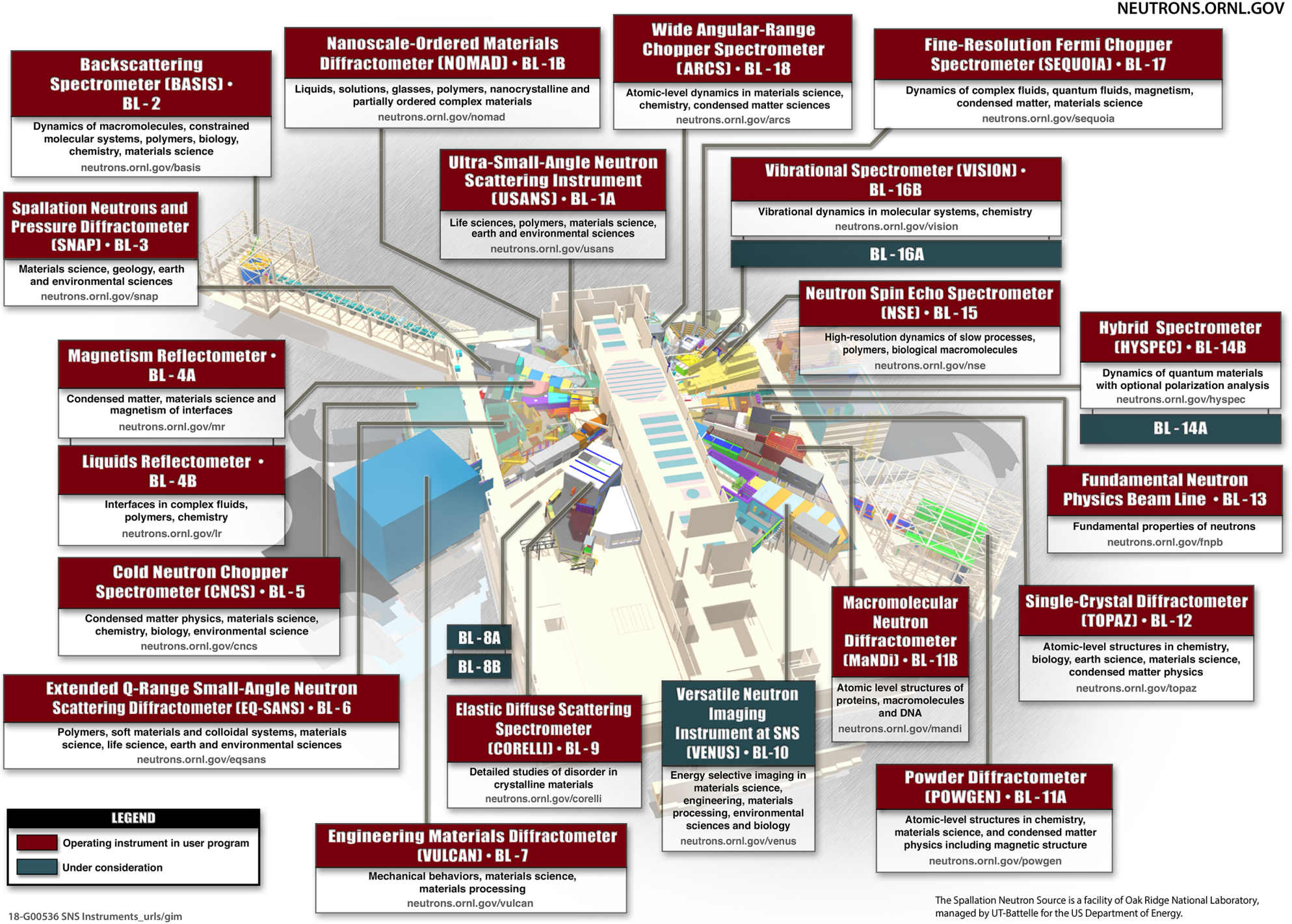
OAK RIDGE National Laboratory | SPALLATION NEUTRON SOURCE

