Soft X-ray Microscopy at TwinMic beamline Elettra Sincrotrone Trieste

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Soft X-ray microscopy is established as a very powerful tool for understanding complex processes occurring at the submicron length scales [1], especially when coupled with X-ray spectroscopy techniques. The presentation will focus on recent achievements of the TwinMic beamline at Elettra Sincrotrone Trieste, where Soft X-ray microscopy can be coupled with i) the low energy X-ray Fluorescence (LEXRF) set-up, allowing for elemental mapping of light elements, from B and covering the K and L edges of all elements in the energy range 190 to 2200 eV [1, 2], and ii) XANES spectroscopy for metal speciation [3]. The latest outcomes in research fields, such as nanotoxicology, clinical medicine, environmental science and electrochemistry will be demonstrated through selected results [3-6]. New imaging modes in development will also be discussed and illustrated [7].

References:

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