

International Journal of Materials, Mechanics and Manufacturing

CONTENTS

Volume 3, Number 1, February 2015

• General Mechanical Engineering

- Tracing Performance Evaluation on Ergonomics Mouse Base on Steering Law.....1
Waraporn Phithugthummakun and Phairoat Ladavichitkul
- A Study of Efficiency Eccentric Drilling-Milling Chuck.....5
Hasan Al Dabbas
- Design of Pelletizing Machine (Balling Disc)9
K. O. Ikebudu, Chukwumuanya E. O., Swift O. N. K., and Nwokeocha Toochukwu
- Experimental and Numerical Heat Transfer Analyses of Exhaust Region of Reciprocating Compressor.....13
Mehmet Onur Dincer, Kemal Sarioglu, and Husnu Kerpici
- Development of Indirect Visualization Technic of Propagating Flame by Densely Installed Ion-Probes.....17
Tomoaki Yatsufusa, Kan Lu, and Koji Ishibashi
- Numerical and Experimental Investigations of Lift and Drag Performances of NACA 0015 Wind Turbine Airfoil.....22
Izzet Şahin and Adem Acir

• Advanced Materials and Processing Technology

- A Numerical Investigation of Effects of Cutting Velocity and Feed Rate on Residual Stresses in Aluminum Alloy Al-6061.....26
Sohail Akram, Syed Husain Imran Jaffery, Mushtaq Khan, Aamir Mubashar, and Liaqat Ali
- Study of Corrosion Resistance of Aluminum Alloy 6061/SiC Composites in 3.5% NaCl Solution.....31
Muna K. Abbass, Khairia S. Hassan, and Abbas S. Alwan
- An Improved Mathematical Model to Predict Surface Roughness Using Hybrid Method.....36
Mohd Fadzil Faisae Ab. Rashid
- Improving EDM Efficiency with Silicon Carbide Powder-Mixed Dielectric Fluid.....40
M. A. Razak, A. M. Abdul-Rani, and A. M. Nanimina
- The Effect of Cyclo-Alkane Additives in Waste Cooking Oil B20 Fuel on a Single Cylinder DI Diesel Engine44
George Varghese, P. Mohanan, and Nithesh Naik

• Control Engineering and Electrical Engineering

- An Auto-Tuning Method for the Scaling Factors of Fuzzy Logic Controllers with Application to SISO Mechanical System.....49
Gamal Abdel Nasser, Abdel Badie Sharkawy, and M-Emad S. Soliman

Assistive Pen to Improve Quality Writing of Hand Tremor with Proportional-Control.....	56
<i>Z. M. Yusop, M. Z. Md. Zain, M. Hussein, A. R Musa, and I. Ishak</i>	
Analysis of Diesel Spray Droplets Behavior Using Shadowgraph Technique Images.....	60
<i>Abdullah Adam, Mamat Rizalman, and Tomoaki Yatsufusa</i>	
Study of a Photovoltaic System Using MPPT Buck-Boost Converter.....	65
<i>A. Bouchakour, L. Zaghba, M. Brahami, and A. Borni</i>	