

6th International Workshop on Microsystems

Alexander Campus, International Hellenic University, 15 December 2021

**Dep. Industrial Engineering and Management,
International Hellenic University**

**6th International Workshop
on Microsystems**
Alexander Sindos Campus,
International Hellenic University
15 December 2021

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 new 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 five successful workshops between 2016 and 2020, the 6th 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: www.microengineering.tolthe.gr/WoMGREECE2021

Registration:
Please register your intention to participate by e-mail to: info@microengineering.tolthe.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: 15th November 2021
Abstracts should be e-mailed to: info@microengineering.tolthe.gr
All abstracts will be published online in a workshop proceedings edition
A best paper award will be granted, sponsored by Ioannidis Electronics, Marasil 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 session
11:00-11:15: Coffee break
11:15-11:45: Poster session
11:45-12:00: Best Paper Award / Summary

Technical Programme Committee
A. Adaras
D. Bechtis
M. E. Kirioglu
S. Papatheopoulos
F. Stergioopoulos
A. Tsiatsiavlidis
K. Stoulos
A. Tsougaris
C. Yeadis
C. Zingou
A. Hatzopoulos

Organizer:
Michail E. Kirioglu, Industrial Eng. & Management, IHU

Session Chairs:
Dr. Demetris Tsiatsiavlidis, Industrial Eng. & Management, IHU

sponsors:
Dep. Industrial Engineering and Management, International Hellenic University
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Preliminary Programme

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08:45-09:00: Registration

Please check-in or register at the front desk.

09:00-09:15: Welcome and introduction

09:15-10:45: First Oral Session (Session Chair: Dr. D. Triantafyllidis, IHU)

09:15 – 10:00: Nanoparticle based sensors. *Prof. Dimitris Tsoukalas, Dept. of Physics, National Technical University of Athens* 21WOM-01 (keynote, invited).

10:00: Design and Construction of an Automated Milling Machine for producing PCBs. *M. Mytilinaios and D. Triantafyllidis*, 21WOM-02.

10:15: A python software tool for 2D and 3D image processing, *A. Boukogiannis and D. Bechtsis*, 21WOM-03.

10:30: Design Framework of a Decision Support System used in a Canning Industry, *G. Kokkas, A. Styliadis-Heinz, F. Stergiopoulos and D. Bechtsis*, 21WOM-04.

10:45-11:15: Coffee Break and Poster Session

Fabrication and Development of an Optical Biomedical Sensor, *A. Bantis, M. Michailidou, E. Gkagkanis, K. Karakostas and M. E. Kiziroglou*, 21WOM-05.

11:15-12:00: Second Oral Session (Session Chair: Dr. D. Triantafyllidis, IHU)

11:15: A Novel Approach on Fault Detection of Analog and Mixed Signal Circuits by monitoring the fluctuation of the Supply Current, *V. D. Vassios, A.T. Hatzopoulos and D. K. Papakostas*, 21WOM-06.

11:30: Rectification and boosting circuit for acoustic power transfer, *V. Fountas, D. Makarikas, M. E. Kiziroglou, K. Karakostas and A. Chatzopoulos*, 21WOM-07.

11:45: Automation of a Washing Machine: An Open-Source Approach, *K. Kostopoulos and D. Triantafyllidis*, 21WOM-08.

12:00-12:15: Best Paper Award by Ioannidis Electronics. Concluding remarks.