

Wednesday 22nd October 2014

8:30am: Registration

8:45am: Workshop opening (ARCSIS and CMP)

9:00am: Introduction: [Nando Basile](#) (STMicroelectronics, France) - Enabling the «things» of IoT

Session 1 - Sensors Part 1

Chairman: [Sylvain BLAYAC](#) - EMSE/CMP

9:30am: **Keynote Speaker – Nitish V. Thakor**, National University of Singapore (Singapore) – «**Biologically Inspired Sensors and Intelligent Neural Decoding**»

10:15am: «**Conducting Polymer Devices for Neural Interfacing**» – [Jonathan Rivnay](#), Ecole des Mines de Saint-Etienne, Centre CMP (France)

10:40am: Break

11:05am: «**Biomimetic robots and visual sensors account for insect's behaviors**» – [Franck Ruffier](#), Institute of Movement Science (France)

Session 2 - Wireless Network Part 1

Chairman: [Alain PEGATOQUET](#) - UNICE

11:30am: «**An innovative wireless technology to enable the Internet of Things market**» – [David Royet](#), Semtech (Switzerland)

11:55am: «**Simulation techniques to support the design of wireless smart objects**» – [Davide Quaglia](#), University of Verona/EDALab (Italy)

12:20pm: «**Hardware Access Control in Constrained Environments**»– [Lilian Bossuet](#), Laboratoire Hubert Curien, Université Jean Monnet (France)

12:45pm: Lunch / Poster Session

RFID Demonstration

2:00pm: «**RFID Sensing: RF can deliver more than ID**» - [Christophe Loussert](#), Tagsys RFID (France)

Session 1 - Sensors Part 2

Chairman: [Khalifa AGUIR](#) - IM2NP, Aix-Marseille University

2:25pm: «**Integrated mixed-signal systems for instrumentation: sensors not just for sensing!**» – [Vincent Frick](#), Icube (France)

2:50pm: «**A Circuit Model of CNT Patterns For An Inkjet Printed Paper-Based Gas Sensor**»– [Stéphane Bila](#), XLIM (France)

3:15pm: «**Development of the inertial-based long-term, efficient and personal wireless sensing platform**»– [Liao Kuo-Hsien](#), ASE group (Taiwan)

3:40pm: Break

Chairman: [Khalifa AGUIR](#) - IM2NP, Aix-Marseille University

4:05pm: «**MEMS-Based Motion Sensors**» - [Pascal Nouet](#), LIRMM - University of Montpellier (France)

Session 4 - Smart objects and Smart applications Part 1

Chairman: [Nando BASILE](#) - STMicroelectronics

4:30pm: «**Sensors and Technologies for the Internet of Things**» - [Guillaume Girardin](#), Yole Développement (France)

4:55pm: «**Smartsensing / application of wearable technologies to smart textile**» - [Laurent Fichet](#), Cityzen Sciences (France)

5:20pm: End of the day

Thursday 23rd October 2014

8:30am: Registration

Session 1 - Sensors Part 3

Chairman: [Khalifa AGUIR](#) - IM2NP, Aix-Marseille University

8:45am: «**Basic understanding of gas sensing with nano-structured Semiconducting Metal OXides (SMOX)**» – [Nicolae Barsan](#), University of Tübingen - Institute of Physical Chemistry (Germany)

9:10am: «**Development of a gas preconcentrator for traces and explosives detection, and integration in a μ GC**» – [Jean-Paul Viricelle](#), Ecole des Mines de Saint-Etienne - Centre SPIN (France)

9:35am: «**Innovating current sensor for smart building application**» – [Cyril Jacquemod](#), IM2NP - Aix-Marseille University (France)

10:00am: Break

Session 3 - Energy harvesting and management Part 1

Chairman: [Sylvain BLAYAC](#) - EMSE/CMP

10:25am: «**Powering autonomous sensor nodes**» – [Nando Basile](#), STMicroelectronics (France)

