

Joint MEDEA+/ENIAC Workshop

“Nanoelectronics 2015: towards and beyond”

To be held at Montreux Conference Centre

on September 22, 2006
(following ESSDERC conference)

Co-chairs:

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and

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(STMicroelectronics; chair of ENIAC WG SRA)

Abstract

The workshop “Nanoelectronics 2015: towards and beyond” is jointly organized by MEDEA+ and ENIAC and aims to be an open forum where various visions concerning the future of nanoelectronics worldwide and, more particularly, in Europe, will be presented.

The workshop includes as first session a series of presentations mirroring the content of the recent report prepared by the working group *Towards and beyond 2015: technology, devices, circuits and systems* of MEDEA+ Scientific Committee, with particular focus on a combined technology-system vision for the end-of-roadmap silicon CMOS and related challenges, emerging nanoelectronics and, finally, new collaborative models between industry, research institutes and universities. The presentations precede a public document elaborated by a team of industry and academic experts, which will be released after the workshop.

The second series of presentations of the workshop is organized in a session called *ENIAC SRA: a roadmap to meet the challenges* that essentially reflects the More Moore, Beyond CMOS and More-than-Moore concepts from the Strategic Research Agenda of ENIAC.

Two outstanding invited speakers, Professor H. Iwai, from University of Tokyo, Japan and Steve Hillenius, from SRC, USA, will complete the global picture with realities from Japan and USA concerning the nanoelectronics challenges, recent evolutions and collaborative industry-academia research strategies outside Europe.

The workshop will end with a *Panel discussion* with the participation of the invited speakers on how to match ENIAC’s SRA with the vision emerging from the MEDEA+ working group, where all the participants are strongly encouraged to actively participate and contribute.

Preliminary Program

8:30-8:40	Introduction
8:40-9:50	Report from the MEDEA+ Scientific Committee Working Group on "Towards and Beyond 2015" <ul style="list-style-type: none">○ Overview of the report (A. Ionescu)○ Towards 2015: More Moore and "More than Moore" (H. De Man)○ Beyond 2015 (J.P. Bourgoin)
9:50-10:20	Invited speaker – Prof. Hiroshi Iwai (Tokyo Institute of Technology, Japan)
10:20-10:40	Coffee break
10:40 -12:00	ENIAC SRA: a roadmap to meet the challenge <ul style="list-style-type: none">○ More Moore & Beyond CMOS (N. Lehner)○ More-than-Moore & Heterogeneous Integration (G.Q.Zhang & R. Aschenbrenner)○ Design Automation (Ph. Magarshack)○ Equipment and Materials (R. Hartman)
12:00 - 13:00	Buffet lunch
13:00-13:30	Invited speaker – Dr Steve Hillenius (SRC, USA)
13:30-13:50	"How to strengthen and organize European research in nanoelectronics?" (A. Ionescu and L. Selmi)
13:50-15:30	Panel discussion with (invited) speakers on how to match ENIAC's SRA with the vision
15:30	Closing remarks by MEDEA+ and ENIAC
15:35	End

Registration

Participation in the workshop is free, but - for logistics reasons - registration is still mandatory. Please note that the organizers reserve the right to send an invoice for expenses amounting to 100 EUR to "no-shows".

If you attend ESSDERC/ESSCIRC and are interested in participating in the workshop, please register through the ESSDERC conference portal <http://www.essderc2006.com> and go to the link "Conference Registration".

If you are interested in attending the Workshop, without attending ESSDERC/ESSCIRC, please contact the conference secretariat at esscirc-essderc@epfl.ch.