

New stage of benchtop X-ray diffractometer MiniFlex with new two-dimensional detector and temperature-control attachment

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The benchtop X-ray diffractometer MiniFlex is equipped with the high-speed two-dimensional detector HyPix-400 MF, which means that analysis using much more insightful diffraction patterns are available with a compact XRD machine. This new detector allows high-speed, low-noise data collection and it makes possible to obtain a two-dimensional diffraction image which is effective for samples with coarse grain and / or preferred orientation. In addition, the temperature-control attachment BTS 150/500 (manufactured by Anton Paar) can be used with MiniFlex. BTS 150 enables measurements from -10°C to 150 °C, and BTS 500 enables measurements from room temperature to 500 °C. With this MiniFlex system, you can observe the process of phase transition of substance due to temperature change in-situ. Various examples of characterization by MiniFlex will be presented at the poster session.