



**EXPLORING ORGANIC INTERFACES AT ALOISA BEAMLINE:
INSIGHTS FROM SYNCHROTRON X-RAYS SPECTROSCOPIES**

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Hybrid organic-inorganic materials play a crucial role in various technological fields, including energy storage, electronic devices, catalysis, and nanomedicine. The properties of these materials are not only determined by their chemical and physical composition but are also significantly influenced by the interfaces between the organic layer and the inorganic substrate. Therefore, understanding the structural and electronic properties of these organic-inorganic interfaces at the nanoscale is essential for optimizing their functionalization and design.

The ALOISA Beamline at the ELETTRA synchrotron in Trieste, operated by CNR, specializes in surface science. With its versatile multi-technique end stations, it enables users to explore both the chemistry and structure of surfaces, adsorbates, and ultra-thin organic films using synchrotron radiation-based XPS and NEXAFS spectroscopies.

In this presentation, I will introduce the key techniques available at the ALOISA beamline and highlight our primary research areas, with a focus on organic semiconductors and on-surface chemistry, presenting our latest works on the stabilization of organic radicals and on-surface growth of 3D coordination polymers.

Date / Time: Wednesday, March 26, 2025 - 3 p.m.

Place: Seminar room 09.02, Heinrichstraße 26, ground floor
(Department of Earth Sciences)

Host: Ass.-Prof. Dr. Giovanni Giovanni