



Winter School on Unconventional Nano-Electronics

December 17 - 18, 2021

Live Broadcast from ECE Dept. DUTh at Xanthi, Greece

**Malgorzata
Chrzanowska-Jeske**
The Journey to 3D Integration

Panagiotis Dimitrakis
Emerging non-volatile memories and Memristors

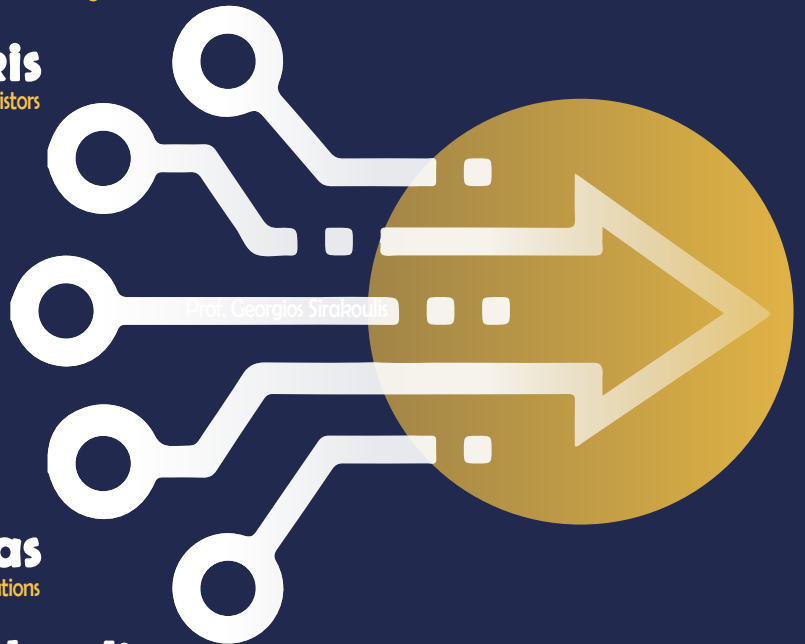
Sorin Cotofana
Energy Effective Graphene Based Computing

Shimeng Yu
NeuroSim: A Benchmark Framework of Compute-in-Memory
Hardware Accelerators from Devices/Circuits to Architectures/Algorithms

Antonio Rubio
Beneficial Effects of Noise, Degradation and Inaccuracy in Electronic Design

Dimitris Tsoukalas
Resistive switching devices for memory and computing applications

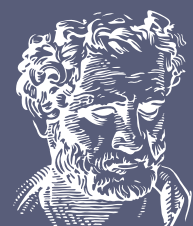
Georgios Sirakoullis
Memristor Computing: From Standard Architectures to Unconventional Paradigms



**Virtual
Participation**

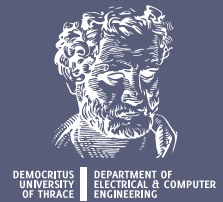
Register at <https://events.vtools.ieee.org/event/register/293346>

The UCoNE Winter School is a seasonal school for circuits and systems designers, engineers, material engineers, computer scientists and graduate and postgraduate students working in the relevant fields of nanoelectronic technologies, systems and applications. The school aims at the dissemination of advanced scientific knowledge and the promotion of international contacts among scientists from academia and industry.



DEMOCRITUS UNIVERSITY OF THRACE | DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

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Friday, December 17th

UCoNE Winter School Opening 15:00
by Prof. Georgios Sirakoulis

Energy Effective Graphene Based Computing 15:10
by Prof. Sorin Cotofana

Break 16:10

**NeuroSim: A Benchmark Framework of
Compute-in-Memory Hardware Accelerators
from Devices/Circuits to Architectures/Algorithms** 16:20
by Prof. Shimeng Yu

Break 17:50

**Beneficial Effects of Noise, Degradation and
Inaccuracy in Electronic Design** 18:00
by Prof. Antonio Rubio

Day 1 Closing 19:00

Saturday, December 18th

10:00 The Journey to 3D Integration
by Prof. Malgorzata Chrzanowska-Jeske

**11:00 Resistive switching devices for memory and
computing applications**
by Prof. Dimitris Tsoukalas

12:00 Break

12:30 Emerging non-volatile memories and Memristors
by Dr. Panagiotis Dimitrakis

**13:30 Memristor Computing: From Standard
Architectures to Unconventional Paradigms**
by Prof. Georgios Sirakoulis

14:30 Day 2 Closing