**Session Proposal**

# Session Title

Integrated remediation and utilization strategies for degraded soils in mined lands

# Session Organizers

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# Session Description

The symposium will provide a scope for critical discussion about As and Cd in rice ecosystems, the biogeochemical processes that regulate their bioavailability to soil organisms, plants, animals and humans and the management strategies to mitigate the metal(loid)s. Practical solutions for managing As and Cd in paddy soils and rice will be shared extensively between experts and those interested in this field. An integrated approach that employs a combination of remediation technologies, with the aim of securing methods that are economically and technologically feasible will be outlined during the symposium. The symposium will also provide a networking opportunity for domestic/early-career soil scientists as well as established international soil scientists.

This session will explore recent advancements, challenges, and emerging strategies in soil reclamation and ecological restoration of post-mining landscapes. Discussions will encompass the biogeochemical processes governing soil degradation, heavy metal contamination dynamics, and the mechanisms influencing soil fertility restoration and microbial community resilience. Presentations will highlight integrated remediation approaches, including physical, chemical, and biological techniques aimed at improving soil structure, enhancing nutrient cycling, and mitigating contaminant bioavailability. Case studies on sustainable land management, phytoremediation, and the application of soil amendments will provide insight into effective restoration methodologies. Special attention will be given to the integration of ecological restoration principles with socio-economic considerations to ensure the long-term sustainability of reclaimed lands. This session will serve as a platform for interdisciplinary exchange among researchers, industry experts, and policymakers, fostering collaboration on innovative and scalable restoration strategies. Additionally, it will provide valuable networking opportunities for early-career researchers and international scholars engaged in soil reclamation and ecosystem rehabilitation.

# Format

Oral presentations and panel discussions.

# Proposed Speakers

Pending……