NETWORKS, MARKETS & PEOPLE - NMP2024

THEMATIC SESSIONS - TS

TS-10

GEOMATIC TECHNIQUES AND METHODOLOGIES FOR ENVIRONMENT AND CULTURAL HERITAGE MANAGEMENT AND FOR URBAN RESILIENCE

Keywords: Environment; Cultural Heritage; Remote Sensing; UAV; Geographical Information System.

In recent times, there is a growing focus on the management (monitoring, control, and prevention) of land, artifacts, and cultural heritage, particularly in response to the evident territorial and environmental changes caused by climate change. Changing weather patterns poses significant threats to land, infrastructures, cultural sites and urban resilience.

As a result, there is an increased recognition of the importance of implementing effective monitoring systems and preventive measures, in order to safeguard and preserve the land, artifacts, and cultural heritage, together with technologies and tools (VR/AR/MR) for the dissemination of the information acquired. This involves employing advanced Geomatics technologies and methodologies that can provide accurate and real-time data on the condition and changes occurring in these areas and similarly to make the dissemination of information more efficient. The proposed Session would explore the different Geomatics/Soft Computing Techniques and Methodologies used for Environment and Infrastructures Monitoring and for the Preservation, Enhancement, Restoration and Dissemination of Cultural Heritage according to Urban Resilience.

CHAIRS

Vincenzo Barrile - Geomatics Laboratory of DICEAM, Depart. Of Civil, Energy, Environmental and Materials Engineering, Mediterranea University of Reggio Calabria, Italy.

Professor of Geomatics SSD ICAR/06. Scientific Supervisor and Leader of the Geomatics Laboratory of DICEAM, Depart. Of Civil, Energy, Environmental and Materials Engineering – Mediterranea University of Reggio Calabria. Expert in Remote Sensing, GNSS, Laser Scanner, Georadar, Virtual/Augmented/Mixed Reality, Cultural Heritage, 3D modeling, photogrammetry, Geographical Information Systems.

Emanuela Genovese - Geomatics Laboratory of DICEAM, Depart. Of Civil, Energy, Environmental and Materials Engineering, Mediterranea University of Reggio Calabria, Italy.

Technical Supervisor of the Geomatics Laboratory of DICEAM, Depart. Of Civil, Energy, Environmental and Materials Engineering - Mediterranea University of Reggio Calabria. Expert in drones surveings and Geographical Information Systems data management.