MS40 Operando and in-situ crystallographic studies

## MS40-2-4 XRDynamic 500: the automated multipurpose powder X-ray diffractometer from Anton Paar #MS40-2-4

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## Abstract

With the launch of the XRDynamic 500 automated multipurpose powder X-ray diffractometer, Anton Paar is breaking new ground in XRD and taking materials research to the next level. In this presentation the key features and benefits of XRDynamic 500 will be presented.

The core of XRDynamic 500 is the TruBeam<sup>™</sup> concept. TruBeam<sup>™</sup> comprises a large goniometer radius and evacuated optics units, automatic change of the beam geometry and all optics components, and automated instrument and sample alignment routines. All of these features combine to deliver outstanding data quality (in terms of both resolution and signal-to-noise ratio) that can be measured with high efficiency in a straight-forward manner; even users new to XRD can measure excellent quality XRD data every time. The high level of automation means that you can perform measurements on one or many samples with different geometries and instrument configurations in one batch with no user intervention needed.

In addition to the key instrument features and benefits, application examples will also be presented. XRDynamic 500 is suitable for powder XRD (in reflection and transmission), grazing incidence XRD, non-ambient XRD, PDF analysis, SAXS and more, covering a huge range of sample types and application fields. A wide variety of sample stages and sample holders ensures that there is an optimized instrument configuration available no matter the type of sample.

## XRDynamic 500

