

Special Issue on
Geophysical Prospecting in Wetland Environments

CALL FOR PAPERS

Wetlands, including coastal, brackish, freshwater, and forested areas, are among the most significant ecosystems on Earth. These areas are located at the interface between terrestrial and aquatic systems in either rural or urban regions and so often have high biodiversity and species density. Human history is also strongly linked to wetland environments as numerous cultures have taken advantage of their abundant resources to establish sustainable civilizations and strong socioeconomic centers. Sadly modern developed and developing worlds have caused the destruction and drainage of wetlands at alarming rates to expand agricultural or domestic activities. Nowadays the beneficial values of wetlands are globally recognized thus leading to targeted environmental, legal, and management actions for their conservation and protection.

Wetlands have unique characteristics that require multidisciplinary scientific efforts for their effective study. During the last three decades geophysical methods have undergone major breakthroughs in terms of advanced geophysical instrumentation, modified field strategies, and automated inversion/tomographic algorithms for the efficient reconstruction of the shallow subsurface in terrestrial and aquatic environments. To this direction geophysical methods can provide a new layer of information which can augment standard wetland research approaches enhancing the framework for designing and implementing optimum wetland management policies.

This special issue will make an effort to enrich the current knowledge for the wetland properties approaching the subject from a completely different perspective.

Potential topics include but are not limited to the following:

- ▶ Terrestrial, aquatic, and airborne geophysics for wetland characterization
- ▶ Geophysical mapping and retrieval of soil, geological, geotechnical, and hydrogeological characteristics
- ▶ Geophysical monitoring of the spatial and temporal dynamics of wetland environments
- ▶ Laboratory results on the geophysical properties of materials related to wetland environment
- ▶ Introducing joint inversion geophysical methods for wetland characterization and monitoring
- ▶ Reconstructing the evidence of human use in ancient coasts and submerged landscapes in shallow low-energy environments
- ▶ Quantifying the cultural heritage resources in wetlands
- ▶ Research approaches in wetland environments integrating geophysics with satellite remote sensing and/or aerial imaging
- ▶ Novel approaches to applying geophysical methods in this zone

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ijge/gpwe/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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