



Training

MODULES

The topics from each module are in modular form themselves.

Any topic can be used either as a single entity or in combination with other topics.

MODULE #	SUBJECT	TOPICS
MODULE 1	BASIC X-RAY DIFFRACTION	<ol style="list-style-type: none"> 1. Basic X-ray Diffraction (XRD) Theory 2. Basic Crystallography 3. Single crystal X-ray diffraction – brief overview 4. Powder diffraction – brief overview 5. Qualitative powder XRD 6. Quantitative powder XRD
MODULE 2	XRD INSTRUMENTATION	<ol style="list-style-type: none"> 1. History of XRD Instrumentation 2. X-rays and X-ray generators 3. Basic Overview of Diffractometer Hardware 4. Basic Overview of Photographic Systems Hardware 5. Data Acquisition 6. Peripherals 7. Selection of instrument hardware 8. Selection of operating conditions 9. Standard samples
MODULE 3	SAMPLING and SAMPLE PREPARATION	<ol style="list-style-type: none"> 1. Sampling 2. Crushing and milling 3. Sample mounts – diffractometers 4. Sample mounts – photographic systems
MODULE 4	BASIC SIROQUANT	<ol style="list-style-type: none"> 1. History of Rietveld method 2. Development of SIROQUANT 3. SIROQUANT Basics 4. Quick Guide to SIROQUANT 5. SIROQUANT method

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MODULE 5	ADVANCED SIROQUANT	<ol style="list-style-type: none"> 1. Phase Preview 2. Phase selection 3. Parameters 4. Advanced Refinements 5. Calculations 6. Management 7. Printing
MODULE 6	Si PHASE	<ol style="list-style-type: none"> 1. Introduction 2. Input 3. Output 4. Integration with SIROQUANT
MODULE 7	EXAMPLES	<ol style="list-style-type: none"> 1. Simple 2. Advanced 3. Complex