



NEWSLETTER – October 2011

New call for proposals open

Nano-Tera.ch has just launched a new call for proposals. This call includes a new set of large RTD (Research, Technology, Development) projects as well as ED (Education & Dissemination) activities.

This call covers three main research areas: wearable and implantable systems, ambient and environment systems, as well as energy systems. The extension towards energy concepts is a new focus of Nano-Tera.

Notice that the maximum applicable salaries for personnel have been raised in order to better conform to salary levels usually applied in the involved institutions.

The submission deadline is January 31st, 2012.

Details on the program scope and application forms:

<http://www.nano-tera.ch/proposals.html>

Details on existing projects:

<http://www.nano-tera.ch/projects/index.html>



E-Print workshop coming up

The Swiss E-Printing workshop, first Swiss conference on printed electronics and functional materials, is coming up on **December 1-2, 2011** in Basel.

E-Printing is a key enabling technology that goes well beyond the established paper printing. In recent years, novel areas have matured, where printing techniques find increasingly a pathway from R&D to industrial manufacturing. These areas not only include organic and printed opto-electronics, but also micro-optical, bio-medical, MEMS fabrication and packaging, 3D rapid prototyping, flexible substrate and roll-to-roll technologies.

Switzerland already has many activities in the E-print field, and the organisation of the Swiss e-Print conference will allow active professionals to identify potential complementary partnership in this upcoming manufacturing discipline that spans across several disciplines from tools, ink materials, surfaces, chemistry & physics, electronics and optics, among others.

Authors may also submit an abstract for a poster presentation. Note that the deadline for submissions is **November 1, 2011**.

For submission and registration to the conference, please visit:

<http://www.swiss-eprint.ch>



Enrico Macii new member of the Nano-Tera Scientific Advisory Board

Following the departure of Prof. Nick Jennings, Prof. Enrico Macii, professor of electrical and computer engineering, and now vice-rector of the Politecnico di Torino, has joined the independent Scientific Advisory Board of Nano-Tera.ch. ✂

New series of Nano-Tera-related courses

As part of their ED activity, the Swiss Foundation for Research in Microtechnology (FSRM) proposes a new series of courses on various domains of interest to Nano-Tera researchers.

The Nano-Tera researchers will benefit from an almost free participation, with registration fees of only CHF 100 for 1-day courses (instead of CHF 580) and CHF 150 for 2-day courses (instead of CHF 1100).

- [New Trends in Nano-Electronics*](#))
Nov. 10 – Zurich, Technopark
A. Ionescu, EPFL – T. Skotnicki, ST Microelectronics
- [Polymer Optoelectronic Technologies and their Applications](#)
Nov. 24 – Muttens, CSEM
G. Nisato and team, CSEM
- [How X-rays Can Support the Development of MEMS *](#))
Nov. 28-29 – Zurich, Technopark
A. Dommann, A. Neels, CSEM
- [Electron Microscopy](#)
Dec. 5 – Neuchâtel, FSRM
M. Dadras, CSEM – S. Abolhassani, PSI
- [Carbon Nano Tubes *](#))
Dec. 10 – Dübendorf, EMPA-Akademie
P. Gröning, P. Ruffieux, EMPA
- [Micro Optics *](#))
Dec. 12-13 – Neuchâtel, FSRM
H.P. Herzig, EPFL, M. Rossi, Heptagon Oy

*) **ETCS points** : For courses marked with *), the Doctoral School in microsystems and microelectronics of the EPFL credits 1 ETCS point if the candidates successfully passes the exam in the end of at least **2** course **days** (1 two-days course or 2 one-day courses).

To benefit from the Nano-Tera discount, mention “Special Nano-Tera fee” in the registration form and indicate which Nano-Tera project you are involved in. Note that the number of places for discounted participations is limited to 10 Nano-Tera researchers, on a first come, first served basis.

For more information, do not hesitate to contact Annette Locher of the FSRM at locher@fsm.ch. ✂

Nano-Tera annual meeting 2012: mark your calendars!

