

HSC5: HERCULES Specialised Course: Synchrotron Radiation and Neutrons for Cultural Heritage Studies (4-bunch period)						
	Sunday, 7 October 2007	Monday, 8 October 2007	Tuesday, 9 October 2007	Wednesday, 10 October 2007	Thursday, 11 October 2007	Friday, 12 October 2007
08:00						
08:15		Welcome (J. Baruchel)	Meeting point ESRF auditorium	Safety Training ESRF auditorium (8h00 - 9h00)	Meeting point ESRF auditorium	
08:30		Introduction E. Pantos (UK)	<u>XRD/XAS Tutorials</u> (8h30-10h30)	Practicals ( 9h00 - 13h00)	<u>Practicals - 8h30-12h30</u>	
9:00		X-ray Fluorescence and X-ray Absorption spectrometry A. Somogyi (HU) (9h00-10h30)	F. D'Acapito (IT) Groups A and B T. Hansen (DE) Groups C and D	micro-beam Diffraction ID13 (M. Burghammer, DE)	micro-beam IR ID21 (M. Cotte, FR)	Synchrotron radiation and neutrons for painting and cosmetic studies M. Cotte (FR) (9h00-10h00)
9:30				Powder Diffraction ID15 (V. Honkimaki, FI)	Powder Diffraction ID31 (M. Brunelli, IT)	Metals G. Artioli (IT) (10h00-11h00)
10:00		COFFEE (10h30-11h00)	COFFEE (10h30-11h00)		XAS BM08 (C. Maurizio, IT)	
10:30		Exploring Archeology and Cultural Heritage with Synchrotron infrared light P. Dumas (FR) (11h00-12h30)	Neutron diffraction analysis of archaeological materials W. Kockelmann (DE) (11h00-12h30)	XAS BM08 (F. D'Acapito, IT)	Neutron Diffraction D20 (T. Hansen, DE)	COFFEE (11h00-11h30)
11:00				Tomography/Imaging ID19 (P. Tafforeau, FR)	Grazing Incidence/2theta diffraction BM02 (N. Boudet, FR)	Application of SR spectroscopy to studies of corrosive inks and pigments J. Kolar (SL) (11h30-12h30)
11:30				Grazing Incidence/2theta diffraction BM02 (N. Boudet, FR)		
12:00		LUNCH (12h30 - 13h45)	LUNCH (12h30 - 13h45)	LUNCH (13h00 - 14h00)	LUNCH (12h30 - 14h00)	LUNCH (12h30 - 14h00)
12:30						
13:00		Synchrotron based X-ray micro-analysis: principles and applications J. Susini (FR) (13h45-15h00)	Presentation of practicals	<u>Practicals - 14h00-18h00</u>	<u>Practicals - 14h00-18h00</u>	Wood & Bones T.J. Wess (UK) (14h00-15h00)
13:30		REFRESHER (15h00 - 15h30)	2D and 3D Absorption and Fluorescence Imaging P. Bleuet (FR) (14h00 - 15h30)	micro-beam Diffraction ID13 (M. Burghammer, DE))	micro-beam IR ID21 (M. Cotte, FR)	REFRESHER (15h00 - 15h30)
14:00		Crystallography and Diffraction techniques for Cultural Heritage Materials M. Anne (FR) (15h30 - 16h45)	REFRESHER (15h30-16h00)	Powder Diffraction ID15 (V. Honkimaki, FI)	Powder Diffraction ID31 (M. Brunelli, IT)	Lustre pottery: medieval nanotechnology seen by SR M. Vendrell (ES) (15h30 - 16h30)
14:30		16h45 bus to Museum	<u>XRD/XAS Tutorials</u> (16h00-18h00)	XAS BM08 (F. D'Acapito, IT)	XAS BM08 (C. Maurizio, IT)	
15:00			F. D'Acapito (IT) Groups C and D T. Hansen (DE) Groups A and B	Tomography/Imaging ID19 (P. Tafforeau, FR)	Neutron Diffraction D20 (T. Hansen, DE)	Round table and Conclusion Ph. Walter (FR) (16h30 - 18h00)
15:30		Visit of the Musée de Grenoble		Grazing Incidence/2theta diffraction BM02 (N. Boudet, FR)	Grazing Incidence/2theta diffraction BM02 (N. Boudet, FR)	
16:00				Qumran and the Dead Sea Scrolls, a handshake between SR and Nuclear reactions J. Gunneweg (ISR) (18h00-19h00)	Application of X-ray synchrotron microtomography for non-destructive 3D imaging of fossils P. Tafforeau (FR) (18h00-19h00)	Farewell cocktail (ESRF entrance hall) (18h00-20h00)
16:30						
17:00					Dinner downtown uphill	
17:30						
18:00	Registration and Buffet (Hotel Suisse et Bordeaux) (18h00-20h00)		Poster Session Wine & Cheese ESRF restaurant (18h00-20h00)			
18:30						
19:00						

Lectures in the ESRF auditorium

Tutorials in the ESRF auditorium (T. Hansen) and in the ESRF computer training room (F. D'Acapito)