



## THIOX NEWS AND COMING EVENTS, APRIL, 2006

Dear Colleagues,

You will find below information on the recent and planned activities of our THIOX ESF network.

### 1) The THIOX Trondheim meeting and the first THIOX Awards for young scientists

The THIOX meeting on “Thin Films for Novel Oxide Devices” organized by **Thomas Tybell in Trondheim, Norway, March 20-22**, was a success with 36 participants from 13 different nationalities and 15 different labs. Many stimulating talks and discussions took place in the inspiring conference location.



(Photographer: E. Eberg)

During the meeting, the two first ESF-THIOX Awards for young researchers were given to:

**Patrycja Paruch** for her contribution to the development of nanoscale ferroelectric writing and her studies of the static and dynamic behaviour of ferroelectric domain walls,

and

**Gervasi Herranz** for his contribution to the understanding of growth mechanisms and functionalities of epitaxial metallic ferromagnetic oxide films.



Award winners Patrycja Paruch and Gervasi Herranz with the THIOX Executive Committee.

If you know another great candidate, submit a proposal!

## 2) Next THIOX meetings

**May 2006.** An international conference organized jointly with the ESF  $\pi$ -Shift network on :

***“Trends in future electronics: Quantum digital circuits, materials with exceptional electronic properties, novel device concepts and applications”***

will take place in **Bordeaux (France), May 6-10 2006.**



This joint workshop of the European Science Foundation programs  $\pi$ -Shift and THIOX aims at exchanging ideas and results on novel concepts for future electronic devices. A particular, but not exclusive, focus will be on electronically active structures based on superconducting and/or oxide-electronic materials. Experimental as well as theoretical aspects will be discussed.

Some examples of particular interest are: Josephson (quantum)-electronics, oxide materials and interfaces with exceptional electronic characteristics, interplay between various ordering phenomena in materials such as superconductivity and magnetism.

The conference organizers are: **A. Buzdin, H. Hilgenkamp, and J. Mannhart.**

**More information on the location and deadlines can be found on:**

<http://www.cpmoh.u-bordeaux.fr/>

**March 2007.** A THIOX meeting will be organized by **Josep Fontcuberta, March 28-30 2007** close to Barcelona. Along with presentations of the THIOX ongoing work, tutorials and special sessions with industries will be organized.



The workshop will take place at the "Eden Roc" Hotel, [www.caproig.com](http://www.caproig.com), at Sant Feliu de Guixols - about 1hour north from Barcelona.

More information and a website will be available soon. For urgent questions, please contact directly Josep Fontcuberta ([fontcuberta@icmab.es](mailto:fontcuberta@icmab.es)).

**Fall 2007.** A special THIOX workshop will be organized by PhD students on a topic and in a setting to be selected by the students.

**Spring 2008.** The final THIOX workshop will take place in Santa Margherita, Italy and will be organized by **Daniele Marré, Emilio Bellingeri and Ilaria Pallecchi.**

### **3) The coming Oxide Electronics workshops sponsored by THIOX.**

The **WOE13** conference will take place **on the Ischia Island, close to Naples Italy, October 9-11, 2006**. The organizing committee is composed of **R. Vaglio, F. Miletto, M. Salluzzo, and L. Maritato from Naples, and D. Marré from Genoa**.

Information can be found on [www.woe13.it/](http://www.woe13.it/)

The **WOE14** conference will be organized **in South Korea in 2007**. The organizers will be **T. Noh (Seoul Univ.), M. Kawasaki (Tohoku Univ.) and H. Tabata (Osaka Univ.)**.

### **4) Other meetings supported by THIOX**

The Nanoscale Superconductivity and Magnetism (NSM2006) conference in school format will take place in **Leuven (Vaalbeek, Belgium) from July 6th to July 8th 2006**, as a satellite to the M<sup>2</sup>S-HTSC-VIII conference.

Financial support for the conference is given by the European Science Foundation programmes "Thin Films for Novel Oxide Devices" (THIOX) and "Arrays of Quantum Dots and Josephson Junctions" (AQDJJ).

The conference is focused on the confinement and quantization effects in superconducting, magnetic and superconductor/ferromagnet hybrid nanostructures. Experts working in this field will review the most exciting recent developments and outline the perspectives for practical applications of nanosuperconductors and nanomagnets.

The meeting organizers are: **Victor Moshchalkov, Johan Vanacken, and Gunther Jelu**.

For further information, please consult: <http://fys.kuleuven.be/nsm2006/>.

### **5) European School on Nanosciences and Nanotechnologies (ESONN)**

The third edition of the European School on Nanosciences and Nanotechnologies (ESONN) will be held in **Grenoble, France from August 27<sup>th</sup> to September 15<sup>th</sup>, 2006**.

This European School is aimed at providing training for graduate students, postdoctoral and junior scientists from universities and laboratories in the field of Nanosciences and Nanotechnologies.

The academic and practical courses will cover the fabrication, principles and characterisation of nano-objects and nanostructures. A key point of the training is the emphasis given to practicals (half of the program), which will be held in clean room facilities and research laboratories in Grenoble.

All the relevant information can be found on: <http://www.esonn.inpg.fr/>

(Information provided by Catherine Dubourdieu, Associate director of ESONN on behalf of the Organizing Committee).

## 6) THIOX Brochure

The THIOX brochure describing the interest, programme, aims and objectives as well as the various activities of the THIOX ESF network is now available. The brochure can be obtained directly from Jochen Mannhart ( [jochen.mannhart@physik.uni-augsburg.de](mailto:jochen.mannhart@physik.uni-augsburg.de) ) or downloaded from the ESF website at <http://www.esf.org/thiox> .

## 7) ESF-THIOX Award for young researchers

The next ESF-THIOX award(s) for young researchers will be distributed in Bordeaux during the  $\pi$ -Shift-THIOX joint meeting in May.

The award consists of a diploma describing the outstanding research and an invitation to present the work in an invited honorary talk at a THIOX workshop.

Proposals can be submitted electronically **anytime** by any group leader as described in: <http://www.ims.tnw.utwente.nl/thiox/News/award.doc/index.html>

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**MORE INFORMATION ON THIOX CAN BE FOUND ON THE THIOX WEBSITE:**

<http://www.thiox.nl>

We look forward to seeing you soon, and, certainly, in one of the future THIOX meetings.

Sincerely,

Dave Blank, Jochen Mannhart, and Jean-Marc Triscone