



ÓBUDA UNIVERSITY  
REJTŐ SÁNDOR FACULTY OF LIGHT INDUSTRY  
AND ENVIRONMENTAL ENGINEERING



## ANNOUNCEMENT For Online

### The 13<sup>th</sup> ICEEE-2022 International Annual Conference on

### “Global Environmental Development & Sustainability: Research, Engineering & Management”

17<sup>th</sup> – 18<sup>th</sup> of November 2022, Budapest – Hungary

#### Dear Distinguished Friends & Colleagues!

Greetings from the Organizing Committee of the 13<sup>th</sup> ICEEE-2022  
Hope all is good and healthy on your side.

*“The last few years have dramatically changed the landscape of Planet interaction, and it will only continue to shift. It's important to understand these changes so we can give the population of the Earth what they want.”*

*“We have only one planet, and we are using its resources 50% faster than it can take. So, what about the future of the new and next generations! Future of humanity and the planet depends on successful resolution of the interconnected challenges of economic, social, cultural, and environmental sustainability+.”*

***Integrating sustainable development is fully into higher education and research strategies.*** Higher education and research institutions play a key role in achieving the 2030 Development Agenda and related to the Global Sustainable Development Goals. "Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This time the Conference focus on the issues of ***“Global Environmental Development & Sustainability: Research, Engineering & Management”***.

Environmental Sustainability decided to restructure itself around six foci:

1. Environmental Change Issues & Assessments
2. Environmental Change & Global Sustainability
3. Ecosystem Dynamics & Sustainability;
4. Sustainability Governance & Transformation;
5. Sustainability Challenges; and
6. Sustainability Sciences.

Human population has increased from 2.6 billion in 1950 to more than 7.5 billion, while the boundaries between people have shifted drastically due to advances in human knowledge, technique process & societal change. Human society requires protection and monitoring of the

environmental quality. Environmental protection & waste management have effects on human health & ecosystems quality, requiring cooperation across different sectors to determine effective responses. By increasing the global population is rising at a staggering rate & demands ever more resources, while the bad management of environmental protection & waste management are making matters worse.

The 13<sup>th</sup> ICEEE-2022 annual meeting has had successful experiences in the past 12 years. It is dedicated to keeping you on the cutting edge of natural scientific information and environmental best practices in environmental sustainability and development.

The Conference deals with the field of Research and Development in Environmental, Life and Natural, Technical, and Economic Sciences. The 13<sup>th</sup> Online International Annual Conference welcomes scientific research, review, and discussion papers dealing with environmental sustainability and development issues from such fields as the biological sciences, agriculture, geology, meteorology, energy, food sciences, soil and water sciences, geography, nutrition, physical sciences, economics, environmental law, environment and human health, pollution and waste management, land conservation, etc.

The Conference aims for providing an understanding of the essential knowledge and techniques about GLOBAL PROBLEMS and researching for solutions. In that respect, the participants acquire hands-on experience and practical knowledge on how to cooperate together in a project proposal and how to implement/manage successfully obtained solutions.

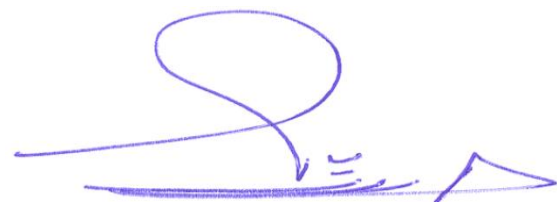
The Conference particularly welcomes papers that highlight more than one dimension of sustainable development. We would like to encourage and amplify the transfer of knowledge between scientists with different backgrounds and from different disciplines who study, solve or apply the same types of equations.

Join now and you can pre-select your favourite sessions based on your interests.

Currently, we are very grateful for a large amount of interest and continue to work hard to finalize a scientific program that will exceed expectations. We encourage all speakers (oral or poster) to promptly send in the application form and the abstract(s) to have a chance to announce the final scientific program at an early time. All papers will be peer-reviewed after submission, & accepted papers will be published in Conference Proceedings Book with ISBN. After publishing, all accepted papers will be submitted for indexed in indexed scientific websites.

