery to Cancer Cells.....231

Kheireddine El-Boubbou

The Role of Ceria in Hydrogenation of Carbon Monoxide and Dehydration of Bio-Ethanol.....235

Kusman Dossumov, Gaukhar Y. Yergazyieva, Dina Kh. Churina, Samal Zh.Tayrabekova, Oken Akhmet, and Erbol M. Tulebayev

The Detection for Nickel Base Super Alloy Based on Ultrasonic Phased Array241

Mengqiu Gao, Bing Li, Lei Chen, and Yuegen Wang

Processing of Methane over the Oxide Catalysts.....247

Kusman Dossumov, Gaukhar Ye. Yergazyieva, Laura K. Myltykbayeva, and Moldyr M. Telbayeva

- **Mechanical Design**

A Study on Surface Quality of Laser Drilled Holes: Parametric Optimization Using Harmony Search Algorithm251

S. Chatterjee, K. Abhishek, and S. S. Mahapatra

Finite Element Analysis and Manufacture of Porous Structure Based on SLM Technique255

Yaling Wang, Xianshuai Chen, Yuanxin Luo, Chunyu Zhang, Peng Zhang, and Wei Feng

Comprehensive Design and Manufacturing Solutions for Sand Control and Tooling towards Enhanced Oil Recovery.....259

Yongsheng Ma

Developing Annual Overhaul Decisions for Turbo Machinery under a Cost Value Approach.....270

Chung Yeh and Yu-Tang Lee

- **Modeling and Simulation**

Solving Production Processes Disparity Issue through Implementation of Poka-Yoke Concept.....	278
<i>Che-Ani M. N., Sapian A. S., Azid I. A., and Kamaruddin S.</i>	
A Study of Tolerances Effect of the Interference Fit in a Retaining Ring Generator 60 MW at Dieng Geothermal Component Using FEM.....	282
<i>Aditya Sukma Nugraha, Imam Djunaedi, and Hilman Syaeful Alam</i>	
Alternative Optical Acquisition Technique for Supporting Reverse Engineering Process.....	286
<i>Suchada Rianmora and Molticha Rangsiyangkoon</i>	
Fracture Distribution Pattern via Numerical Stimulation in Naturally Fractured Shale Gas Reservoir.....	290
<i>Zhou Tong, Zhang Shicheng, Zou Yushi, Lin Hun, and Hao Siying</i>	