



H2020 project NEREID presents the first version of its roadmap on the future of European Nanoelectronics

Using an interactive workshop methodology, experts from technology and application combined technology push with market pull

Hannover/Grenoble/Brussels ... November 30,2017: The NEREID project ("NanoElectronics Roadmap for Europe: Identification and Dissemination") is going to present the first version of its roadmap on the future of European nanoelectronics on December 6, 2018, 3:25 pm -4:10 pm at EFECS 2017 in Brussels (https://efecs.eu/exhibition.html). In order to enable a public discussion and to identify possible improvements this first version of the NEREID roadmap has already been published at <u>https://www.nereid-h2020.eu/roadmap</u>.

"The distinguishing characteristic of the project is to combine technology push with market pull, building technology roadmaps starting from application needs." says patrick Cogez from AENEAS and industrial co-leader of the project. Following this approach, a set of workshops has involved more than 100 international research and application experts, coming from various institutions out of eleven countries.

"The objective of NEREID is to elaborate a new roadmap for nanoelectronics, focused on the requirements of European semiconductor and application industries." says Francis Balestra from Grenoble INP and coordinator of the project. "It will address societal challenges following advanced concepts developed by Research Centres and Universities in order to achieve an early identification of promising novel technologies covering the R&D needs all along the innovation chain. The final result will be a roadmap for European micro- and nanoelectronics, with a clear identification of medium and long term objectives."

The NEREID roadmap for nanoelectronics is intended as input for future research programmes at European and National levels. It aims to help coordinating efforts to solve the main challenges in nanoelectronics and put the EU at the forefront of future technological developments. Therefore it takes into account the specificity of the European industrial and academic landscape, and targets a better coordination between academic and industrial research in equipment, semiconductors and application developments.

The NEREID roadmap is divided into several main technology sectors: Advanced Logic (including Nanoscale FETs and Memories) and Connectivity, Functional Diversification (Smart Sensors, Smart Energy, Energy for Autonomous Systems), Beyond-CMOS (Emerging Devices and Computing Paradigms), Heterogeneous Integration and System Design, Equipment, Materials and Manufacturing Science, and it also includes cross-functional enabling domains.

About the NEREID Project:

NEREID is a three year 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, are three general workshops aiming at gathering the needs of the main application sectors, and specific workshops that 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, Grenoble INP, SINANO, imec, PoliTo, VTT and Tyndall.

Read more about the partners and the project on <u>www.nereid-h2020.eu</u>.

Contact: Francis Balestra, +33 4 56 52 95 10, balestra@minatec.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 TEneRRDIS (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/