



NEWSLETTER – June 2012

Last chance to register to the Workshop on System Design for 3D Silicon Integration!

The System Design for 3D Silicon Integration workshop (D43D) – which will be held on **June 25-27 at the Mövenpick hotel in Lausanne** – will bring together prominent experts from semiconductor industry and academia to exchange ideas, compare findings, and constructively work towards the vision of 3-D integrated systems.

The addressed topics include, but are not limited to, interconnect architectures and thermal management for 3-D ICs, application partitioning for 3-D architectures, modeling, characterization, and testing of 3-D ICs, and emerging applications requiring three-dimensional integrated systems. The workshop includes two days with technical session and keynote talks with prestigious speakers from all around the world and a tutorial day.

It is still possible to register to the workshop until June 20th! The detailed program, the registration webpage for the event and all other details can be found at www.d43d.com

Prof. De Micheli receives the Mac Van Valkenburg Award

Giovanni De Micheli has received the **2012 Mac Van Valkenburg Award** for sustained contributions to theory, practice and experimentation on design methods and tools for integrated circuits, systems and networks.



The Mac Van Valkenburg Award is the highest honor given by the IEEE Circuit and Systems Society to one of its members. It honors an individual for outstanding technical contributions and distinguishable leadership in a field within the scope of CAS Society. The award is based on the quality and significance of contribution, and continuity of technical leadership.

Giovanni De Micheli, Nano-Tera.ch program leader, is Professor and Director of the Institute of Electrical Engineering at EPFL, Fellow of ACM and IEEE and a member of the Academia Europaea.

Nano-Tera.ch launches its new website

A newly revamped website was just launched for Nano-Tera.ch, starting with the homepage, the program section and the project pages.

The new page is designed to provide an enhanced browsing experience, offering direct access to news items and hot links, such as the call for proposals and other major announcements.

With improving connection speeds, it is now possible to use supermassive images, with ever more interactive features. Coupled with the huge amounts of information generated by ongoing projects, this means that our ambitions for the website can expand in terms of both dimension and content.

➤ www.nano-tera.ch



General view of the new Nano-Tera.ch homepage



Details from the main page

We welcome all feedback: please feel free to contact the webmaster: webmaster@nano-tera.ch

Nano-Tera.ch supports the Swiss NanoConvention

Nano-Tera.ch was prominently featured at the [Swiss Nano Convention](#) which was held on May 22-24 in Lausanne. It was present with a booth and praised by EPFL Vice-President for Academic Affairs Philippe Gillet during his introductory remarks.



Prof. Philippe Gillet, Vice-President for Academic Affairs, EPFL



Philippe Leuba, member of the Vaud State Council



Nano-Tera.ch booth at the Swiss NanoConvention

The Swiss NanoConvention 2012 brought together Swiss and international leaders from science and industry in the field of «nano», key figures in innovation and technology, entrepreneurs, investors, administrators and politicians.

Key topics included Nano for Energy, Life sciences, Computer sciences and Consumer products. Another focus was the potential risks associated with free nanoparticles, and how society sees and handles these issues.

Excerpt from the AGEFI article written after the Swiss NanoConvention

L'AGEFI (...) Un nouveau programme de soutien a par ailleurs été créé en 2008. Nano-Tera réunit ainsi 31 institutions, parmi lesquelles: l'Ecole polytechnique fédérale de Lausanne (EPFL), L'Ecole polytechnique fédérale de Zurich (ETHZ), le centre suisse d'électronique et microtechnique (CSEM), le Centre hospitalier universitaire vaudois (CHUV) et IBM Zurich. Le budget de cette entité s'élève à 60 millions de francs en fonds publics. Ils sont répartis sur 19 projets principaux en tranches de quatre années, dont l'échéance arrive en 2013. «Tous les dossiers soutenus ont trouvé une application concrète. Nous nous réjouissons le prochaine vague de financement qui commencera l'année prochaine», précise Patrick Mayor, coordinateur scientifique pour Nano-Tera à Lausanne. Parmi les projets dont le financement aboutira en 2013, se trouve notamment la plateforme NutriChip. Ce système digestif artificiel miniature sur puce permet d'observer in vitro les effets des aliments sur le corps humain, une fois digérés. Cette technologie a été soutenue par Nestlé. Mais aussi, TecInTex, un projet de recherche visant à créer des tissus intelligents. Dotés de capteurs miniatures, des vêtements souples et lavables vérifient l'oxygénation des tissus dans le muscle. Notamment pour les patients atteints d'escarres. (...)

L'AGEFI, 24.05.2012

Swiss Finals for iCAN'12

The [Swiss Qualifying Competition for the International Contest of Applications in Nano-micro Technology \(iCAN'12\)](#) – supported by Nano-Tera.ch – led to the selection of the team that will participate to the finals in Beijing in July.

The Swiss Finals which were held on May 22 in parallel with the Swiss NanoConvention (see opposite), was won by Edwin Dornbierer from ETHZ and Andres Heldstab from NTB Buchs. With their project “Beat Tracker”, the team constructed a device that calculates the rhythm of one's movement using a 3D accelerometer and 3D gyroscope, then transmits this information to a smart phone which in turns plays a corresponding song with an appropriately matching rhythm.

A demonstration was conducted using walking, jogging and running movements, as well as using a stationary bike.



Prof. Jürgen Brugger, EPFL (iCAN Swiss Project Leader), Dr. Emine Cagin, ETH Zurich (Coach), Edwin Dornbierer (ETHZ) Andres Heldstab (NTB Buchs), Prof. André Bernard, NTB Buchs (Jury member)