



## Table of contents

Editorial	i
Table of contents	iii
1. <b>Optimization of process parameters to improve the wear resistance of the mild steel using electroless Ni-P coating process</b> Vinod Kumar T., Muraliraja R., Chandrasekaran M. ....	1
2. <b>Tribological study of vegetable oil and its TMP esters as biolubricants</b> Md M. Hussain, Vivek Gaval, Amit Pratap, Deepak Sonawane .....	13
3. <b>Temperature distribution in a drilling brake contact</b> Fikrat Yusubov, Alasgar Aliyev .....	28
4. <b>Nanomechanical properties of human hair using AFM, nanoindentation, SEM and EDX</b> Avinash, Mohammad Mursaleen, Navin Kumar, Praveer Sihota .....	46
5. <b>Effect of PVD process parameters on TiAlN coated cutting tool flank wear performance</b> Md Nizam Abd Rahman, Mohamad Ridzuan Jamli, Mohd Nazim Abdul Rahman, Rohana Abdullah, Bobby Umroh, Mohd Amri Sulaiman .....	55
6. <b>Tribological behaviour of palm oil mixed with fly ash microparticles as a bio-based lubricant for manufacturing processes</b> Pay Jun Liew, Hock Seng Tay, Ching Yee Yap, Intan Sharhida Othman, Raja Izamshah Raja Abdullah .....	73
7. <b>Effect of humidity and temperature on the tribology of sputter-deposited ZnO and silver added ZnO (Ag-ZnO) films on titanium substrates</b> Ahalapitiya H. Jayatissa, Bodhi R. Manu .....	84
8. <b>Carbon nanotube as effective enhancer for performance and emission of diesel engine fueled with waste plastic pyrolytic oil-diesel blend and its combination with titanium oxide nanoparticle</b> Muhamad Sharul Nizam Awang, Nurin Wahidah Mohd Zulkifli, Abul Kalam, Muhammad Mujtaba Abbas, Muhammad Hazwan Ahmad, Syahir Amzar Zulkifli, Mohd Nur Ashraf Mohd Yusoff, Wan Mohd Ashri Wan Daud, Neneng Siti Silfi Ambarwati, Rose Fadzilah Abdullah .....	97

9. **A comparative study on wear behavior of AZ91D Mg alloy in dry and simulated body fluid for bio-implant materials**  
Satpal Kundu, Lalit Thakur ..... 115
10. **Analysis of six-pocket hybrid misaligned irregular journal bearings operating with couple stress lubricant**  
Abhishake Chaudhary, Arvind K. Rajput, Rajiv Verma ..... 130