The third annual meeting of Nano-Tera.ch will be held in Zurich on **April 26-27, 2012**.

The event will once again feature plenary presentations of all RTD Principal Investigators as well as poster sessions on each of the two days. ✂

Six new Sino-Swiss projects starting

Following the recent joint call for proposals launched by Nano-Tera.ch in partnership with the Sino Swiss Science and Technology Cooperation (SSSTC), new projects have been selected and are starting this month.

This initiative, aiming at creating synergies to encourage Swiss-Chinese research collaborations within Nano-Tera.ch thematic areas, has led to collaborations between Swiss and Chinese research laboratories in various institutions.

They are starting now for one year. Follow the links below for more details on each project.

Project name	Investigators
<i>i-Needle</i> Intelligent Needles with Wireless Connection to Internet for Biophysical Bases of Acupuncture	Sandro Carrara, EPFL Giovanni De Micheli, EPFL Christine Nardini, Shanghai Inst. for Biological Sciences
<i>M3WSN</i> Mobile Multi-Media Wireless Sensor Networks	Torsten Braun, Uni Bern Liusheng Huang, Uni of Science and Technology of China, Suzhou
<i>NaNiBo</i> Nano-Confinement of Nitrogen and Boron based Hydrides	Andreas Züttel, EMPA Andreas Borschulte, EMPA Ping Chen, Dalian Inst. of Chemical Physics (DICP) Yao Zhang, DICP
<i>NetCam</i> Real Time Computation & Optimization for Networked Camera Surveillance	John Lygeros, ETHZ Takkuen John Koo, Shenzhen Inst. of Adv. Technology
<i>SiC nanomembranes</i> SiC Nanomembranes for MEMS Biofuel Cell	Jürgen Brugger, EPFL Haixia Zhang, Peking University
<i>3DOptoChemiImage</i> Optofluidic 3D Chemical Imaging Cytometry based on inline Digital Coherent anti-Stokes Raman Scattering Holography	Demetri Psaltis, EPFL Kebin Shi, Peking University

Prof. Lothar Thiele featured in Horizonte magazine

The Swiss research magazine Horizonte, in its September 2011 edition ([in German](#) / [in French](#)), offers a full portrait of Prof. Lothar Thiele, addressing his research and the challenges of computer science education.

Prof. Thiele heads a research group in the Computer Engineering and Networks Laboratory of ETHZ. He is also a member of the Nano-Tera.ch Executive Committee and is involved in the RTD projects X-Sense and OpenSense. ✂

Dr. Martin Rajman appointed new Executive Director of Nano-Tera.ch

Currently the head of the EPFL Center for Global Computing, an association of research groups and laboratories of the School of Computer and Communication Sciences at the EPFL, Dr. Martin Rajman, has been appointed Executive Director of Nano-Tera.ch.

The executive committee and the management office team wish Dr. Peter Bradley all the best for his future endeavors and welcome Martin Rajman as their new director. ✂

New conference-connect planner for Nano-Tera.ch

A new platform designed as a [conference planner](#) has been developed by the [Community Knowledge Development project](#) of Nano-Tera.ch. This is a beta version of a social networking platform for the Nano-Tera community allowing people to connect and consult which are the most interesting and relevant events to meet and discuss with colleagues and future partners to leverage their research areas and work. The overarching goal is to stimulate inter/trans disciplinarity in the Nano-Tera.ch community.

All past conferences attended by Nano-Tera researchers can be consulted by date or by project. In addition, future conferences which are already known can also be seen, and other future conference can be added directly on the platform by prospective organizers and participants. ✂

Belenos tests its hydrogen car

Belenos Clean Power, a start-up of Swatch Group, has been testing its new revolutionary electric car, whose battery relies on oxygen and hydrogen obtained from water electrolysis. This first real-life test has been [widely](#) reported in the [press](#) recently.

The Nano-Tera project GreenPower, led by Prof. Månson of EPFL, collaborates to these research efforts with Belenos, notably in the development of a unique hydrogen container, adequate membranes for the fuel cells safety issues related to hydrogen and oxygen storage. ✂