



H2020 project NEREID collected recent application needs to map the future of European Nanoelectronics

Hannover/Grenoble/... April 20 2016: The NEREID project (“NanoElectronics Roadmap for Europe: Identification and Dissemination”) has held its first General Workshop on Apr. 12-13, 2016 in Minatec, Grenoble, France, organized by Grenoble INP and SINANO Institute. The distinguishing characteristic of the project is to combine technology push with market pull, building technology roadmaps starting from application needs. Following this approach, the General Workshop has involved in a lively dialogue 50 international research and application experts, coming from about thirty institutions out of eleven countries.

The workshop methodology, already proven in the FP7 CSA project NANO-TEC (www.fp7-nanotec.eu), on Beyond CMOS, and in the ITRS organization, has been to combine general presentations by experts, with discussion in mixed working groups. Application Experts presented the scenarios and the requirements for future products in the areas of Security, Automotive, Energy, Digital Manufacturing, Internet of Things (IoT), and Medical/Health while Technology Experts gave an overview of the evolution of the different technologies in the fields of Beyond CMOS Technologies, Nanoscale FET & Connectivity, Smart sensors & Smart Energy, System Design & Heterogeneous integration, Equipment, Materials and Manufacturing Science. Then, mixed Technology-Applications Groups discussed in parallel sessions the priorities for technology development in order to satisfy the different applications. Finally the conclusion of this first analysis was reported in the plenary session.

The Workshop’s results will be the base of future activities, involving a larger number of technology experts, to build a European Roadmap on the future of Nanoelectronics. Further General Workshop will extend the base of application domains covered and focus on the most promising technologies for each area.

About the NEREID Project:

NEREID is a Cooperation and Support action that has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 685559, with the objective to develop a roadmap for the European Nanoelectronics industry, starting from the needs of applications and leveraging the strengths of the European eco-system. In addition, it will aim to an early benchmark/identification of promising novel nanoelectronic technologies, and identify bottlenecks all along the innovation value chain.

Highlights of the NEREID project, which has a duration of three years, will be three general workshops aiming at gathering the needs of the main application sectors, and specific workshops that will define the roadmaps of the different technology domains, with a broad involvement of leading experts from industry and academia. The project consortia of NEREID

is distributed all over Europe and consists of AENEAS, CEA-LETI, IUNET, EPFL, edacentrum Fraunhofer, ICN2, INP, SINANO, imec, PoliTo, VTT and Tyndall.

Read more about the partners and the project on www.nereid-h2020.eu.

Contact: Francis Balestra, +33 4 56 52 95 10, balestra@mimatec.grenoble-inp.fr

About Grenoble INP, Coordinator of NEREID

Coordinator of NEREID, Grenoble INP is one of Europe's leading technology universities, at the heart of innovation from more than a century. It is involved in major development projects such as Minalogic (micro and nanotechnology and embedded software) and TEnEeRRDIS (renewable energy) industrial clusters. Grenoble INP also coordinates several FP7 and H2020 research projects. Lifelong learning is a touchstone of Grenoble Institute of Technology, from bachelor's degree to ongoing professional development. 11 engineering degree courses are on offer in key engineering sciences and Grenoble INP also runs masters and doctorate schools. 5 500 engineers are awarded bachelor's degrees each year and 900 doctorates are also awarded. With its solid combination of teaching, research and business promotion, Grenoble Institute of Technology plays a key role in making Grenoble one of the most attractive scientific and industrial locations worldwide.

More on <http://www.grenoble-inp.fr/welcome/>

Pictures:



Francis Balestra during his presentation
on the first NEREID General Workshop on April 12, 2016 in Grenoble



Enrico Sangiorgi, scientific coordinator of the project (left) and a view

