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Tom Blanton

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https://doi.org/10.1017/S0885715616000245 Published online by Cambridge University Press
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Powder Diffraction is a quarterly journal published by the JCPDS-International Centre for Diffraction Data through Cambridge University Press.

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The XRF course covers the basics of X-ray spectra; instrumentation design; methods of qualitative and quantitative analysis; specimen preparation and applications for both wavelength and energy dispersive spectrometry. Emphasizing quantitative methods; use of automated X-ray spectrometers; review of mathematical matrix correction procedures and new developments in XRF.

Fundamentals of X-ray Powder Diffraction:
Spring 2017

For the novice with some XRD knowledge or for the experienced with an interest in the theory behind XRD, this clinic offers a strong base for increased lab performance.

The clinic covers instrumentation, specimen preparation, data acquisition and qualitative phase analysis. Hands-on use of personal computers for demonstration of the latest software; data mining with the PDF. The powder diffractometer: optical arrangement, factors affecting instrumental profile width, choice and function of divergence slit, calibration and alignment, detectors, X-ray optics.

*Advanced Methods in X-ray Powder Diffraction:
Spring 2017

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* See the ICDD web site for prerequisites for advanced courses.

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https://doi.org/10.1017/S0885715616000245  Published online by Cambridge University Press