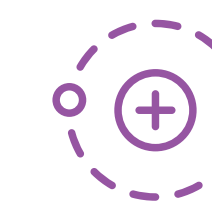


CDIF-4-XAS: Describing X-Ray Spectroscopy Data for Cross-Domain Use



The CDIF-4-XAS project will enable new science by making it easier to access, combine and reuse X-ray Absorption Spectroscopy - XAS data across RIs and disciplines. It will enhance the interoperability and reusability of XAS data by applying the Cross-Domain Interoperability Framework (CDIF), a set of guidelines and practices for using domain-agnostic standards to support the interoperability and reusability of FAIR data, especially across domain and institutional boundaries.



PaNOSC
Photon and Neutron Science

Challenge

XAS data specialised formats and metadata conventions hinder cross-domain use. Data sharing among applications, databases, and facilities is inefficient, leading to the loss of essential experimental information. The need for a more interoperable solution becomes urgent.

Solution

Through CDIF-4-XAS, metadata and provenance for XAS data are standardised, enhancing the integration of XAS datasets into EOSC infrastructures. This promotes data reuse across different research domains, making XAS data more accessible and valuable.

Scientific Impact

XAS will unlock new possibilities for research by enabling seamless data combination and analysis across RIs. Researchers in energy, chemistry, and environmental sciences, among others, will benefit from easier access to XAS data.

Partners

CODATA; RAL, STFC; Cardiff University; HZB and HMC as unfunded partners.