Looking forward to hear from you soon and We look forward for your paper

Sincerely yours,



*Prof. Dr. Hosam Bayoumi Hamuda  
Conference Chair  
President of ICEEE  
Óbuda University  
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*If you have questions, please contact the Chairman of the Conference by e-mail or by phone*

## Organization and Committees

After a great successful of the last International Annual Conferences of ICEEE, with the progress of global Environmental Innovation, and to face the global environmental problems, the

- *International Council of Environmental Engineering Education (ICEEE) in cooperation with*
- *Óbuda University,*
- *Rejtő Sándor Faculty of Light Industry and Environmental Engineering,*
- *Institute of Environmental Engineering and Natural Sciences, as well as the*
- *Hungarian Soil Science Society – Session of Soil Biology*

They are cordially and kindly invites you to participate in **13<sup>th</sup> ICEEE-2022 Online International Annual Conference** on “**Global Environmental Development & Sustainability: Research, Engineering & Management**” at Óbuda University on November 17-18, 2022.

The Conference is carrying out under the auspices of:

**Prof. Dr. Levente KOVÁCS**

**Presidency of the Conference**

**Dr. László KOLTAI**

**Dr. Rita BODÁNÉ-KENDROVICS**

**Prof. Dr. Hosam BAYOUMI HAMUDA**

**Rector, Óbuda University**

**Dean, Rejtő Sándor Faculty of Light Industry & Environmental Engineering**

**Director, Institute of Environmental Engineering & Natural Sciences**

**President, International Council of Environmental Engineering Education  
Chairman of Conference**

### Organising Committee

- Prof. Dr. Hosam BAYOUMI HAMUDA (Óbuda University, Hungary)
- Dr. Rita BODÁNÉ-KENDROVICS (Óbuda University, Hungary)
- Dr. Ágnes BÁLINT (Óbuda University, Hungary)
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- Prof. Dr. Borbála BIRÓ (Hungarian University of Agriculture & Life Sciences, Hungary)
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- Prof. Dr. Mihály RÉGER (Óbuda University, Hungary)
- Prof. Dr. József STEIER (Sunwo Plc, Energy Expert, Hungary)
- Prof. Dr. Hosam BAYOUMI HAMUDA (Óbuda University, Hungary)
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- Dr. Nabil KHELIFI (Springer Nature, Germany)
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- Dr. Edmond HOXHA (Polytechnic University of Tirana, Albania)
- Dr. Rita BODÁNÉ-KENDROVICS (Óbuda University, Hungary)
- Dr. Zoltán NAÁR (Tokaj-Hegyalja University, Hungary)
- Dr. Edit CSANÁK (Óbuda University, Hungary)
- Dr. Tünde TAKÁCS (HAS, Institute for Soil Sciences & Agricultural Chemistry, Hungary)
- Dr. Tibor SZILI-KOVÁCS (HAS, Institute for Soil Sciences & Agricultural Chemistry, Hungary)
- Dr. Krisztina DEMÉNY (Óbuda University, Hungary)
- Dr. Veronika MAJOR (Hungarian Water & Wastewater Technology Association, Hungary)
- Dr. Enkhtuya OCHIRBAT (Mongolian Academy of Sciences, Mongolia)

On behalf of the Organizing Committee of the 13<sup>th</sup> ICEEE-2022, we cordially invite you to participate in any of the following forms:

#### The 13<sup>th</sup> ICEEE-2022

1. Author: Submit original scientific works
2. Speaker: Deliver speeches/lectures
3. Listener: Without papers & speeches

On behalf of the organizing committee, it is an honour to welcome you to attend this event and deliver a talk on **your research interest**. Your prompt reply will be highly. All papers will be peer-reviewed after submission, & accepted papers will be published in Conference Proceedings Book with ISBN. After publishing, all accepted papers will be submitted for indexed in **indexed scientific websites**.

### Principal Publishing Partners:

1. **Tájökológiai Lapok: Hungarian Journal of Landscape Ecology (SCOPUS)**
2. **Agrokémia és Talajtan AKJournals (Agrochemistry and Soil Science Journal)**
3. **Euro-Mediterranean Journal for Environmental Integration**  
(<https://www.springer.com/journal/41207>)
4. **ISBN Proceedings book**

## CONFERENCE HIGHLIGHT TOPICS

Form the above mentioned reasons, the special 13<sup>th</sup>. International Conference ICEEE-2022 on Environmental Sustainability and Development aims to provide a comprehensive perspective on changes in environmental quality affecting ecosystem & human health adopting global perspective concepts of climate change, modelling, & ecosystem services. For this purpose, valuable studies were gathered together for the special ICEEE-2022. The majority of the selected papers will be focused on the quality of environmental elements (air, landscape, soil, water, food, health, waste, & economics) as well as treatment & systems of management.

