

## Special Session

### Sustainable and Resilient Regional Ecosystems

**Description:**

The use of natural resources and the subsequent build-up of waste and pollution cause a variety of environmental problems in regional ecosystems, many of which exacerbate social and economic inequality. This session is intended to highlight the importance of peaceful cohabitation between human activity and the environment, with a focus on exploring novel ways and solutions for preserving and nourishing the delicate balance of regional ecosystems. Regional ecosystems' long-term health and vitality will be ensured by the sharing of ideas, discussions of obstacles, and initiatives proposed by experts and researchers. This session will:

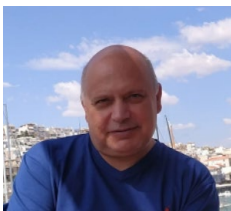
- Strategies for preserving and enhancing regional biodiversity.
- Examine the impact of climate change on regional ecosystems and developing adaptive measures.
- Balance human development with ecosystem preservation via Sustainable Land Use Planning.
- Provide case studies and techniques for restoring degraded regional ecosystems via Ecosystem Restoration Methodologies.
- Incorporate traditional knowledge for sustainable ecosystem management.
- Illustrate modern methodologies to create MCDM Decision Support Systems to optimize ecosystemic resilience.
- Analyze the role of policies and governance in promoting regional ecosystem sustainability.

**Session Moderators:**

- Asst. Prof. Konstantinos Kokkinos Digital Systems Dept., University of Thessaly, Greece.
- Prof. Dr.-Ing. Nicholas Samaras, Digital Systems Dept., University of Thessaly, Greece.

**Moderators.....**

**Dr. Konstantinos Kokkinos**



Dr. Kokkinos holds a B.Sc. in Physics, from Univ. of Thessaloniki, Greece, a M.Sc. & PhD in Computer Science from UoM\_WMU, U.S.A. (1995 and 2002 respectively). He is an IEEE member, an OpenMI-Assoc. member, and currently an Asst. Prof. in Digital Systems Dept. at Univ. of Thessaly, Greece, and a member of Center of Research and Technology Greece, (CERTH). His major research interests include Decision Support Systems, Fuzzy Logic and Soft Computing, Integrated Modelling and Simulation, Artificial Intelligence, and Environmental Software. Dr. Kokkinos has participated in 9 NSF, FP7, Erasmus and Horizon 2020 funded projects and has published over 60 papers.

**Dr. Nicholas S. Samaras**



Nicholas S. Samaras (IEEE SM) is a Professor at the Department of Digital Systems, at the University of Thessaly, in Larissa, Greece. Dr. Samaras received his Ph.D. degree from the University of Pittsburgh, in Pittsburgh, PA, USA, in electrical engineering. His current research interests include IoT Systems and Applications, Networked Control Systems and Industrial Automation. He has served in several organizing, Steering and/or Program Committees, for several international conferences and he is Associate Editor and paper reviewer for various International Journals. He was a corecipient of the IEEE Industry Applications Society Prize Paper Award in 1998.