



NEWSLETTER – March 2010

Nano-Tera annual meeting coming up

Nano-Tera.ch, the Swiss scientific initiative in health, security and environment systems, is organizing its first annual meeting on April 29th.

The event, held at the Allegro Grand Casino Kursaal in Bern, will offer researchers involved in all projects the opportunity to meet and exchange ideas on their ongoing research.

Oral presentations will be given by the Principal Investigators of each Research, Technology and Development (RTD) projects which started in 2009.

Posters will be presented by the newly selected RTD 2010 projects. All other participants to the Nano-Tera projects who wish to contribute with a poster at the meeting are strongly encouraged to do so.

Attendance is free but everyone should formally register for the event by March 26th and announce their interest in presenting a poster. Details on poster format will be communicated shortly.

A schedule and the registration form can be found at <http://www.nano-tera.ch/events/meeting.html> ✂

Ongoing call for NTF and ED projects

Nano-Tera.ch would like to remind the community that the call for Nano-Tera Focused (NTF) as well as Education & Dissemination (ED) projects is still running. Submission deadlines are every two months, namely the first open working day after the end of every even month. The next deadline is thus May 3rd, 2010.

For more information on submission procedures, see: <http://www.nano-tera.ch/proposals.html>

In related news, Nano-Tera will sponsor the **D43D workshop** on 3-dimensional integration as a new Education and Dissemination activity conducted by David Aienza and Vasileios Pavlidis of EPFL. The workshop will take place at EPFL on May 26-28.

It is strongly related to the Nano-Tera CMOSAIC project with special sessions showing the advances within CMOSAIC on interlayer cooling in 3D stacked architectures.

For details, please see <http://www.d43d.com> ✂

Nano-Tera welcomes the University of Geneva as its new consortium member

Following the selection of the new RTD project QCrypt, led by University of Geneva professor Nicolas Gisin, a new member has been admitted to the Nano-Tera consortium.

Prof. Jean-Dominique Vassalli, rector of the University of Geneva, thus officially joins Patrick Aebischer (EPFL), Ralph Eichler (ETHZ), Mario El-Khoury (CSEM), Antonio Loprieno (UniBas), Piero Martinoli (USI) and Martine Rahier (UniNE) in the program Steering Committee. ✂

Mark your calendars for the second workshop!

The second Nano-Tera workshop is already approaching. It is scheduled to take place on June 14-15, 2010.

Following the success of the previous workshop on biosensors and body-area networks organized in November in the Neuchâtel region, it has been decided to maintain the 2-day format which was well appreciated and offered a good opportunity for networking among researchers of different fields.

The Swiss Foundation for Research in Microtechnology (FSRM) is responsible for the organization of the workshop, as part of its Nano-Tera funded Education and Dissemination project TED-Activities.

(<http://www.nano-tera.ch/projects/204.php>)

The theme of the second workshop is planned to be *Lab-on-chip and remote data analysis* and will take place in Nidelbad, very close to Zurich on June 14-15.

The workshop will again feature keynote talks and tutorials by senior researchers coming from inside the Nano-Tera community as well as outside. Following the enthusiasm for short presentations given by participants, this will be proposed again. More details on a preliminary schedule and talks will be communicated soon. ✂

Nine new projects starting this month

Following the second call for Research, Technology and Development (RTD) projects, nine new projects have been selected last December and are starting this month.

Various projects cover areas from environmental monitoring (air quality monitoring, alpine mass movements) to sensor systems for health monitoring and more.

They will involve a total of 39 research groups from 15 Swiss universities and research institutions. These are institutions of the Swiss Federal Institute of Technology domain (ETH Zurich, EPF Lausanne, Paul Scherrer Institute and Empa), the universities of Basel, Geneva and Zurich and the university of applied sciences Western Switzerland (HES-SO). Other institutions

are the Swiss Center for Electronics and Microtechnology (CSEM), the university hospital of Vaud (CHUV) and its Pluridisciplinary Center for Oncology (CePO), the Ludwig Institute for Cancer Research (LICR), the Institute for Research in Biomedicine (IRB), the Agroscope Liebefeld-Posieux (ALP) and id Quantique.

The consolidated budget for these nine projects amounts to CHF 45.6 million, including a CHF 3.3 million total contribution from the private sector (id Quantique, SensorScope, A. Menarini Diagnostic, Nestlé, ACP Advanced Circuit Pursuit, Belenos Clean Power, FOEN and Gamma Remote Sensing).

The table below provides an overview of the different projects and indicates the total budget (including the industrial participation).

For more information on specific projects, see <http://www.nano-tera.ch/projects/rt2010.php> ✂

Project name	Principal Investigator	Participating institutions	Budget (mio CHF)
<i>GreenPower</i> – Connecting Renewable Energy to Green Mobility using Hydrogen as Energy Carrier under the Belenos Clean Power Initiative	Jan-Anders Månson (EPFL) jan-anders.manson@epfl.ch	EPFL, CSEM, PSI	4.4
<i>i-IronIC</i> – Implantable/Wearable System for online Monitoring of Human Metabolic Conditions	Giovanni De Micheli (EPFL) giovanni.demicheli@epfl.ch	EPFL, EMPA, ETHZ, IRB	7.3
<i>ISyPeM</i> – Intelligent Integrated Systems for Personalized Medicine	Carlotta Guiducci (EPFL) carlotta.guiducci@epfl.ch	EPFL, CHUV, CSEM, HES-SO,	5.8
<i>NutriChip</i> – A Technological Platform for Nutrition Analysis to promote Healthy Food	Martin Gijs (EPFL) martin.gijs@epfl.ch	EPFL, ALP, ETHZ, UniBas	4.3
<i>OpenSense</i> – Open Sensor Networks for Air Quality Monitoring	Karl Aberer (EPFL) karl.aberer@epfl.ch	EPFL, ETHZ	5.0
<i>PATLiSci</i> – Probe Array Technology for Life Science Applications	Harry Heinzelmann (CSEM) harry.heinzelmann@csem.ch	CSEM, CePO, EPFL, LICR, UniBas	6.0
<i>PlaCiTUS</i> – Platform Circuit Technology Underying Heterogeneous Nano and Tera Systems	Qiuting Huang (ETHZ) huang@iis.ee.ethz.ch	ETHZ, CSEM, EPFL	3.9
<i>QCrypt</i> – Secure High-Speed Communication based on Quantum Key Distribution	Nicolas Gisin (UniGE) nicolas.gisin@unige.ch	UniGE, ETHZ, HES-SO, id Quantique	4.4
<i>X-Sense</i> – Monitoring Alpine Mass Movements at Multiple Scales	Lothar Thiele (ETHZ) thiele@tik.ee.ethz.ch	ETHZ, UZH	4.7

45.6

For more information, visit <http://www.nano-tera.ch> or contact:

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