The Organizing Committee takes the honour to welcome all participants from pure & applied Environmental and Natural sciences to take part in this event. During the Conference, we intend to devote special interest to the following topics:

### Session (A) Healthcare: Risk & Management:

- Bioengineering & Healthcare
- Clean Technologies for Healthy Biosphere
- Climate Change & Ecological Migration & Human Health
- COVID-19, Pandemic & Their Global Effects
- Environmental Epigenetics & Human Healthcare
- Health & Nutritional Therapy
- Infection & Drug Resistance
- Integrated Disease Management
- Obesity, Metabolic Syndrome, & Prediabetes
- Probiotics & Human Health
- Probiotics & COVID-19, HIV infection, Anti-carcinogenic Diseases
- Prevalence, Knowledge & Potential Determinants of COVID-19
- Risk Management: Healthcare & Environmental Problems
- Textile & Human Health
- Vaccines Research & Development
- Vitamin D & Immunity Science

### Session (B) Soil Biology & Land Uses

- Agricultural Activity Enhances CO<sub>2</sub> & CH<sub>4</sub> Emissions
- Bacterial Inoculants for Field Applications
- Detection & Analysis of Pesticides & Mycotoxins
- Dynamics Nutrient Cycling in Agroecosystems
- Effect of Mycorrhizae on the Plant Growth
- Environmental Impact Assessment on Soil Pollution
- Fundamental Aspects of PGPR in Soil Quality
- Impacts of Biochar, Sewage Sludge & Compost on Soil Fertility & Plant Growth
- Impacts of Heavy Metals on Soil Biology & Crop Production
- Microbial Communities & Bioremediation of Oil-Contaminated Agricultural Soils
- Mobility of heavy metals & metalloids on Soil Biology
- Organic & Inorganic Pollutants in Soil
- Physicochemical Properties & Fertility Assessment of Soils
- Phytoremediation of Contaminated Soils
- Pollutants in the Plant – Rhizosphere System
- Probiotics & Plant Health
- Soil Biological & Physical Properties & Ecosystem Processes
- Soil Biota, Ecosystem Services & Land Productivity
- Soil Carbon & Nitrogen Stocks & Storage of Soil Microbiome

- Soil Quality & Biocontrol
- Xenobiotic Metabolism in Plants – Rhizosphere System

**Session (C) Physicochemical Properties of Water & Sediments**

- Assessment of Groundwater Hydrogeochemistry & Quality
- Assessment of Running & Potable Water Quality Parameters
- Biological & Microbiological Assessment of Surface & Groundwater
- Bioremediation of Water Sectors
- Chemical & Microbial Analysis of Potable Water
- Desalination & Water Treatment
- Environmental Factors & Phytoplankton in Surface Water
- Distribution Pattern of Metals in Water & Sediment
- Faecal Pollution in Water Bodies
- Heavy Metals in Surface Water & Their Ecotoxicological Implications
- Hydrobiology Sustainability
- Hydrogeological Engineering & Physicochemical Parameters in Surface Water
- Macro- & Microplastics in Running Water
- Membrane Technology, Process & System Design
- Multivariate Approaches & Water Quality
- Phosphorus & Nitrogen in Water Body
- Techniques to Recycle Wastewater
- Water Footprints
- Water Pollution & Treatment Technology
- Water Resources Planning & Management

**Session (D) Circular Economy Strategy and Waste Management:**

- Bioeconomy Industry
- Consumer Packaged Goods
- Environmental Economics, Policy, Resources & Strategy
- Financial Globalization, Economic Growth & Environmental Sustainability
- Humanities & Social Science in Environment
- Socioeconomic Risks of Extreme El Niño Event-Related Road Damages
- Social Innovation Ecosystems
- Sustainable Consumption & Education
- Waste & Wastewater Management in Agroecosystem Using Soil Biotechnological Aspects for Soil Protection, Security, Sustainable, Health And Biodiversity

**Session (E) Waste Management**

- Biogenic Municipal Waste & Biofuel Production
- Bioremediation & Management of Hazardous & Radioactive Waste
- Circular Economy Potential of Urban Organic Waste
- Ecotoxicological Evaluation & Treatment of wastewater
- Microbial Systems & Technology for Pollutant Removal
- Municipal Wastewater Treatment Plants & Environmental Management
- Residues of Biomass. Environmental Impact & Recycling
- Socio-Environmental Conflict: Mining & Industrial Wastes
- Sustainable Use & Waste Management of Plastics
- Waste Management (Air, Water, Soil, Industrial, Textile , etc.)

