

Year: 2023

Volume: 5

Issue: 2

e-ISSN: 2687-5993

<http://www.ijeska.com/index>



**IJESKA**

*contribution to science*

# International Journal of Earth Sciences Knowledge and Applications



I  
J  
E  
S  
K  
A

**Prof. Dr. Ekrem KALKAN**  
Editor-in-Chief

# International Journal of Earth Sciences Knowledge and Applications

Year: 2023 – Volume 5 – Issue 2

## Editorial Team

### Editor-in-Chief

**Ekrem KALKAN**, Professor, Geological Engineering  
Civil Engineering Department, Engineering Faculty, Ataturk University, Erzurum, Turkey

### Associate Editor

**Alaattin SAKCALI**, PhD, Mining Engineering, Ataturk University, Turkey

### Section Editors

**Mine ALACALI**, PhD, Geological Engineering, İzmir Seferihisar Municipality, Turkey

**Yıldırım PALABIYIK**, PhD, Petroleum and Natural Gas Engineering, Istanbul Technical University, Turkey

### Editorial Board Members

**Gasham ZEYNALOV**, Khazar University, Azerbaijan

**Shahriyar KARIMDOUST**, Payame Noor University, Iran

**Yousef VASIGH**, Islamic Azad University, Iran

**Dineh PATHAK**, Tribhuvan University, Nepal

**Adnan KHAN**, Karachi University, Pakistan

**Ghulam MURTAZA**, Kunming University of Science and Technology, China

**Hamza Furkan HARPUTLUGIL**, Exeter University, United Kingdom

**Ergül YASAR**, Iskenderun Technical University, Turkey

**Hayrunnisa NADAROGLU**, Ataturk University, Turkey

**Muhammet Kaan YESILYURT**, Ataturk University, Turkey

**Suleyman AYDIN**, Agri Ibrahim Çeçen University, Turkey

**Çağlar OZER**, Ataturk University, Turkey

**Vagif GADIROV**, Baku State University, Azerbaijan

**Ahmed Wedam AHMED**, AGH-University of Science and Technology, Poland

**Akshey BHARGAVA**, Global Institute of Engineering and Technology, India

**Bishnu Pada BOSE**, Indian Institute of Technology, India

**Mustafa Engin KOCADAĞISTAN**, Ataturk University, Turkey

**Tugbanur OZEN BALABAN**, Katip Celebi University, Turkey

**Fusun S. TUT HAKLIDIR**, Istanbul Bilgi University, Turkey

**Adil OZDEMIR**, Ataturk University, Turkey

**Mohamed ABIQUI**, Ibn Zohr University, Morocco

**Muhammad Nasar-u-Minallah BHALLI**, Postgraduate College Gojra, Pakistan

**Alperen SAHINOGLU**, Istanbul Esenyurt University, Turkey

**Gemechu Fufa ARFASA**, Woalita Sodo University, Ethiopia

# International Journal of Earth Sciences

## Knowledge and Applications

Year: 2023 – Volume 5 – Issue 2

### Contents

#### Research Article

- 1 Impacts of Recurrent Flooding and Erosion in the Municipality of Mususa (Butembo/Democratic Republic of the Congo) and Some Control Strategies  
*Deogratias Anguandia Odhipio* 168 - 181
  - 2 Baseline Geo-engineering dataset and Parameters' Empirical Modeling for Civil Engineering Construction in Okeigbo, Southwestern Nigeria  
*Falowo Olumuyiwa Olusola; Olorunda Oluwafemi; Ologan Tunde; Ayetoro Ayodeji* 182 - 207
  - 3 Discovering Colour Alteration Conditions and Inclusion Changes of Sri Lankan Black/Brown (Penithora/Maangu) Tourmaline  
*Igala L. C. Sammani Wickramarathna, Ramawickrama G. Chamal Jaliya, Illangasinghe K. M. S. C. Kumara Illangasinghe* 208 - 216
  - 4 Bacteriological Vulnerability of Surface and Underground Waters in a Faecal Sludge Disposal Area in Dschang, Cameroon  
*Willy Fogang Noubep, Emmanuel Rodrigue Kenne, Emile Temgoua, Primus Azinwi Tamfuh, Hassan Yap Mfouapon, Ronny Roy Choumele Jiague* 217 - 226
  - 5 Vegetation Distribution Pattern at Several Landforms and Its Implications towards Surface Run Off  
*Fahmi Arif Kurnianto, Elan Artono Nurdin, Era Iswara Pangastuti, Hani Dwi Ribtyanti* 227 - 236
  - 6 Evaluation of Resin Coated Proppants: A New Custom Method  
*Ekrem Alagoz, Yalcin Yaradilmis* 237 - 243
  - 7 Study of Physicochemical Properties of Soil at Qargha Dam Areas in Paghman District, Kabul, Afghanistan  
*Hafizullah Rasouli, Ashok Vaseashta, Mohammad Hamid Hamdard* 244 - 251
  - 8 Geodynamic Processes of the Southern Margin of the Eastern European Platform in the Phanerozoic  
*Kostiantyn Andriiovych Bezruchko, Ludmyla Ivanivna Pymonenko, Nataliia Victorivna Vergelska, Andriy Anatoliiovych Karhapolov* 252 - 257
  - 9 Population Dynamics of Pampus Griseus (Cuvier & Valenciennes, 1833) in Mon Coastal Area  
*Zarni Ko Ko* 258 - 263
  - 10 Lithostratigraphic Characterization of the Subsurface Soil and Lithological Identification Using Electrical Resistivity Method' on Ovade Community of Oghara, Southern Nigeria  
*Komolafe Nkechi Perpetual, Ese Anthony Aladin* 264 - 270
  - 11 Contribution of Hierarchical Multi-Criteria Analysis (AHP) to the Evaluation and Spatialization of Soil Erodibility in Humid Mountainous Areas: Case of Bafou-North, Cameroon Western Highlands  
*Joseph Zetekouang Guepi Vounang; Emile Temgoua; Bienvenu Achille Ibrahim; Primus Azinwi Tamfuh; Bertrand Kenzong; Evariste Désiré Moundjeu; Lavoisier Sonwa; Ghislain Nkolo; Franck Nguema Nguema; Ludovic Armand Wouatong; Dieudonné Lucien Bitom* 271 - 281
  - 12 Determination of Groundwater Status and Characteristics of the Subsurface Layers Using Electrical Vertical Sounding (VES) and Dipole-Dipole Configuration at Osasogie Road and Environs Southern, Nigeria  
*Ese Anthony Aladin; Sikiru Salami; Omasan Akperi* 282 - 292
- #### Review Article
- 13 Effect of Soil Salinization on the Liquid Limits of Soils: A Review  
*Uddav Ghimire* 293 - 302
  - 14 Sustainable Development in the Oil and Gas Sector: Considering Economic, Environmental and Social Aspects  
*Ekrem Alagoz* 303 - 308
  - 15 Valorization of Iron Ore Tailing (IOT) Waste Through the Circular Economy Concept: A Sustainable Solution Towards Mitigation of Resource Crisis and Climate Change  
*Bishnu Pada Bose* 309 - 316