

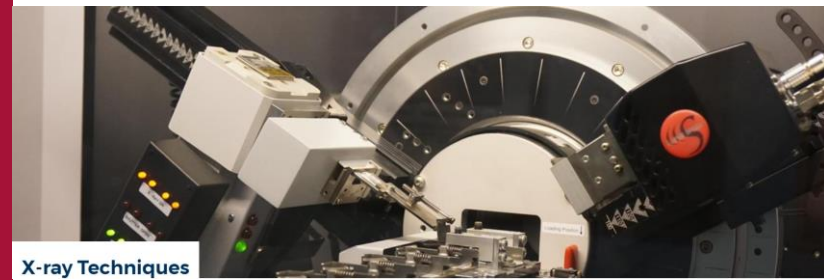
Brunel University London (Experimental Techniques Centre with the collaboration of BCAST) is pleased to offer a 4 days residential course on X-Ray diffraction with international experts on advanced theoretical and practical course. The course content includes:

- Powder and single crystal diffractometry
- Experimental set up
- TOPAS software
- GSAS 2 software
- MAUD software
- *in situ* single crystal analysis
- Single crystal *ab initio* structure determination

The Location:
Experimental Techniques Centre
Bragg Building
Kingston Lane
Uxbridge

Attendance fee **£850**

(Includes accommodation, subsistence and course notes)



X-ray diffraction: structure and texture

Hands on workshop covering theoretical framework and software used for X-ray analysis

17th to 20th of September 2018

Brunel University London
UB8 3PH

To attend please **email the organisers**

Dr. Lorna Anguilano Lorna.Anguilano@brunel.ac.uk

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X-Ray Diffraction: Structure and Texture

Program

	Morning	Afternoon
17/09	Theory of Powder Diffraction (PD) Monica Dapiaggi & Matteo Leoni 4h theory	GSAS2 software (PD) Monica Dapiaggi 1h lecture 3h tutorial
18/09	TOPAS software (PD) Matteo Leoni 1h lecture 3h tutorial	Single crystal X-Ray diffraction Chris Frampton 1h equipment Single crystal X-Ray diffraction Chris Frampton, Michele Zema 3h Theory and practice
19/09	Single crystal X-Ray diffraction Chris Frampton 2h <i>ab initio</i> structure determination Single crystal X-Ray diffraction Michele Zema 2h In situ analyses	Single crystal X-Ray diffraction Chris Frampton, Michele Zema 2h Sample preparation Single crystal X-Ray diffraction Chris Frampton, Michele Zema 2h Practical set-up
20/09	MAUD software (PD) Luca Lutterotti 2h lecture 2h tutorial	MAUD software (PD) Luca Lutterotti 2h lecture 2h tutorial

Speakers



Monica Dapiaggi – Associate Professor at University of Milan, has a long experience on powder diffraction, at room temperature and at non ambient conditions, in structural refinement (Rietveld method) and in peak shape analysis. Monica works with laboratory instruments, and with non-conventional sources (synchrotron radiation, thermal and pulsed neutrons).



Matteo Leoni – Associate professor at University of Trento, has a long experience in the use of diffraction for non-structural and microstructural studies. He developed advanced methods and software for the determination of the microstructure from data collected in laboratory and at large scale facilities.



Chris Frampton – Co-founder and scientific advisor at Nuformix Ltd. and Honorary Professor at Brunel University and crystallography consultant. Chris is an expert in single crystal diffraction and *ab initio* structure reconstruction.



Michele Zema - Executive Outreach Officer at Intl. Union of Crystallography, Lecturer in Mineralogy and Crystallography at University of Pavia. Michele is an expert in structural chemistry and the use of XRD for investigation of crystal behaviour under non-ambient conditions and cation order-disorder processes..



Luca Lutterotti – Professor at University of Trento. Luca is an expert in Rietveld, stress and texture analysis. He created the software MAUD for texture and quantitative analysis using diffraction and combined techniques.