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Sala de Grados
Facultad de Ciencias



INMA

Impulso



New Opportunities for Nanoscale X-ray Imaging

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Coherent X-rays enable fundamentally new microscopies to image complex materials. Notably, their ability to directly observe the actual arrangement of structural defects and lattice distortions enables structure-property relationships of nano-scale materials to be observed directly.

This talk will highlight progress towards achieving these opportunities, including a summary of key developments. Experimental results will be presented that illustrate the importance of structural defects in the morphology and reactivity of mineral nanoparticles, using Bragg coherent diffraction imaging. Recent efforts to extend these capabilities to image interfaces and thin films will be described, along with a perspective on future opportunities.