

Neutron Tutorials:

Group 1 (N1-N3): Inelastic Neutron Scattering

N1: HB-1A and HB-3 Triple-Axis Spectrometers, HFIR (Mon, Tue, Fri)

N2: HYSPEC Hybrid Spectrometer, SNS (Thu, Fri)

N3: SEQUOIA Fine-Resolution Fermi Chopper Spectrometer, SNS (Mon, Tue, Fri)

Group 2 (N4-N6): Chemical Spectroscopy

N4: BASIS Backscattering Spectrometer, SNS (Mon, Tue, Thu)

N5: VISION Vibrational Spectrometer, SNS (Mon, Tue, Thu)

N6: NSE Neutron Spin Echo Spectrometer, SNS (Thu, Fri)

Group 3 (N7-N10): Neutron Powder Diffraction

N7: HB-2A Powder Diffractometer, HFIR (Mon, Tue, Thu)

N8: HIDRA Engineering Materials Diffractometer, HFIR (Mon, Tue)

N9: NOMAD Nanoscale-Ordered Materials Diffractometer, SNS (Mon, Tue, Thu, Fri)

N10: POWGEN Powder Diffractometer, SNS (Tue, Thu, Fri)

Group 4 (N11-N14): Neutron Single Crystal Diffraction

N11: WAND² Wide-angle Neutron Diffractometer, HFIR (Tue, Thu, Fri)

N12: DEMAND Single Crystal Diffractometer, HFIR (Mon, Tue, Thu)

N13: CORELLI Elastic Diffuse Scattering Spectrometer, SNS (Mon, Tue, Fri)

N14: TOPAZ Single Crystal Diffractometer, SNS (Mon, Tue, Thu)

Group 5 (N15): Neutron Imaging

N15: MARS Multimodal Advanced Radiography Station, HFIR and
VENUS Versatile Neutron Imaging Instrument, SNS (Thu, Fri)

Group 6 (N16-N19): Small-Angle Neutron Scattering

N16: GP-SANS General Purpose Small Angle Neutron Scattering, HFIR (Thu, Fri)

N17: Magnetic SANS at GP-SANS, HFIR (Mon)

N18: Bio-SANS Biological Small-Angle Neutron Scattering, HFIR (Mon, Tue)

N19: EQ-SANS Extended Q-Range Small-Angle Neutron Scattering, SNS (Mon, Tue, Thu)

Group 7 (N20-N21): Neutron Reflectometry

N20: MAGREF Magnetism Reflectometer, SNS (Mon)

N21: LIQREF Liquids Reflectometer, SNS (Mon, Tue, Thu)

Group 8 (N22-N25): Complex Sample Environments

N22: VULCAN Engineering Materials Diffractometer, SNS (Thu, Fri)

N23: High Temperature, SNS (Mon, Tue, Thu)

N24: RheoSANS, Shull Wollan Center (Fri)

N25: Resonant Ultrasound Spectroscopy, SNS (Thu, Fri)

Group 9 (N26): Neutron Data Science

N26: Data Science for Neutron Scattering (Fri)

X-ray Tutorials:

Group 1 (X1-X2): X-ray Imaging

- X1: High Energy X-ray Diffraction Microscopy and Strain Measurement (Tue, Thu)
- X2: X-ray Fluorescence Microscopy (Wed)

Group 2 (X3-X5): X-ray Spectroscopy

- X3: Extended X-ray Absorption Fine Structure (EXAFS) (Tue, Wed, Thu, Fri)
- X4: Beamline Operations and X-ray Absorption Spectroscopy (Tue, Wed, Thu, Fri)
- X5: Angle-Resolved Photoemission Spectroscopy (Tue)

Group 3 (X6-X8): Inelastic X-ray Scattering

- X6: Nuclear Resonant Scattering (Tue, Thu)
- X7: High-Resolution Inelastic X-ray Scattering (Tue, Wed)
- X8: Resonant Inelastic X-ray Scattering (Tue, Wed, Thu, Fri)

Group 4 (X9-X13): Resonant/Magnetic Scattering/Spectroscopy

- X9: X-ray Magnetic Scattering (Wed, Fri)
- X10: X-ray Resonant Magnetic Scattering (Tue, Thu)
- X11: Resonant Soft X-ray Scattering (Fri)
- X12: X-ray Magnetic Spectroscopy (Tue, Thu)
- X13: Soft X-ray Spectroscopy (Thu)

Group 5 (X14-X17): Coherence Based Techniques

- X14: X-ray Ptychography (Tue, Thu, Fri)
- X15: X-ray Photon Correlation Spectroscopy (Tue, Thu)
- X16: Coherent Bragg Rod Analysis (COBRA) (Tue)
- X17: Coherent X-ray Diffraction Imaging (Tue, Thu)

Group 6 (X18-X22): Small-Angle X-ray Scattering

- X18: Grazing Incidence X-ray Scattering (Wed, Fri)
- X19: Small and Ultra-Small-Angle Scattering from Complex Materials (Tue, Wed)
- X20: Small Angle X-ray Scattering of biological and nanoscale systems (Tue, Wed)
- X21: Studying hierarchical materials with SAXS, MAXS, and WAXS (Tue)
- X22: Nanomaterial Characterization using Anomalous SAX (Thu, Fri)

Group 7 (X23-X25): Diffraction-I

- X23: Energy Dispersive X-ray Diffraction (Tue)
- X24: Synchrotron Powder Diffraction (Tue, Thu)
- X25: Pair Distribution Function Analyses (Wed, Fri)

Group 8 (X26-X28): Diffraction-II

- X26: 3D Reciprocal Space Diffraction (Tue, Wed, Thu, Fri)
- X27: Single Crystal Diffuse Scattering (Wed, Fri)
- X28: Time-Resolved X-ray Diffraction (Tue, Wed, Thu, Fri)

Group 9 (X29-X32): Instrumentation and Complex Environments

- X29: High-Pressure Charge Transport Measurements (Tue, Wed, Thu, Fri)
- X30: High pressure tools for X-ray diffraction (Tue, Wed, Thu, Fri)
- X31: High-Resolution X-ray Fluorescence (Wed, Thu,)
- X32: X-ray Dark Field Microscopy (Tue, Thu)