

## MS46-P140 LATE | XALOC, THE MX BEAMLINE AT ALBA SYNCHROTRON: CURRENT STATUS AND PERSPECTIVES

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XALOC is a tunable MX beamline, in user operation since 2012, located at the 3<sup>rd</sup> generation synchrotron ALBA (Barcelona). XALOC has been designed to deal with automatable X-ray diffraction experiments of micrometer-sized crystals, including a variety of crystal sizes, unit-cell dimensions and crystals with high mosaic spread and/or poor diffraction. The aim for a reliable all-in-one beamline is equaled by the aim to maximize ease-of-use and automatization. Mail-in data collection is now in routine operation and dewar transport expenses are covered for users from Spain and abroad. To achieve a high-throughput MX beamline, we have implemented a new double gripper at the CATS sample changer that allows sample interchange in less than 20 seconds. Besides, an improvement in the CATS dewar allows to allocate up to 6 Unipucks (96 samples). EMBL/ESRF pucks are also acceptable with a capacity of 30 samples. In addition, MXCube and ISPyB software platforms for data collection and sample tracking/experiment reporting are routinely used at the beamline, allowing automated centering and the possibility to download the results obtained with the EDNA automated data processing pipeline through a web browser (<https://ispyb.cells.es/>). Native data collection has been facilitated by a Helium chamber developed “in-house” providing initial promising results. The beamline allows “in-situ” diffraction and serial crystallography experiments have been carried out successfully. XALOC is continuously open to new proposals providing beamtime within a few weeks. Current possibilities and upgrades that will become available in the near future will be discussed.