Special Issue

Application of Artificial Intelligence in Forest Management to Sustainable Green Economy

Deadline: 20 May 2023

Guest Editor（s）：

Dr. Larisa IVAȘCU

Politehnica University of Timisoara, Romania

✉ larisa.ivascu@upt.ro

Dr. Alin ARTENE

Politehnica University of Timisoara, Romania

✉ dagarjc@gmail.com

Dr. Rimsha Khalid

Phuket Rajabhat University, Phuket, Thailand

✉ rimshakhalid82@gmail.com

https://systems.enpress-publisher.com/
si.php/index/detail?id=37&jid=24

The development of new geospatial technologies and innovative advanced data analysis is leading to significant progress in the monitoring, mapping, and prediction of fire hazard, risk, and effects (Falaras et al., 2022). New GIS and remote sensing technologies such as unmanned aerial vehicles (UAV), aerial, terrestrial or satellite LIDAR, new satellite and/or radar sensors, and cloud-based imagery processing tools (e.g., Google Earth Engine) are being applied to monitor and characterize fuel hazard, fuel moisture, fire behavior, burned area, burn severity, and fire effects (e.g., fire emissions, fuel consumption, tree mortality and regeneration) (Khaiter & Erechtchoukova, 2022). As the key administration of the nation's forests, intends to use GIS technology to effectively plan and carry out the projects on forestry operations, conservation, utilization, and development. In implementing forest management plans, it is necessary to have accurate data on which to reach decisions (Jokar et al., 2022).

Keywords:

- Monitoring of Fire, Behavior, and Effects of GIS
- Technological Approaches for Fuel, Hazard Mapping and Remote Sensing
- Technological Interventions and Multisensory Approaches
- Methodological Advancements of Forest Mortality and Regeneration Monitoring