

# 1<sup>st</sup> International Meeting on "Materials for high-field magnets"

September 14, 2011 / 9h15-12h00 / Marseille - Parc Chanot - France

The aim of the thematic network "Materials for high-field magnets" belonging to the FP7 / EuroMagNET II project, is to bring together scientists and engineers working with ultra-strong conductors and reinforcement materials for superconducting, resistive or pulsed magnets with those working on the metallurgy of high strength metals. The limiting parameter for reaching higher magnetic fields is the conductor-material strength and common efforts on an international level are necessary to develop and achieve better materials for constructing superior high field magnets for the user community.

This first international meeting will promote the exchange of knowledge and ideas about the development of materials for high-field magnets.

## Format of the meeting

Two sessions of oral presentations will be dedicated to the state of the art and the future in terms of development of "high strength materials for high field magnets" by

- **members of EuroMagNET II consortium**

Dr X. Chaud, LNCMI-Grenoble, France / Dr F. Lecouturier, LNCMI-Toulouse, France

Dr S. Wiegiers, HMFL-Nijmegen, Netherlands / Dr S. Zherlyitsyn, HLD-Dresden, Germany

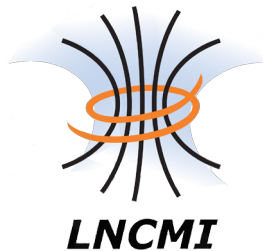
- **members of non-european high field laboratories, metallurgists, industrials,...**

Dr K. Han, NHMFL-Tallahassee, USA / Pr K. Kindo, ISSP-Tokyo, Japan

Dr C. Swenson, LANL-Los Alamos, USA / Pr L. Thilly, Institut P<sup>2</sup>-Poitiers, France

Dr C. Verdy, LERMPS-Belfort, France

<http://www.euromagnet2.eu/>



## Registration

Send your name, affiliation, address to

[florence.lecouturier@lncmi.cnrs.fr](mailto:florence.lecouturier@lncmi.cnrs.fr)

**28 August 2011: Registration deadline**

The participation to the meeting is free

## Venue

This meeting will be held during the MT22 conference in order to allow the participation of overseas participants

Palais des Congrès, parc Chanot

porte A, Rond-Point du Prado

Marseille - France



Organizer contact: [florence.lecouturier@lncmi.cnrs.fr](mailto:florence.lecouturier@lncmi.cnrs.fr)

Dr Florence Lecouturier

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13008 Marseille, France

room RIOU (2<sup>nd</sup> floor)

## Program

- 9h15-9h20 Opening  
*F. Lecouturier*
- 9h20-9h35 Ideal conductor properties for DC resistive magnets  
*S. Wiegers*
- 9h35-9h50 Superconducting materials for high field magnets at LNCMI  
*X. Chaud, F. Debray, P. Pugnât, C. Trophime, P. Tixador*
- 9h50-10h05 HLD experience with high-strength wires and reinforcement materials  
*S. Zherlitsyn*
- 10h05-10h15 R&D of high strength materials for pulsed magnets at LNCMI  
*F. Lecouturier*
- Coffee break
- 10h30-10h45 High strength material consideration for high field magnets  
*K. Han, R.P. Walsh, V. Toplosky, J. Lu, Y. Xin, R. Goddard*
- 10h45-11h00 Specification high-strength high-conductivity wire for pulsed magnet applications  
*C. Swenson*
- 11h00-11h15 Development of new Cu-Ag wire for pulsed magnets  
*A. Matsuo*
- 11h15-11h30 Investigation of cold-sprayed materials for high field magnets  
*C. Verdy, C. Coddet, G. Montavon, F. Debray, F. Lecouturier*
- 11h30-11h45 Nanocomposite metallic conductors for high field magnets: on the role of microstructure in the response to harsh environment  
*L. Thilly, F. Lecouturier*
- 11h45-11h50 Conclusions and closing