Registration fees

	Until June 1st, 2011	After June 1st, 2011
Student	400 €	500 €
Academic people	750 €	900 €
Industrial people	750 €	900 €

Add 19,6% (VAT) for EC citizen

In order to ensure and encourage individual interaction the number of participants will be limited to 40.

Registration fees include :

- Admission and participation to the course
- Coffee breaks, lunches, reception and two conferences dinner

Participants will be required to make their own accommodation and travelling arrangements to and from workshop venue. Organizers will send an hotels list and an access map of the training place. Upon request organizers can make accommodation bookings for participants.

Please direct questions or registration to INEL:



General information

Venue

The workshop will be held at Caen, France.

IUT, UCBN, CRISMAT ENSICAEN

Access

Caen is located in Normandy at 250 km west of Paris. Further more details are available in the registration form.



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WORKSHOP

Combined Analysis Using X-ray and Neutron Scattering

July 4–8, 2011 Caen (France)

5 days training on the aspect of Combined Analysis by X-ray and Neutron Scattering and introduction to MAUD software

Aim of the workshop

Is to allow students, academic and nonacademic researchers to obtain information relating to the characterisation, structure, microstructure, phase, texture, stress and reflectivity by " Combined Analysis using X-ray and neutron scattering techniques" and relating to a number of samples and structures including : thin films bulk materials, mate- rials with anisotropic crystal structures, polyphased materials, nanomaterials, multi-detectors, etc.

Each type of analysis will be considered individually and then integrated into a combined analysis program. Some specific examples will be studied using X-ray and neutron experimental data.

The objective is to bring together participant's from various fields and to provide an opportunity to discuss individual interests and experience.

X-ray equipment used at the CRISMAT laboratory and by INEL will be used to demonstrate technical aspects and to support the theoretical and practical issues of this course.



Topics

The workshop will cover many aspects of "Combined Analysis" by X-ray and neutron scattering, ranging from fundamental requirements to technically relevant industrial and academic applications.

- \checkmark Diffraction technique, an overview
- ✓ Crystallography Texture Analysis
- ✓ Residual Stress Analysis
- ✓ Rietveld analysis
- ✓ Reflectivity analysis
- ✓ Phase analysis
- \checkmark Phase and line broadening analysis
- \checkmark The combined solution
- ✓ Using MAUD software

Pre-requisites

The necessary pre-requisites are as follows:

 \checkmark Basic knowledge of crystallography and diffraction techniques

✓ Good practice in the use of computers✓ If possible, bring your laptop for the

practical sessions



Maud, Materials Analysis Using Diffraction

http://www.ing.unitn.it/~maud/

Our Team of Speakers

Daniel Chateigner, Caen (France) Luca Lutterotti, Trento (Italia) Christophe Fontugne, Artenay (France) Olivier Perez, Caen (France) Magali Morales, Caen (France)



{001}, {100} and {111} pole figures recalculated from the OD refined by combined analysis for the a) as-cast and b) cast and sintered PZT samples synthetised by the pure PbO flux route. Linear density scale, equal area projection.

Registration

If you are interested in this workshop, please contact INEL by an email entitled "Inel Crismat workshop" to:

Email: info@inel.fr Phone: +33(0)2 38 80 45 45

We will send you a registration form by email that you will have to fill out and send back to us. You will also received the workshop program as well as the procedure to install the software on your PC before the start of the workshop. Payment conditions and tourism information will be included.

> Registration Deadline June 15th, 2011