10:50am: «**Harvesting energy from ambient RF sources for wireless sensors**» – [Christian Person](#), Telecom Bretagne (France)

11:15am: «**RF energy harvesting and remote powering at 900 MHz and 2.4 GHz**» – [Thierry Taris](#), IMS Laboratory - University of Bordeaux (France)

11:40am: «**Thermal energy harvesting by combined pyroelectric, piezoelectric and shape memory effects**» – [Boris Gusarov](#), G2Elab - Grenoble University (France)

12:05pm: Lunch / Poster session

Session 2 - Wireless Network Part 2

Chairman: [Stéphane MEILLERE](#) - IM2NP, Aix-Marseille University

1:45pm: «**Wake-up interval adaptation for low power WSNs**» – [Olivier Berder](#), University of Rennes (France)

2:10pm: «**WSN Power management: nano power wake up radios**» – [Michele Magno](#), ETH Zurich – IIS Group (Switzerland)

2:35pm: «**A network simulation approach for exploring the design space of wireless sensor networks and RF transceivers**» – [Carolynn Bernier](#), CEA-LETI (France)

3:00pm: Break / Poster session / Demonstrations

Session 4 - Smart objects and Smart applications Part 2

Chairman: [Luc JEANNEROT](#) - ARCSIS

4:00pm: «**Energy harvesting wireless solutions for home automation and smart buildings**» – [Graham Martin](#), EnOcean Alliance (Germany)

4:25pm: «**Security contribution of smart objects in the embedded world: the automotive example**» - [Pierre Girard](#), Gemalto (France)

4:50pm: «**Technologies disruption from LETI to fuel the IoT revolution**»
[Jean-Michel Goiran](#), CEA-LETI (France)

5:15pm: End of the day

8:00pm: Conference dinner

Friday 24th October 2014

8:45am: Registration

Session 1 - Sensors Part 4

Chairman: *Hervé BARTHELEMY - IM2NP, University of Toulon*

9:00am: «**Use of numerical study and design of experiment to optimize acoustic sensor**» – [Rubaiyet Iftekharul Haque](#), Ecole des Mines de Saint-Etienne, Centre CMP, Flexible Electronics Department (France)

9:25am: «**The ink-jet printing humidity sensor on paper**» - [Sébastien Pacchini](#), CINTRA UMI CNRS/NTU/Thales (Singapore)

9:50am: «**Physics of flexible waveguide touch sensor and applications to advanced human machine interface objects**» - [Sylvain Blayac](#), Ecole des Mines de Saint-Etienne, Centre CMP (France)

10:15am: Break

Session 3 - Energy harvesting and management Part 2

Chairman: *Nando BASILE - STMicroelectronics*

10:45am: **Keynote Speaker - Robert G. Andosca**, MicroGen Systems (USA)- «**Powering The Internet of Things**»

11:20am: «**Thermoelectric Generation from SNAP III to Body Heat Harvesters: Inventing Materials to Unleash Technology**» -[Dario Narducci](#), University of Milano, Dept. of Materials Science (Italy)

11:45am: «**Inductive DC/DC solution for electromagnetic energy harvester**» - [Christian Vollaire](#), Ecole Centrale de Lyon/AMPERE (France)

12:10pm: «**Next generation ultracapacitors and Energy Harvesting in sensors and mobile applications**» - [Harald Hauf](#), NawaTechnologies (France)

12:35pm: Lunch/Poster session

Session 4 - Smart objects and Smart applications Part 3

Chairman: *Luc JEANNEROT - ARCSIS*

1:45pm: «**Internet of Things: Do not let anybody control your smart devices**» - [Denis Carniel](#), LoginPeople (France)

2:10pm: «**Smart patch integration for elderly and athletes monitoring**» - [Damien Brulin](#), LAAS (France)

2:35pm: «**SmartSantander: Experimenting on a Future Internet enabled Smart City**» - [Luis Sanchez](#), University of Cantabria (Spain)

3:00pm: Conference closure