

**MS37-2-2 Electron diffraction and nanocrystallography: crystal mapping of nanoscale crystals with a dedicated electron diffractometer**  
#MS37-2-2

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**Abstract**

In recent years, Electron Diffraction (ED) established itself as an emerging technology in the fields of inorganic molecules, material sciences, geological sciences, energetic materials, bioorganic chemistry, and many others.<sup>[1-4]</sup> Diffraction experiments are done with (modified)-Electron Microscopes and performing these experiments require special expertise and efforts. Pioneers in the field of Electron Diffraction<sup>[5]</sup> all agree that a dedicated device for the realization of such experiments would be a significant step forward for the crystallographic community.

With the "ED-1", such a device is now on the market and ELDICO Scientific AG will present latest results from its dedicated Electron Diffractometer, built and optimized for diffraction experiments. Electron Diffraction in conjunction with STEM imaging can be used for crystal mapping with a seamless transition to structure analysis of crystals with different morphology. The possibilities of this dual-technique workflow will be shown on different exemplifying experiments performed on our device.

**References**

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