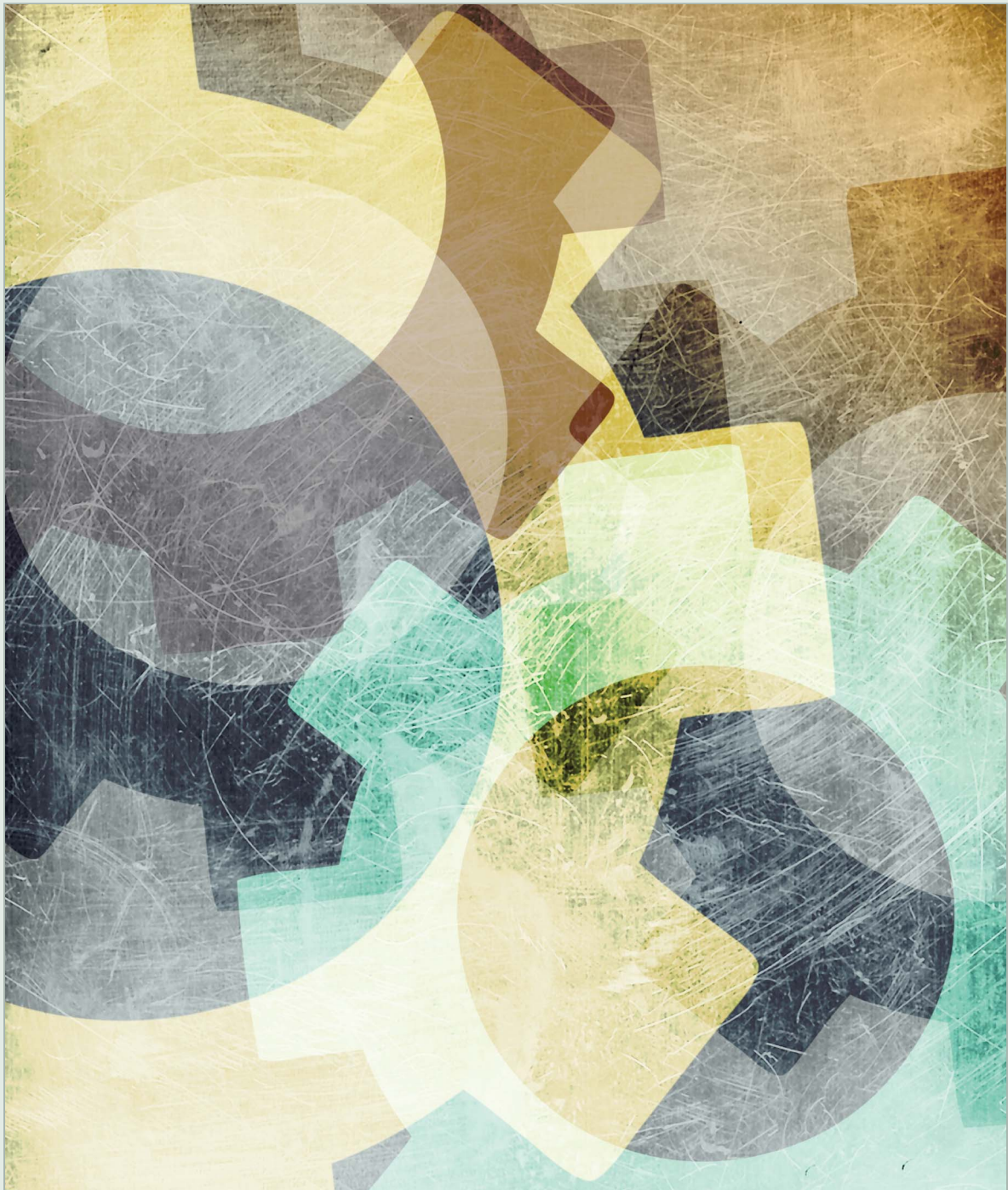


Tribology and Materials

Volume 2 | Issue 4 | December 2023 | ISSN 2812-9717



Editor-in-Chief
Aleksandar Venci

www.tribomat.net

Tribology and Materials

Volume 2 | Issue 4 | December 2023 | UDC 621 | ISSN 2812-9717

- Editor-in-Chief:** **Aleksandar Venci**
University of Belgrade, Faculty of Mechanical Engineering, Belgrade, Serbia
- Editorial Board:** **Emilia Assenova**
Society of Bulgarian Tribologists, Sofia, Bulgaria
Bharat Bhushan
The Ohio State University, Columbus, USA
Gabriella Bognár
University of Miskolc, Miskolc, Hungary
Lorena Deleanu
"Dunărea de Jos" University of Galați, Galați, Romania
Michel Fillon
University of Poitiers, Poitiers, France
Carsten Gachot
Vienna University of Technology, Austria
Kristina Jakimovska
Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia
Mara Kandeve
Faculty of Industrial Technology, Technical University of Sofia, Sofia, Bulgaria
Damjan Klobčar
Faculty of Mechanical Engineering, University of Ljubljana, Ljubljana, Slovenia
Marcela Pokusová
Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava, Bratislava, Slovakia
Valentin L. Popov
Technical University of Berlin, Berlin, Germany
Răzvan George Rîpeanu
Petroleum-Gas University of Ploiești, Ploiești, Romania
Blaža Stojanović
University of Kragujevac, Faculty of Engineering, Kragujevac, Serbia
Petr Svoboda
Brno University of Technology, Faculty of Mechanical Engineering, Brno, Czechia
Nikolaos M. Vaxevanidis
School of Pedagogical and Technological Education, Athens, Greece
Elena Zadorozhnaya
South Ural State University, Chelyabinsk, Russia
- Technical Editor:** **Aleksandar Milivojević**
University of Belgrade, Faculty of Mechanical Engineering, Belgrade, Serbia
- Proofreader:** **Nina Polovina**
- Cover Design:** **Jakša Vlahović**
- Publisher:** **Balkan Scientific Centre**
Belgrade, Serbia
Published quarterly

Contents

Vivek Sharma, Ashis Mallick, Kartikay Kumar

Effect of graphene nanoplates on the mechanical and corrosion properties of aluminium nanocomposite fabricated by powder metallurgy 154

Zar Chi Linn, War War Min Swe, Aung Kyaw Soe, Aung Ko Latt

Experimental and numerical analysis on the thermal performance of the aluminium absorber ... 162

Makgwantsha Hermelton Mashiachidi, Dawood A. Desai

Fatigue life prediction of turbine blades with geometric imperfections made of stainless steel ... 172

Awet Gebretsadkan Brhane, Samuel Tesfaye Mekonone

Numeric simulation of steel twin disc system under rolling-sliding contact 181

Basim A. Abass, Mushrek A. Mahdi

Effect of microridges on the performance of three-lobe journal bearing considering cavitation and lubricant compressibility 189