World's most intense pulsed, accelerator-based neutron source

NEUTRONS.ORNL.GOV



Backscattering Spectrometer (BASIS) • BL-2

Dynamics of macromolecules, constrained molecular systems, polymers, biology, chemistry, materials science

neutrons.ornl.gov/basis

Nanoscale-Ordered Materials Diffractometer (NOMAD) • BL-1B

Liquids, solutions, glasses, polymers, nanocrystalline and partially ordered complex materials

neutrons.ornl.gov/nomad

Wide Angular-Range Chopper Spectrometer (ARCS) • BL-18

Atomic-level dynamics in materials science, chemistry, condensed matter sciences

neutrons.ornl.gov/arcs

Fine-Resolution Fermi Chopper Spectrometer (SEQUOIA) • BL-17

Dynamics of complex fluids, quantum fluids, magnetism, condensed matter, materials science

neutrons.ornl.gov/sequoia

Spallation Neutrons and Pressure Diffractometer (SNAP) • BL-3

Materials science, geology, earth and environmental sciences

neutrons.ornl.gov/snap

Ultra-Small-Angle Neutron Scattering Instrument (USANS) • BL-1A

Life sciences, polymers, materials science, earth and environmental sciences

neutrons.ornl.gov/usans

Vibrational Spectrometer (VISION) • BL-16B

Vibrational dynamics in molecular systems, chemistry

neutrons.ornl.gov/vision

BL-16A

Neutron Spin Echo Spectrometer (NSE) • BL-15

High-resolution dynamics of slow processes, polymers, biological macromolecules

neutrons.ornl.gov/nse

Hybrid Spectrometer (HYSPEC) • BL-14B

Dynamics of quantum materials with optional polarization analysis

neutrons.ornl.gov/hyspec

BL-14A

Magnetism Reflectometer • BL-4A

Condensed matter, materials science and magnetism of interfaces

neutrons.ornl.gov/mr

Liquids Reflectometer • BL-4B

Interfaces in complex fluids, polymers, chemistry

neutrons.ornl.gov/lr

Fundamental Neutron Physics Beam Line • BL-13

Fundamental properties of neutrons

neutrons.ornl.gov/fnpb

Cold Neutron Chopper Spectrometer (CNCS) • BL-5

Condensed matter physics, materials science, chemistry, biology, environmental science

neutrons.ornl.gov/cncs

BL-8A

BL-8B

Macromolecular Neutron Diffractometer (MaNDi) • BL-11B

Atomic level structures of proteins, macromolecules and DNA

neutrons.ornl.gov/mandi

Single-Crystal Diffractometer (TOPAZ) • BL-12

Atomic-level structures in chemistry, biology, earth science, materials science, condensed matter physics

neutrons.ornl.gov/topaz

Extended Q-Range Small-Angle Neutron Scattering Diffractometer (EQ-SANS) • BL-6

Polymers, soft materials and colloidal systems, materials science, life science, earth and environmental sciences

neutrons.ornl.gov/eqsans

Elastic Diffuse Scattering Spectrometer (CORELLI) • BL-9

Detailed studies of disorder in crystalline materials

neutrons.ornl.gov/corelli

Versatile Neutron Imaging Instrument at SNS (VENUS) • BL-10

Energy selective imaging in materials science, engineering, materials processing, environmental sciences and biology

neutrons.ornl.gov/venus

Powder Diffractometer (POWGEN) • BL-11A

Atomic-level structures in chemistry, materials science, and condensed matter physics including magnetic structure

neutrons.ornl.gov/powgen

LEGEND

- Operating instrument in user program
- Under consideration

Engineering Materials Diffractometer (VULCAN) • BL-7

Mechanical behaviors, materials science, materials processing

neutrons.ornl.gov/vulcan

18-G00536 SNS Instruments_urls/gim

The Spallation Neutron Source is a facility of Oak Ridge National Laboratory, managed by UT-Battelle for the US Department of Energy.