Journal of Environmental Friendly Materials (JEFM)

Director-in-Charge: Prof. R. Ghasemzade

Editor-in-Chief: Dr. H. Sabet

Managing Editor: Dr. M. Ghanbari Haghighi Technical Manager: Dr. V. Abouei Mehrizi Executive Manager: Dr. M. Abbasi

Publisher: Islamic Azad University, Karaj Branch.

Vol.3, No.2, 2019.

Print ISSN: 2538-3620

Online ISSN: 2538-3744

Page Designer: Eng. M. R. Tavighi

Editorial Board

Prof. R. Ghasemzade - Extractive Metallurgy , Industrial Furnace Design .Fuel and Energy Saving

Professor of Materials Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran.

(Email Address: rgzadeh@iust.ac.ir)

Prof. N. Towhidi - Extractive Metallurgy, Ironmaking, Energy

Professor of Materials Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran.

(Email Address: ntowhidi@ut.ac.ir)

Prof. A. Halvaee - Casting, Metals and Alloys, Materials Selection

Professor of Materials Engineering, Tehran University, Tehran, Iran.

(Email Address: halvaee@ut.ac.ir)

Prof. A. Shokuhfar - Nano Materials , Composite Materials , Smart Materials Advance Materials

Professor of Materials Engineering, K.N.Toosi University of Technology, Tehran, Iran.

(Email Address: shokuhfar@kntu.ac.ir)

Prof. M. Heydarzadeh Sohi - Surface Engineering , Advance Materials and Processing

Professor of Materials Engineering, Tehran University, Tehran, Iran.

(Email Address: mhsohi@ut.ac.ir)

Dr. H. Sabet - Welding and Joining of Advance Materials, NDT Associate Professor of Materials Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran.

(Email Address: h-sabet@kiau.ac.ir)

Dr. S. H. Razavi - High Temperature Materials , Nano Materials , Advance Materials

Associate Professor of Materials Engineering, Iran University of Science and Technology, Tehran, Iran.

(Email Address: hrazavi@iust.ac.ir)

Dr. M. R. Vaezi Jaze - Nano Materials . Advance Materials

Associate Professor of Materials Engineering, Institute of Materials and Energy, Meshkin Dasht, Iran.

(Email Address: m r vaezi@merc.ac.ir)

Dr. M. Goodarzi - Extractive Metallurgy , Modeling of Materials

Associate Professor of Materials Engineering, Iran University of Science and Technology, Tehran, Iran.

(Email Address: mgoodarzi@iust.ac.ir)

Dr. K. Amini - Advance Materials, Cryogenic Materials, Surface Engineering

Associate Professor of Materials Engineering, Islamic Azad University, Tiran Branch, Tiran, Iran.

(Email Address: k amini@iautiran.ac.ir)

Dr. H. Ahmad Mehrabi - Polymer Materials, Ceramic Materials, Sustainable Materials ,Waste and Recycling of Materials , Energy Resilient Manufacturing of Materials

Cranfield University - UK.

(Email Address: h.a.mehrabi@cranfield.ac.uk)

Dr. A. Valanezhad Saeidabad - Biomaterials , Porous Materials , Advance Materials

Nagasaki University- Japan.

(Email Address: vala@nagasaki-u.ac.jp)

Dr. S. H. Ghaffar - Nano Biomaterials, Environmental Friendly

Materials, Building Materials, Green Technology

Brunel University- UK

(Email Address: seyed.ghaffar@brunel.ac.uk)

Journal of Environmental Friendly Materials (JEFM) covers all aspects of the science, characterization, technology and application of environmental friendly materials. The main aims of this quarterly periodical are publishing original and full research papers within the scopes of the journal.

Subjects covered by the journal include:

- Novel processes to produce environmental friendly materials
- Properties of environmental friendly materials
- Environmental friendly materials characterization
- Simulation and modeling for production environmental friendly materials
- Sustainable materials, Nanomaterials, Composite materials, Metals and Alloys, Biomaterials, Porous materials, Structural materials
- Waste and recycling of materials, Energy resilient manufacturing of materials

Journal of Environmental Friendly Materials (JEFM) is an open access journal which is published by Islamic Azad University, Karaj branch. This is peer-reviewed journal, publishing original and research papers on all aspects of the science, preparation, processing, production, characterization, technology and application of environmental friendly materials. The editorial board will welcome papers from all of scientists in the hope that this will advance the scientific standards of the journal and provide a channel of communication between scientific researchers and their colleagues in the world.

Journal of Environmental Friendly Materials (JEFM)

Department of Materials Engineering, Faculty of Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran. P.O. Box: Karaj, 14115-143, Tel: +98 26 34418143, Fax: +98 2634401142 Website: http://jefm.kiau.ac.ir/ Email: jefm@kiau.ac.ir

Journal of Environmental Friendly Materials (JEFM) – Vol.3, No.2, 2019.

Investigation on Hot Tearing Susceptibility of A201 Aluminum Alloy in Different Ingate Velocities and Molds

M. H. Ayandeh, A. A. Kashi, M. Ghambarian, H. Karimi, A. Mootabha, A. Khoyini, E.M. Boushehri (1-3)

The Effect of Electroplating Time on Microstructural Properties and Hardness of Silver Coating on C10100 Alloy

A. Taherkhani, Y. Shajari, K. Mirzavand, A. Mellatkhah, Z. S. Seyedraoufi (5-9)

Environmental Optimization of Building Insulation Thickness in Warm-Dry Region E. Anbarzadeh, S. M. Ghafoori Yazdi (11-15)

Investigation of the In Situ Ceramic Particles (TiCN, TiC) Composite Cladding on the Abrasive Wear Resistance of the Steel Substrate

M. Mohammadikhah, A. Hadizadeh, S. Mehrabeian (17-23)

Optimizing the Factors of Colour Concentration, pH and the Amount of Nanoparticles in Removal of R198 Reactive Dye under UV Rays by Zinc Oxide Nanoparticles Extracted from Leaching Residue of Zinc Melting Factory

S. S. Gojrati, M. Hajisafari, M. M. Khosravirad (25-31)

Metallic Foams, New generation of the Environmental Friendly Materials

V. Abouei Mehrizi, B. Karbakhsh Ravari (33-39)

Fully HF Welded Helical Finned Tubes in Combined Cycle Power Plant

M. Sadeghi, H. Sabet, H. Razavi (41-47)

The Potential of Bamboo as an Environmental Friendly Material in Contemporary Buildings Construction

S. Hamzehloo, E. Esfandyari Fard (49-57)