



## Joint SINANO-NEREID-Nanonets2Sense-Convergence Workshop:

### *"Nanoelectronics and Smart System Technologies for Future applications"*

#### Dresden, September 3<sup>rd</sup>: Program:

- **8:15-8:30 Presentation of the Workshop** : Enrico Sangiorgi, Director SINANO Institute
- **8:30-12:30 NEREID: Presentation of the Final version of the "NanoElectronics Roadmap for Europe"**
  - **8:30-8:50 General Presentation**: Francis Balestra, NEREID Coordinator, CNRS-GINP
  - **8:50-9:20 Beyond CMOS Roadmap**: Jouni Ahopelto, VTT
  - **Advanced Logic and Connectivity**
    - **9:20-9:40 Nanoscale FETs Roadmap**: Anda Mocuta, IMEC
    - **9:40-10:00 Connectivity Roadmap**: Didier Belot, CEA-LETI
  - *10:00- 10:30 Coffee-Break*
  - **Functional Diversification**
    - **10:30-10:50 Smart Energy Roadmap**: Enrico Sangiorgi, IUNET
    - **10:50-11:10 Smart Sensors Roadmap**: Adrian Ionescu, EPFL
    - **11:10-11:30 Energy for Autonomous Systems Roadmap**: David Holden, CEA-LETI
  - **11:30- 12:00 System Design and Heterogeneous Integration Roadmap**: Georgios Fagas, Tyndall
  - **12:00- 12:30 Equipment and Manufacturing Science Roadmap**: Markus Pfeffer, Fraunhofer
- *12:30-13:30 Lunch*
- **13:30-16:00 Nanonets2Sense: Nanonet-based integrated sensors for health and well-being**
  - **13:30-13:55 "Integration concept and project overview"**: Mireille Mouis, CNRS-GINP Nanonets2Sense Coordinator
  - **13:55-14:20 "Engineering of Si and ZnO nanonets for the fabrication of functional devices"**: Céline Ternon, GINP
  - **14:20-14:45 "Si nanowire-based biosensors integration with CMOS"**: Per-Erik Hellström, KTH
  - **14:45-15:10 "Characterization and modelling of Nanonet-based FETs in the presence of percolating effects"**: Thibault Cazimajou, GINP
  - **15:10-15:35 "Low-power readout for threshold voltage shifts detection"**: Saul Rodriguez, KTH
  - **15:35- 16:00 "Chemiresistors for breath analysis"**: Claudio Zuliani, ams UK
- *16:00-16:30 Coffee Break*
- **16:30-19:00 Convergence: Frictionless Energy Efficient Convergent Wearables for Healthcare and Lifestyle Applications**
  - **16:30-16:55 General Presentation**: Adrian Ionescu, EPFL, Convergence Coordinator
  - **16:55-17:20 "Wearable physical and physiological low power sensors"**: Denis Flandre, UCL
  - **17:20-17:45 "Wearable environmental sensors: gas and particles"**: Cosmin Roman, ETHZ
  - **17:45-18:10 "Energy harvesting/ Energy management"**: Aldo Romani, IUNET
  - **18:10-18:35 "Sensor and Energy Harvesting flexible platform"**: Elise Saoutieff, CEA
  - **18:35-19:00 "Applications scenarios and validation plan"**: Saverio De Vito, ENEA

