

The Optical Dispersive EXAFS (ODE) Beamline at Soleil Synchrotron and Its Studies

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The Optical Dispersive EXAFS (ODE) beamline at Soleil Synchrotron is a state-of-the-art facility dedicated to advancing in-situ X-ray Absorption Spectroscopy (XAS) studies across a wide range of scientific disciplines. Our research focuses on investigating dynamic processes in electrochemistry [1,2], catalysis [3], and photochemistry [4], utilizing the beamline's unique capabilities to probe electronic and structural changes in real time. Additionally, we conduct XAS measurements under extreme conditions, such as high pressure and low temperatures, to explore material behavior and properties under challenging physical environments [5-7]. By integrating cutting-edge instrumentation with innovative experimental techniques, we aim to uncover fundamental insights into the structural and electronic dynamics of materials, driving progress in energy, environmental science, and materials research.

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