

8th International Workshop on Microsystems

Alexander Campus, International Hellenic University, 20 December 2023

Dep. Industrial Engineering and Management. 

8th International Workshop on Microsystems

Alexander Campus, Sindos
International Hellenic University,
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This workshop brings together research and development from a large spectrum of science and engineering fields related to the implementation of microsystems in the new era of distributed information technologies. As cloud computing services and smart portable systems are becoming ubiquitous and more advanced, new possibilities for interdisciplinary research emerge. The microsystems that comprise the so-called internet of things will encompass a wide range of technologies including from energy sources, energy and information electronics, sensor systems, smart and energy efficient control and computing, telecommunications and networking, and also nanotechnology and micro-electro-mechanical systems. Continuing six successful workshops between 2018 and 2022, the 8th International Workshop on Microsystems aims at bringing together related research and development advancements from the academic community and the industry. Scientific topics include but are not limited to:

- Energy microsystems
- Sensors and sensor electronics
- Embedded systems
- Integrated Circuits and Systems
- Industrial automation and control
- Microelectronics and nanoelectronics
- Micro-electro-mechanical systems
- Computing for microsystems

Conference website: microengineering.iem.ihu.gr/WoMGREECE

Registration:
Please register your intention to participate by e-mail to: info@microengineering.iem.ihu.gr
The registration is free of charge.
Venue: Lecture Theater, Automation and Informatics Building, Sindos Campus, I.H.U., Greece



Abstract submission:
Style and format: Authors can choose between a 300-word abstract with figure or a IEEE style 2-4 page digest
Abstract submission deadline: 12th November 2023
Abstracts should be e-mailed to: info@microengineering.iem.ihu.gr
All abstracts will be published online in a workshop proceedings edition
A best paper award will be granted, sponsored by Ioannidis Electronics, Marasli 78, Thessaloniki
All submissions should be accompanied by a statement of originality, confirming that the full content of this abstract is original and has been created exclusively by the authors

Preliminary programme

09:00-09:30	Registration
09:30-09:45	Welcome and Introduction
09:45-11:00	Oral sessions
11:00-11:15	Coffee break
11:15-11:45	Poster sessions
11:45-12:00	Best Paper Award / Summary

Organizer
Michail E. Kiriakoglou, Industrial Eng. & Management, IHU

Session Chairs
To be confirmed

Technical Programme Committee

A. Astara
D. Becktas
A. Katsopoulos
M. E. Kiriakoglou
T. Koumanis
S. Papanicolaou
K. Siozos
F. Stergiopoulos
D. Triantafyllidis
D. Tzioufopoulos
A. Tsagaris
C. Voulas
C. Zisgos



sponsors:

  

Workshop Proceedings

Programme

08:45-09:00: Registration

Please check-in or register at the front desk.

09:00-09:05: Welcome and introduction

09:05-10:45: First Oral Session (Session Chair: Eirini Aivazidou, IHU)

09:05-10:00: Designing LiNbO₃ lead free-materials for energy harvesting with stable performances, *Samuel Margueron, Femto-ST, France, 23WOM-01* (Keynote, Invited)

10:00 Hybrid Deep Learning Models for Predictive Maintenance. *G. Koutsoudakis and Ch. Moutafidis, Smiling Machines Ltd, 23WOM-02*

10:15: Pseudo-Random Number Generator Implementation with Linear Feed Shift Register Circuits at Distinct Clock Frequencies, *S. Tsioupros, E. Sidiroglou, G. Vellios, I. Intzes and D. Papakostas, 23WOM-03*

10:30: Soil Electrical Conductivity Measurement, *E. Teletos, K. Tsiakmakis and A. T. Hatzopoulos, 23WOM-04*

10:45-11:15: Coffee Break and Poster Session (Session Chair: To be confirmed)

P1. VR Training Application for AR-Assisted Logistics Operations, *V. C. Vasileiou, D. Bechtsis, V. Sidiropoulos and D. Vlachos, 23WOM-05.*

P2. Is Warm-Up Necessary? – Instrument Performance Verification Test, *V. D Vassios., A. T. Hatzopoulos, K. Tsiakmakis and M. S. Papadopoulou, 23WOM-06*

P3. Theoretical Model of Acoustic Power Transfer through solids, *I. Kochliaridis and M. E. Kizioglou, 23WOM-07*

P4. Development of a Customized Prototyping board for the PN7160 Near Field Communication Microchip, *A. Chatzimpaloglou and M. E. Kizioglou, 23WOM-08*

11:15-12:15: Second Oral Session (Session Chair: Argyris Hatzopoulos, IHU)

11:15-12:00: Triboelectric energy harvesting for autonomous electronic devices, *C. Tsamis, 23WOM-09* (Keynote, Invited).

12:00: Further Evaluation and Calibration of a Mie Scattering-based Apparatus for Portable Optical Haematological Analysis, *A. Bantis, M. Michailidou and A. Dziuba, 23WOM-10.*

12:15: Remotely Operated Vehicles as a Means of Training Higher education Students in Underwater Surveying, *T. Anagnostaki, D. Tziourtzioumis and Th. Kosmanis, 23WOM-11*

12:30: Utilization of fermentable biomass for bioethanol production and design of sustainable modular energy storage liquid fuel unit, *D. A. Koumpakis and D. Tziourtzioumis, 23WOM-12.*

...Continued overleaf !

12:45-13:15: Best Paper Award by Ioannidis Electronics. Concluding remarks.

13:30 Third Oral Session: Erasmus Perspectives in Primary and Secondary Education

(Session Chair: Dr. Theodoros Kosmanis, IHU. Session Co-Chairs: Dr. Dimistrios Tziourzioumis, IHU, Dr. Vagia Papanikolaou, IHU)

13:30: Green Spark, *D. Kapousizi, K. Kantela, F. Karra, Z. Lagouda, I. Mindis, A. Nella and A. Paliatsou*, 23WOM-13

13:45 Design Thinking, *I. Karzi, M. Kotopoulou, I. Kotsani, I. Kouda, D. Kouia and E. Krokida*, 23WOM-14

14:00 Epi-STEAM-moniko School, *A. Kontaxi, N. Ch. Kouderis, V. Leliopoulos, E. Liontou. G. Mpantias and K. Nenos*, 23WOM-15

14:15 Smart Recycling, *F. Iosifidou, A. Toka and E. Zarogiannou*, 23WOM-16

14:30 Make it Gree, *V. M. Kolla, G. Gala, M. Zioga, E. Kostoula, K. Louka, N. Terzis and E. Tzouna*, 23WOM-17

14:45 Music Mode, *K. Nteni*, 23WOM-18