Registration fees

	Until May 20th, 2022	After May 20th, 2022
Student	900 €	1100 €
Academic	1600 €	1800 €
Industrial	2000 €	2200 €

All taxes included (20% VAT)

In order to ensure and encourage interactions, the number of attendees is **limited to 20**.

Registration fees include

Admission, participation to courses & Coffee breaks, lunches & conference dinner

Any questions about the training, please use:

Phone: +33(0)2 31 45 26 11
+33(0)2 31 45 26 28

daniel.chateigner@ensicaen.fr
stephanie.gascoin@ensicaen.fr

Attendees are required to make their own accommodation and travel arrangements. A list of hotels and an access map will be sent

General information

Venue

The workshop will take place in Caen, France at the Technological Institute an CRISMAT-ENSICAEN

Access

Caen is located in Normandy, 250 km west of Paris. More details are available on the registration form.

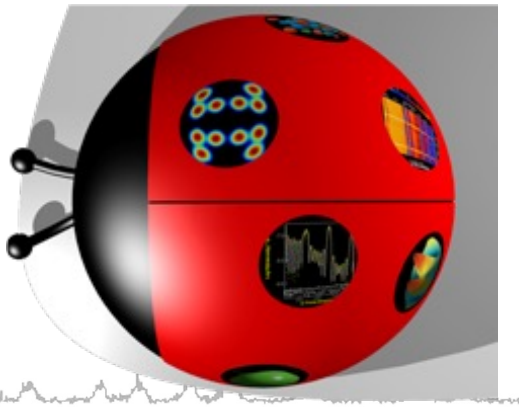
Organizers

CRISMAT UMR 6508 Organizes the 13th WORKSHOP on Combined Analysis Using Ray Scattering

July 3th – 7th, 2023

Caen (France)

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



Objectives

This international school covers many aspects of the “Combined Analysis” methodology using x-Ray, neutron and electron scattering, and X-ray fluorescence applied to material science. Fundamental to technical aspects relevant to industrial and academic applications are targeted.
The combined analysis method is developed for more than 20 years. Ground on the whole pattern fitting using the Rietveld method, it incorporates texture, microstructure, phase, layering, residual stress analyses,, together with x-ray reflectivity and fluorescence and electron diffraction.

The aim is to give students, academic and non-academic researchers the necessary tools to be able to characterize their own samples using the Combined Analysis method and the software MAUD. The characterization involves obtaining information on the structure, microstructure, phase and elemental content, texture, stress in different kind of samples and structures including : thin films, bulk materials, anisotropic materials, poly-phased materials, nano-materials, etc.

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

Topics

Each type of analysis will be considered individually for the proper technique and then integrated into the MAUD Combined Analysis software. Some specific examples will be studied using X-Ray and neutron experimental data.

- Diffraction techniques, overview
- Crystallographic Texture Analysis
- Residual Stress Analysis
- Rietveld analysis
- Reflectivity analysis
- Phase analysis
- Line broadening analysis
- XRD & XRF combined analysis

Registration Links

Registration begins 13th March

French : A COMPLETER

English : A COMPLETER

Registration deadline

June, 19th, 2023

Pre-requisites

- Basic knowledge of crystallography and diffraction techniques
- Good practice in the use of computers
- **Your laptop** for the practicals !

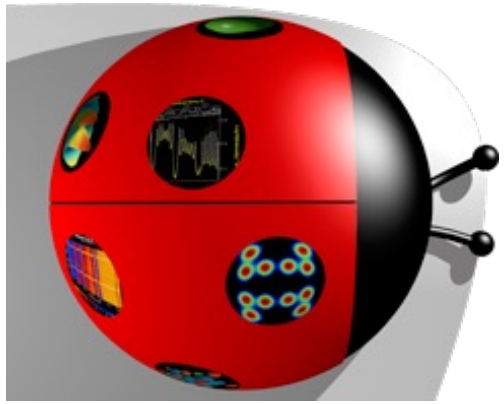
MAUD

Materials **A**nalysis **U**sing **D**iffraction

http://maud.radiographema.eu/

Speakers

Daniel Chateigner, Caen (France)
Luca Lutterotti, Trento (Italia)
Henry Pillière, Artenay (France)
Magali Morales (France)



Informations Link

http://www.ecole.ensicaen.fr/~chateign/formation/