**Session (F) Atmospheric Pollution Assessment:**

- Assessment of Air Quality
- Effect of Transportation on Air Quality & Mobility



- Greenhouses Gas Emissions & Air Quality
- Keeping Planet Clean: Contamination Control in the Industrial Environment
- Lichenoindication & Evaluation of Air Quality

**Session (G) Ecosystems & Landscape for Future Generations:**

- Food web biodiversity and community structure in Water Body
- Landscape Functional Zoning of Urban Protected Areas
- Landscape & Nature Protection
- Landscape Composition, Biodiversity & Natural Pest Control
- Landscape-Moderated Biodiversity Effects of Agri-Environmental Management
- Linking Agricultural Practice to Insect & Bird Populations
- Natural Resource & Biodiversity
- Nexus between Indigenous Ecological Knowledge & Ecosystem Services
- Society, Economy, & Sustainable Development
- Socio-Ecological Analysis for Sustainable Ecosystem Management
- Species Distribution Modelling under Global Climate Change
- Strategy for Conservation of Biodiversity & Landscape
- Urban Ecosystems & Ecosystem Services

**Session (H) Environmental Sciences:**

- Artificial Intelligence in Environment
- Biomonitoring of Diesel-Contaminated Soil
- Civil, Structural, & Environmental Engineering
- Climate Change & Environmental Sustainability
- Desertification & drought
- Ecodesign & Eco-Innovations
- Environmental Education
- Environmental Engineering, Sustainable Production & Eco-Innovations
- Environmental Degradation & Composting
- Environmental Management, Strategy, Standards & Social Responsibility
- Environmental Modelling & Assessment
- Environmental Monitoring & Assessment
- Environmental Pollution & Bioremediation
- Geosciences & Mining
- Man-Made & Natural Environmental Problems
- Meteorological Patterns & Environmentally Stress
- Sustainable Technologies for Energy & Environment

**Session (I) Natural Sciences:**

- Activity of Microbiomes in Food
- Applications of Biochemistry & Biotechnology
- Assessment of Algal Biomass: A Sustainable Approach
- Biomass Conversion & Biorefinery
- Biomaterials & Bioscience
- Biosecurity Strategy for Agricultural & Food Industry
- Biotechnology & Bioscience
- Environmental Application of Microbial Electrochemical Technologies
- Environmental Chemistry and Ecotoxicology
- Environmental Criteria of Biofuel Sustainability
- Food Waste Generation & Prevention Measurement
- Life Sciences
- Mathematical Models & Computational Techniques in Science & Engineering



- Microbiology for Human Health & Survival on Planet
- Nanotechnology
- Ornamental Plants
- Spoilage Behaviour of Microbial Populations in Foodstuff
- Sustainable Food Processing

**Session (J) Sustainable Energy Research & Applications:**

- Biogas Recovery in Municipal Solid Waste
- Energy & Materials
- Energy Footprints
- Energy From Biomass
- Energy Resources
- Environmental Criteria of Biofuel Sustainability
- Low Carbon Fuels
- Non-Renewable & Renewable Energy
- Renewable and Sustainable Energy
- Sustainable Energy Strategies

**Session (K) Effects of Sustainable Development on:**

- Agricultural Management & Soil Conservation
- Applied & Natural Sciences
- Bio/Nano-Technology
- Energy Use & Global Climate Change
- Environmental Engineering
- Healthcare
- Land, Water, Energy & Natural Resources
- Role of National & International Agencies
- Society & Environmental Interactions
- Sustainability Indicators
- Tourism & Environment



**Important deadline:**

- **For registration and submission of the abstract is 15<sup>th</sup> of October 2022.**
- **For submission of the full manuscript is 07<sup>th</sup> of November 2022.**

**The full manuscript should be organized in the following manner:**

- Title
- Names of the Authors
- Name of the Institution
- Abstract
- Keywords (Up To Six)
- Introduction and Aim



- Materials and Methods
- Results and Discussion
- Conclusions
- Acknowledgements
- References.

**The author should fill the abstract and full manuscript in the given templates (in separate attachments)**

For more information, please kindly visit the website: [www.iceee.hu](http://www.iceee.hu)

Please you are being kind to register for the Conference and confirm your presence.

*Yours Sincerely,*

**Contact address:**

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**The 13<sup>th</sup> ICEEE-2022**