## TRAINING AND EDUCATION

## HERCULES Courses (23-27 Mar. 2009)

This five-weeks course is designed to provide training for students, postdoctoral and senior scientists from European and non-European universities and laboratories, in the field of **Neutron and Synchrotron Radiation for condensed matter studies** (Biology, Chemistry, Physics, Materials Science, Geosciences and Industrial applications). In addition to lectures, all full time participants carry out practicals or tutorials in the European Facilities (ILL and ESRF) at Grenoble and, French facilities (SOLEIL and LLB) in Paris area. <a href="http://hercules.grenoble.cnrs.fr">http://hercules.grenoble.cnrs.fr</a>

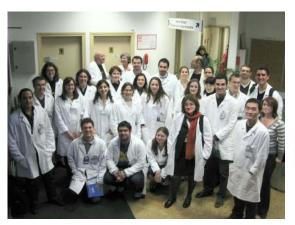


### FANs du LLB 2008 (2-5 Fev. 2009)

After a late restart of the Orphée reactor in late 2008, the FANs du LLB 2008 were postponed to 2-5 February 2009. During this session, the 18 trainees focused mainly on Powder Diffraction and Small Angle Neutron Scattering.

### FANs du LLB 2009 (23-26 Nov. 2009)

The second session of 2009, from 23 to 26 November, welcome 25 trainees from various Universities and Research Institutions. During 4 days, they add a first opportunity to discover and practice Single Crystal and Powder diffraction, Small Angle Neutron Scattering, Inelastic scattering...







#### Journées de la neutronique (23-29 May 2009)

The 17th « Journées de la Neutronique » and « Rossat-Mignot days », co-organised by the LLB, ILL and LCVN, took place from 23 to 29 mai 2009 in La Grande Motte. This year, the meeting was untitled « Neutrons and Soft Matter ». As usual, all the teaching documents will be gathered in a book that will available free of charges in electronic form on the web site of EDP Editions: <a href="http://www.neutron-sciences.org">http://www.neutron-sciences.org</a>.

#### PRATICAL FOR UNDERGRADUATES STUDENTS





Students from Rennes-I University (left) and Bordeaux I University (right) at work in LLB.

#### Rennes-I University – European Master MaMaSELF (27 Nov. 2008)

The visit, organized by W. Paulus from Rennes-I University, gathered about 50 students of 1rst and 2<sup>nd</sup> year of Material Sciences Master. Together with them came also European students from the Master "Erasmus Mundus" MaMaSELF (Materials Science exploiting European Large Scale Facilities). http://etudes.univ-rennes1.fr/mamaself).

### Bordeaux-I University - European Master FAME (26-28 Nov. 2008 & 25-27 Nov. 2009)

On 2008 and 2009, the LLB welcome respectively 13 and 17 students of Masters M2 «Physics and Chemistry" and "Material Sciences" from Bordeaux-I University, and from European Master FAME. During their stay, they were initiated to Powder diffraction, Quasi-elastic Neutron Scattering and Inelastic Neutron scattering on G4.2, Mibémol and G4.3 spectrometers.

These practical trainings were supervised by doctoral fellows of LLB, and came in complement to lessons on neutrons scattering provided during the semester by A. Desmedt (ISM, Talence), M. Josse and A. Toulemonde (ICMCB, Pessac).

# Ecole Centrale (11-12<sup>th</sup> Dec. 2008 & 10-11<sup>th</sup> Dec. 2009)

In 2008 and 2009, a dozen of students in 3<sup>rd</sup> year at the Ecole Centrale de Paris came at LLB for practical work on neutron scattering organized by B. Gillon (LLB) and J-M. Gillet (ECP). The themes proposed were "Powder diffraction" (G41, G. André), « Single crystal diffraction » (6T2, A. Bataille) and "Small angle neutron scattering" (PACE, J. Jestin).

## Paris VI: (14-17th Dec. 2008)

In last December, LLB-Orphée welcome 4 students from the International Master of Applied Physics "NanoMat", co-organized by Paris VI, Uppsala and Roma 3 Universities for practical work on Inelastic Neutron Scattering on G4.3, trained by V. Balédent, thesis student at the LLB.





Students from Ecole Centrale (left) and Paris-VI University (right) at work in LLB.

# **DOCTORAL FORMATION AT LLB**

	Title of the Thesis	Funding	Examination/ University
CALLIGARI Paolo	Adaptation of proteins to hot seabeds environnement: The case of initation factor 6, studied by molecular simulation and neutron scattering.	ILL/LLB	18/12/2008 (PARIS 6)
LAGRENE Karine	Dynamics of electrolyte polymers under quasi uniaxial confinement	CEA	21/10/2008 (PARIS 6)
VINAS Jérôme	Hybride (polymers-silica particles) materials: Synthesis and characterisation.	Region	29/02/2008 (AIX-MARSEILLE 1)
CHEVIGNY Chloé	(Polymers-Grafted particles) composites : from synthesis in colloid solution to the study of macroscopic properties.	CEA	12/10/2009 (PARIS 11)
JOUAULT Nicolas	Silica-Polymers nanocomposites : structure of charges, mechanical reinforcement, conformation of chains et evolution under deformation.	Region	03/11/2009 (PARIS 6)
LE CŒUR Clémence	Influence of cytoplasmic molecular crowding on the stability and diffusion of proteins.	CEA	08/03/2010 (PARIS 7)
MAURER Thomas	Magnetism of anisotropic nano-objects : magnetic and neutron studies of Co_1-x Ni_x nanowires.	CNRS- CEA	10/11/2009 (PARIS 11)
TENCE Sophie	Magnetic structures and properties of hydrides and magnetocaloric compounds based on rare eaths.	Region	30/09/2009 (BORDEAUX 1)