5th International Conference on Green Environmental Engineering and Technology 2023 (IConGEET2023)
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PREFACE

Welcome to the proceedings of the 5th International Conference on Green Environmental Engineering and Technology 2023 (IConGEET2023). We are thrilled to present this compilation of research papers, a testament to the dedication and ingenuity of scholars, scientists, and practitioners who have gathered to explore the theme of "*Empowering Innovation and Technology for a Sustainable and Resilient Future.*"

IConGEET is a recurring event that is coordinated by the Sustainable Environment Research Group (SERG), a subsidiary research group operating under the Centre of Excellence Geopolymer & Green Technology (CEGeoGTech) at Universiti Malaysia Perlis. This conference is also co-organized by the National Institute for Research and Development in Environmental Protection (INCDPM) in Bucharest, Romania and East Coast Environmental Research Institute (ESERI), UniSZA, Malaysia. The IConGEET conference has effectively facilitated the collaboration of academics, practitioners, engineers, and students from around the globe, with the aim of expanding networking opportunities, integrating information, and fostering the interchange of ideas among participants

IConGEET has evolved into a hallmark event, serving as a global nexus for thought leaders and innovators in the fields of green environmental engineering and technology. This year's theme underscores the urgency of our collective mission. In a world facing complex environmental challenges and rapid changes, the pursuit of

sustainability and resilience through innovation and technology has never been more critical.

The papers presented in these proceedings provide a rich tapestry of ideas, research findings, and visionary solutions from the conference. They cover a wide range of topics, including sustainable energy systems, environmental management, climate adaptation, and much more. Each article represents a step forward in our collective path towards a more sustainable and resilient future—a future in which innovative technologies and visionary approaches will be critical. The following are the subjects discussed.

-   Water and Wastewater
-   Air Pollution and Control Technologies
-   Noise pollution
-   Groundwater Pollution
-   Soil Pollution and Treatment
-   Oil Spill
-   Desalination
-   Sustainable Energy and Energy Management
-   Renewable energy
-   Environmental Remediation
-   Environmental Sustainability and Development
-   Greenhouse Effects
-   Global Warming
-   Climate Change
-   Environmental Management and Protection
-   Environmental Risk Assessment & Safety Regulations
-   Environmental Survey
-   Remote Sensing and GIS
-   Environmental Modelling
-   Environmental Education Program
-   Pollution Prevention
-   Other related topics to the theme

The process of transitioning from a conference presentation to a proceedings publishing involves a stringent peer review system. This system employs a single blind review approach, wherein the identities of the reviewers are concealed from the authors. Each paper undergoes evaluation by a minimum of two reviewers, which serves to uphold the high standards of quality and integrity in the research being presented. Stringent measures have been implemented to ensure the absence of any instances of plagiarism within the entirety of the content. We express our sincere gratitude to the authors for their unwavering commitment and to the reviewers for their vital contributions in moulding the content of these papers.

It is anticipated that the information disseminated in these proceedings will be regarded as a significant asset for researchers, policymakers, and practitioners alike. We aspire for these papers to incite additional scholarly investigations, facilitate constructive exchanges, and motivate tangible initiatives aimed at tackling the urgent environmental issues of our era.

As we convene either through virtual means and/or in physical proximity to partake in dialogues, exchange perspectives, and establish partnerships, we acknowledge the efficacy of collective endeavour in furthering our overarching objective. The achievement of IConGEET2023 serves as evidence of the dedication of the international community in establishing a trajectory towards a sustainable, resilient, and ecologically conscious future.

We extend our heartfelt appreciation to all individuals who have made valuable contributions to the accomplishment of IConGEET2023. Furthermore, we excitedly look forward to the ongoing development of innovation, collaboration, and positive outcomes that will continue to influence our future endeavours.

We express our gratitude for the participation in this significant undertaking.

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