

Program

Wednesday, November 15, 2017

9:15 am: Registration

9:45 am: Workshop opening (ARCSIS and CMP)

Session 1 - Sensing Devices (Part 1)

10:00 am: **Tutorial** – Yvan Bonnassieux, Ecole Polytechnique - University Paris-Saclay (France): «Flexible electronic for smart sensor»

11:00 am: Break

11:25 am: **Keynote Speaker** - Dr. Vardan Galstyan, University of Brescia (Italy): «Porous titania nanomaterials for security and healthcare»

12:10 pm: «Sensor applications of organic ferroelectric capacitances integrated on CMOS» - Lionel Fritsch, Irlynx (France)

12:35 pm: Lunch

Session 2 - Energy Harvesting and Management (Part 1)

1:45 pm: **Keynote Speaker** – Nageh Allam, The American University in Cairo, AUC (Egypt): «Earth-Abundant Nanostructured Materials for Efficient Solar Fuel Production»

2:30 pm: **Invited Speaker** – Christophe Lethien, IEMN - University of Lille (France): «On chip micro-batteries and micro-supercapacitors for IoT applications»

3.05 pm: Break

3:30 pm: «System-based characterization and power consumption of microcontrollers for wearable sensors in medical applications» - *Bertrand Massot, INL Lyon (France)*

3:55 pm: «Wind Energy Harvester Based on Triboelectricity: Large-Scale Energy Nanogenerator» - *Aravind Ravichandran, EMSE-CMP (France)*

4:20 pm: «Functional Oxides for Low-Power Applications and Energy Harvesting» - *Bertrand Vilquin, University of Lyon (France)*

4:45 pm: «Soft hybrid generators for embedded applications» - *Claire Jean-Mistral, LaMCoS/INSA Lyon (France)*

5:10 pm: end of the day

Thursday, November 16, 2017

9:00 am: Registration

Session 3 - Sensor Network

9:30 am: «Security of IoT: a major challenge» - *Vincent Bonzom, CEA Tech France / Pôle SCS (France)*

10:00 am: **Tutorial** – Nadia El Mrabet, EMSE, Systèmes et Architectures Sécurisées (France): «Security exchange for IOT»

11:00 am: Break

Program

11:25 am: «End-to-end security for LPWANs» – *Hervé Roche, Trusted Objects (France)*

11:50 am: «Radio Triggered Asynchronous Protocol for ULP Sensor Network Based on a UWB Sub-GHz communication Link» - *Rémy Vauché, IM2NP, Aix-Marseille University (France)*

12:15 pm: Lunch + Demonstrations + Posters + Exhibitors

Session 4 - Applications

2:00 pm: «Pulse mode for power reduction for gas sensor» - *Hatem Majeri, STMicroelectronics (Singapore)*

2:25 pm: «A wireless contact lens eye tracking system (example of a smart sensors development platform)» - *Jean-Louis de Bougrenet de la Tocnaye, IMT-Atlantique Brest (France)*

2:50 pm: «Mox sensors for transdermal alcohol measurement: clinical trials and SNO2 sensors studies» - *Bruno Lawson, Aix-Marseille University / INSERM (France)*

3:15 pm: «Study and development of preventive and curative methods against bedsores: risk detection by pressure sensor network on textile» - *Maxime-Jean Chaudon, Feeligreen / Flexible Electronics (France)*

3:40 pm: Break

Session 1 - Sensing Devices (Part 2)

4:05 pm: **Keynote Speaker** – *Olivier Le Neel, STMicroelectronics (Singapore)*: «From ‘Connected Objects’ to ‘Smart Things’, The Augmented Path»

4:50 pm: «Low Power IoT Design using FDSOI Technology» - *Zhaopeng Wei, Polytech'Lab, University of Nice Sophia Antipolis (France)*

5:15 pm: end of the day

8:00pm: Conference dinner

Friday, November 17, 2017

8:45 am: Registration

Session 2 - Energy Harvesting and Management (Part 2)

9:00 am: **Tutorial** – *Thierry Djenizian, EMSE-CMP (France)*: «Electrochemical energy storage at the micrometer scale»

10:00 am: **Invited Speaker** – *Yair Ein-Eli, Technion-Israel Institute of Technology (Israel)*: «Advanced Li-ion Batteries - Going Lighter, Moving Higher»

10:35 am: Break

11:00 am: «Electronic Circuit design for RF Energy Harvesting using 28nm FD-SOI» - *Jean-Marc Duchamp, University of Grenoble Alpes (France)*

Program

11:25 am: «Autonomous Micro camera system for understanding the typical level of insect contamination on drag» - *Alain Laurent, La Mesure sur Mesure (France)*

Session 1 - Sensing Devices (Part 3)

11:50 am: «Long term stability of a new WO₃ gas sensor for the PPB level BTEX detection» - *Alexandre Favard, IM2NP - CNRS / EcoLogicSense (France)*

12:15 pm: «Self-Powered Pressure Sensor Array Based on Piezoelectric ZnO Nanowires» - *Kiron Prabha Rajeev, GREMAN Laboratory, University of Tours (France)*

12:40 pm: Lunch

2:00 pm: end of the conference

