



Palermo, June 19-21

SIE2017

PHD SCHOOL OF THE SOCIETÀ ITALIANA DI ELETTRONICA

The PhD School of SIE (“Società Italiana di Elettronica” – “Italian Electronics Society”) is a well-awaited event linked to the SIE Annual Meeting, which is announced for the 49th year.

This year the School aims at focusing several practical aspects of modern electronics, including components and systems. During the eleven lessons of the School, students will head out on a journey to the insights of the multifaceted aspects of electronics with practical understanding of physical systems. The topics of this “journey” include power electronics, nanoelectronics and MEMS, radiofrequency, automotive electronics, optoelectronics and solar cells, bioelectronics, space electronics, electronic equipment.

The lecturers are among the most expert researchers in their field, assuming leadership roles in their careers. The School will be enriched by some interactive sessions where the lecturers will show several experimental measurements and applications. Each lesson will be followed by a questions and answers sessions including a five-minute self-evaluation test.



The SIE2017 PhD School will be hosted in the buildings of Palermo Botanical Garden, via Lincoln, 2 – Palermo.

Practical Aspects of Electronic Components and Systems

PhD students and recent graduated are warmly invited to participate to this unique experience. Young researchers, doctors, and company’s R&D staff can also participate.

The official language is English.

Contacts

secretariat.sie2017@gmail.com

www.unipa.it/sie2017



Monday, June 19

| | |
|-------------|---|
| 8:45-9:15 | Welcome and registration |
| 9:15-10:30 | “Optical MEMS for Mobile Phones” <i>Prof. Sabina Merlo, University of Pavia</i> |
| 10:30-10:45 | Practical session |
| 10:45-11:00 | Questions and Answers |
| 11:00-11:15 | COFFEE BREAK |
| 11:15-12:30 | “Resistive Memory: Switching Mechanisms, Models, and Applications in Computing” <i>Prof. Daniele Ielmini, Polytechnic University of Milan</i> |
| 12:30-12:45 | Practical session |
| 12:45-13:00 | Questions and Answers |
| 13:00-15:00 | LUNCH |
| 15:00-16:15 | “Automotive Radar Applications” <i>Dr Angelo Scuderi, STMicroelectronics, Catania</i> |
| 16:15-16:30 | Practical session |
| 16:30-16:45 | Questions and Answers |
| 16:45-17:00 | COFFEE BREAK |
| 17:00-18:15 | “Third Generation Photovoltaics: from Organic Solar Cells to Perovskites” <i>Prof. Aldo Di Carlo, University of Rome “Tor Vergata”</i> |
| 18:15-18:30 | Practical session |
| 18:30-18:45 | Questions and Answers |

Tuesday, June 20

| | |
|-------------|--|
| 8:45-9:30 | “Flexible Piezoelectric MEMS for Sensing, Actuation and Energy Harvesting” <i>Prof. Massimo De Vittorio, University of Salento and CBN-IIT</i> |
| 9:30-9:45 | Practical session |
| 9:45-10:00 | Questions and Answers |
| 10:00-10:30 | “Microelectronic Detectors for Molecular Diagnostics” <i>Dr Cristina Ressa, Optoi Microelectronics, Gardolo (Trento)</i> |
| 10:30-10:45 | Practical session |
| 10:45-11:00 | Questions and Answers |
| 11:00-11:15 | COFFEE BREAK |
| 11:15-12:30 | “Wide Band Gap Semiconductor Devices in Power Electronics” <i>Prof. Giovanni Busatto, University of Cassino</i> |
| 12:30-12:45 | Practical session |
| 12:45-13:00 | Questions and Answers |
| 13:00-14:30 | LUNCH |
| 14:30-15:45 | “Electronics around the Earth: New Challenges for Old Methodologies” <i>Prof. Franco Giannini, University of Rome “Tor Vergata”</i> |
| 15:45-16:00 | Practical session |
| 16:00-16:15 | Questions and Answers |
| 16:15-16:30 | COFFEE BREAK |
| 16:30-17:45 | “GaN-based Optoelectronics: from Material Properties to High Efficiency LEDs and Lasers” <i>Prof. Matteo Meneghini, University of Padua</i> |
| 17:45-18:00 | Practical session |
| 18:00-18:15 | Questions and Answers |

Wednesday, June 21

| | |
|-------------|--|
| 8:45-10:45 | “Fundamentals of Simulations and Characterizations of Electronic Devices” <i>Dr Giovanni D’Amore and Dr Riccardo Giacometti, Keysight Technologies, Amsterdam (NL)</i> |
| 10:45-11:00 | COFFEE BREAK |
| 11:00-11:30 | Practical session |
| 11:30-11:45 | Questions and Answers |
| 11:45-12:30 | “Modern Methods of Absolute and Residual Phase Noise Tests on CW and Pulsed Signals” <i>Dr Alessandro Titta, Rohde & Schwarz Italia, Rome</i> |
| 12:30-12:45 | Practical session |
| 12:45-13:00 | Questions and Answers |
| 13:00-13:15 | Closing remarks |

20:00

SOCIAL DINNER