

Neutrons in Missouri: The University of Missouri Research Reactor (MURR)

Alex Bretaña

University of Missouri Research Reactor (MURR), Columbia, MO | alexbretana@missouri.edu

Abstract. For nearly 60 years, the University of Missouri Research Reactor has conducted groundbreaking research and collaborated with industry partners to develop unique products, including lifesaving radiopharmaceuticals. At 10 megawatts of thermal power, MURR is the highest-power university research reactor in the United States and is well suited for neutron science. MURR's beam ports house the United States only university-based triple axis spectrometer, TRIAX; GANS, a grazing angle neutron spectrometer/reflectometer; the recently updated PSD, a high-resolution neutron powder diffractometer; 2XC, a double-axis powder diffractometer; as well as a thermal neutron irradiation station and a neutron depth profiling (NDP) instrument currently in development. As MURR continues to grow and expand, the University of Missouri has launched an initiative to build a new 20-megawatt, state-of-the-art research reactor, NextGen MURR, expanding critical medical isotope production and the nation's neutron scattering facilities. Along with a new reactor, the state of Missouri and the Department of Energy have come together and partnered on a new \$40 million initiative to establish the Radioisotope Science Center (RSC).

Thursday, September 25, 2025

10:45 AM (UTC-05:00) Eastern Time (US & Canada) | Hybrid format, remote presentation

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