



Table of contents

Editorial	i
Table of contents	iii
1. Experimental study on gearbox oil blended with composite additives Dinesh N. Kamble, Tushar D. Gadekar, Devendra P. Agrawal	1
2. A numerical investigation of the sliding contact between a rigid spherical indenter and a rubber surface: The effect of sliding depth and surface roughness Budi Setiyana, Jamari Jamari, Rifky Ismail, Dirk Jan Schipper	20
3. Tresca stress study of CoCrMo-on-CoCrMo bearings based on body mass index using 2D computational model Muhammad Imam Ammarullah, Gatot Santoso, S. Sugiharto, Toto Supriyono, Ojo Kurdi, Mohammad Tauviqirrahman, Tri Indah Winarni, J. Jamari	31
4. Finite element methods in analyzing contact mechanics to estimate the wear of hard biomaterials in human hip prosthesis - A review Shankar Subramaniam, Nithyaprakash, R., Naveenkumar, R., Abbas, G., Uddin, M.S., Pramanik, A., Animesh Kumar Basak, Chander Prakash	39
5. Effect of reflow temperature on intermetallic compound thickness for Sn-58Bi/Cu reaction couple Andi Idhil Ismail, Andromeda Dwi Laksono, Hizkia Alpha Dewanto, Nabila Amalia Putri, Yee-wen Yen	71
6. The effect of tensile strength and surface roughness by varying oxygen level in 3D printer chamber Muhammad Arifuddin Che Mat, Faiz Redza Ramli, Mohd Nizam Sudin, Safarudin Ghazali Herawan, Mohd Rizal Alkahari	80
7. Deposit formation in the injector of a diesel engine fueled with higher blended palm biodiesel Afiqah Hamzah, Ghazali Omar, Mohd Zaid Akop, Mohd Hafidz Zakaria, Nur Natasha Atikah Rosli	97

8. **Tribological enhancement of modified jatropha oil by activated carbon nanoparticle for metalworking fluid application**
Norfazillah Talib, Ainaa Mardhiah Sabri, Ariff Azizi Zolkefli, Kai Sheng Tan,
Sandip Kunar 113
9. **Optimization study on width of cut and cutting-edge radius during side milling of DAC 55 steel**
Siti Haryani Tomadi, Nor Farah Huda Abd Halim, Aishah Najiah Dahnel,
Umma Sankar Gunasegaran, Joo Eng Lim, Amar Syazwan Rosman 125
10. **Semiconductor strain gauges as potential replacement to metal foil for cutting force measurement in machining process**
Haniff Abdul Rahman, Muhammad Rizal, Jaharah A. Ghani,
Muhammad Amirul Syahfikri Mazlan, Mohd Zaki Nuawi, Che Hassan Che Haron,
Mohd Nur Alfath Suliman, Abdul Hadi Mehamud Zelun 137