SiNANO-NEREID Workshop:

Towards a new NanoElectronics Roadmap for Europe

Leuven, September 11th, 2017

- SINANO Institute -

❖ **Members:**

      23 laboratories from **12** European countries, representing leading partners from the Academic Community **(> 1200** scientific/technical staff in Nanoelectronics)

❖ **Legal entity:** French Association

❖ **Structure:**
- General Assembly (all Members)
- Governing Board (5 Members)
- Director of the Institute

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Core Activities

- **Establish** durable EU Network of researchers from European Scientific and Academic Community to form a *distributed Centre of Excellence* in the Nanoelectronics field

- **Promoting, proposing and executing European projects**. SINANO facilitate the involvements of its Partners in European projects starting from the Consortium build-up, project proposal preparation and execution (management & dissemination). Noticeable examples are the Projects Nanosil, Nanofunction, Guardian Angels, III-V-MOS, NEREID, Nanonets2Sense.

- **Coordinating the Roadmapping activities at European and International levels,** e.g. **NEREID H2020 Project** devoted to Nanoelectronics Roadmapping, European ECS (Electronic Components and Systems) Strategic Research Agenda, IRDS International Roadmap for Devices and Systems,

- **Dissemination events: workshops** – e.g. the Sinano Workshop during the ESSDERC-ESSCIRC Conference; **training** – e.g. the Sinano Modelling and Migas Schools, for disseminating the knowledge.,

13th edition of the SINANO Workshop in the framework of ESSDERC-ESSCIRC

- 09:00 Welcome: Enrico Sangiorgi (SiNANO Institute)
- 09:05 **"Presentation of the NEREID Project"** Francis Balestra (Grenoble INP/CNRS)
- 09:25 **"European Status, Vision and Perspectives in Nanoelectronics"** Francisco Ibanez (European Commission)
- 10:00 "**Emerging technologies for Beyond CMOS"** Jouni Ahopelto (VTT) &**"Alternative Computing Paradigms"** Clivia Sotomayor Torres (ICN2)
- *10:45 Coffee break*
- 11:00 "**Advanced logic: Nanoscale FET"** Anda Mocuta (IMEC) & **"RF and mmW Design / Connectivity"** Yann Deval (IMS Bordeaux)
- 11:45 Functional Diversification: **"Smart Sensors"** Adrian Ionescu (EPFL), **"Smart Energy Devices"** Steve Stoffels (IMEC) & **"Energy for Autonomous Systems"** Stéphane Monfray (ST Microelectronics)
- *12:45 Lunch*
- 14:00 **"System Design"** & **"Heterogenous Integration"** Danilo De Marchi (POLITO) & Holger Schmidt (Infineon)
- 14:45 **"Equipment and Manufacturing Science**: Large area epitaxy of 2D materials for nanoelectronics" Thanasis Dimoulas (NCSRD)
- 15.30 Conclusions: Enrico Sangiorgi, SINANO Institute
- *15.45 End of the Workshop*