

XRD hands on learning: Better data quality, analysis & interpretation

Wed, 27 March, University of Queensland



X-ray diffraction has undoubtedly been integral towards materials science research. We want to gather the XRD community to share knowledge and gain ideas on how to improve materials research. For the upcoming series of Malvern Panalytical's XRD workshops across the Asia Pacific region, we have invited our leading application specialist, Dr Olga Narygina, to share her knowledge.

Olga was previously the Application Specialist in our Supply Centre in the Netherlands, and has recently moved to Brisbane, Australia. Her specialization is in powder X-ray diffraction at ambient and non-ambient conditions. Alongside esteemed researchers from the University of Queensland, she will take you through basics of X-ray diffraction for the analysis of geological and synthetic materials and present various examples of cutting-edge *in operando/ in situ* research.

What you learn at the workshop

- XRD research applications
- Operate our tabletop XRD
- Tips on good sample prep
- Improve phase ID & other advanced powder XRD analysis

Register Now

Wed, 27 Mar, 9am – 5pm
University of Queensland

Programme

Apart from useful applications sharing, look out for an interactive day for hands-on learning. Try your hand at operating our latest powder X-ray diffractometer, Aeris as well as Highscore software. Improve the way you analyse and interpret your data. Spaces are limited.

Register now!

Time	Details
9.15 – 10.15am	Basic and advanced X-ray diffraction applications: <ul style="list-style-type: none">- Powder XRD for characterization of various material types (geological and synthetic materials)- <i>In situ</i> and <i>in operando</i> X-ray diffraction
10.15 – 10.30am	Coffee / Tea break
10.30 – 11.30am	Sharing on advanced materials characterization using XRD by University of Queensland researchers
11.30am – 12.30pm	Basic powder XRD hands-on session using Aeris tabletop diffractometer: <ul style="list-style-type: none">- Learn how to avoid sample prep pitfalls, ensure optimized measurement conditions and good data quality- Learn how to perform phase ID using HighScore software
12.30 – 1.30pm	Lunch
1.30 – 2.30pm	Hands-on session continues
2.30 – 2.45pm	Coffee / Tea break
2.45 – 4.45pm	Advanced analysis and data interpretation: <ul style="list-style-type: none">- Analysis of large data sets (data clustering and phase quantification)- Extracting hidden properties, using Partial Least Square Regression (PLSR) method
4.45 – 5pm	Recap and questions
5pm	End