



NEWSLETTER – July 2010

New NTF projects starting

The end of February call for Nano-Tera Focused (NTF) project proposals had led to the selection of nine projects.

They are activities that focus on a specific research challenge, which can be related to ongoing efforts carried out in the larger Research, Technology and Development projects.

Most projects have just started last month (with some starting in September) and are scheduled to last between 12 and 24 months depending on each project. They involve institutions that are members of ETH Board, SUC and OPET. These include the

ETH Zurich, EPF Lausanne, EMPA, the university of Lugano (USI), the university of Applied Sciences and Arts of Southern Switzerland (SUPSI), the university of Applied Sciences of Western Switzerland in Valais (HES-SO VS) and Haute Ecole Arc. Other institutions are the Hochschule für Technik Buchs (NTB), the Swiss Center for Electronics and Microtechnology (CSEM), the university hospital of Vaud (CHUV) and the Zurich research laboratory of IBM.

The table below provides an overview of the different projects.

For general information on NTF projects, see <http://www.nano-tera.ch/projects/ntf.php> ✂

Project name	Investigators
<u>BioCS-Node</u> – Enabling Ultra-Low Power Ambulatory Monitoring of Cardiac and Neurological Bioelectrical Signals using Compressing Sensing	Pierre Vandergheynst (EPFL) David Atienza Alonso (EPFL)
<u>Enabler</u> – Enabling Energy Efficient Tunnel FET-CMOS Co-design by Compact Modeling and Simulation	Adrian Ionescu (EPFL) Andreas Schenk (ETHZ) Heike Riel (IBM)
<u>G-DEMANDE</u> – Gestational Diabetes Expert-based Monitoring Aided by Networks of Distributed agent Environments	Michael Ignaz Schumacher (HES-SO VS) Juan Ruiz (CHUV)
<u>SMTS</u> – Structure Monitoring System for high performance Transportation systems	Christian Dürager (EMPA) Andreas J. Brunner (EMPA) Manfred Morari (ETHZ) Andreas Heinzlmann (NTB)
<u>TWIGS</u> – Textiles With Integrated Gas Sensors	Kunigunde Cherenack (ETHZ) Danick Briand (EPFL) Giovanni Nisato (CSEM)
<u>ULP-Systems</u> – Sub-Threshold Source Coupled Logic (ST-SCL) Systems for Ubiquitous System Applications	Yusuf Leblebici (EPFL)
<u>SecWear</u> – Design of very low power robust and Secure nodes for Wearable sensor networks	Mariagiovanna Sami (USI) Silvia Giordano (SUPSI) Francesco Regazzoni (USI)
<u>NaWiBo</u> – Nanowire Bonding: In-situ Interconnecting and Addressing of Individual Nanowires	Tomaso Zambelli (ETHZ)
<u>EmoA</u> – Embedded Mobile Agent Framework for Smart Buildings	François Tièche (HE-ARC) Nuria Pazos (HE-ARC)

More on NTF and ED projects...

In addition to the NTF projects selected recently, the subsequent call (end of April) has led to the selection of 2 projects which have just been announced:

Project name	Investigators
NanoUp – Core-Shell Superparamagnetic and Up-converting Nano-Engineered Materials for Biomedical Applications	Andrzej Sienkiewicz (EPFL) Alke Fink (Uni FR)
Bio Implantable Antennas	Anja Skrivervik (EPFL) Juan Mosig (EPFL)

Meanwhile, Education and Dissemination activities have been supported: notably the NanoBio 2010 conference, taking place in Zurich on August 24-27, 2010 and organized by Prof. J. Vörös and M. Textor of ETHZ, among others. This 4-day meeting gathers the leaders of this progressive field from all over the world helping scientists to get an update on the most recent achievements in the different topics of nanobiotechnology to exchange stimulating new ideas, and to take responsibility in forming public opinion about nanobiotechnology.

For more information: <http://www.nanobio.ethz.ch>.

Other ED activities have just been selected, more details will follow. ✂

Last call for NTF projects!

The next deadline for NTF and ED projects is Tuesday, August 31st. Note that this will be the *last call* for NTF projects!

ED call still on-going!

On the other hand, ED activities can still be proposed, with the usual submission deadlines at the end of every even month.

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

Nano-Tera annual meeting 2011: mark your calendars!

The next Nano-Tera Annual meeting will be held over 2 days in Bern, on May 12-13, 2011.

The first Nano-Tera Annual meeting which was held this year in April offered all projects participants the opportunity to gain insight about on-going research in the Nano-Tera programme and beyond. The first wave of RTD projects – started in 2009 – had oral presentations by their Principal Investigators, and about 60 posters were presented by many investigators involved in all the projects in general.

Next year's meeting will be an even larger event taking place over two days and will feature oral presentations of RTD projects started in 2009 as well as the more recent 2010 series. Posters will once again complement the picture.

Write down the dates for this next meeting, which is scheduled on **May 12-13, 2011** in Bern.

Other Nano-Tera related events

The 8th ACM Conference on Embedded Networked Sensor Systems (SenSys 2010) is a highly selective, single-track forum for the presentation of research results on systems issues in the area of embedded, networked sensors.

Dr. Jan Beutel (ETHZ) of the RTD project X-Sense is the general chair of the conference. It will be held on November 3-5, 2010 at the ETHZ.

For details, see <http://sensys.acm.org/2010>

The LASE Photonics West 2011 conference will showcase the latest fundamental and applied research on new laser sources and applications. Highlights include conferences on fiber, solid state, disk, and ultrafast lasers plus the world's largest concentration of semiconductor laser/LED content at one event.

The conference will be held on January 22-27, 2011 in San Francisco.

General info at <http://spie.org/x13198.xml>

In this context, Prof. Ursula Keller (ETHZ), PI of the RTD project MIXSEL, is the chair of a conference dedicated to VECSELS.

For more on this conference, [follow this link](#). ✂