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## **FIREPOD: A new thermal high-throughput powder diffractometer at MLZ**

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The new instrument FIREPOD (FIne REsolution POWder Diffractometer) was successfully transferred from Berlin to Garching as part of a BMBF-funded project. At the MLZ, it will have a 'second life' as a dedicated high-throughput instrument, ideally suited for a wide range of fast parametric studies and studies with large sample series. As such, it perfectly complements the group of three unique thermal powder diffractometers located at the SR8 beam tube of the FRM II. Due to the optimised design of the detector, even very bulky sample environments can be used. The scientific focus will be on advanced materials research, including topics with promising industrial applications such as batteries, hydrogen storage, or construction and functional materials under a wide range of conditions, particularly in situ and in operando studies. The details of the instrument design to meet these goals and its foreseen capabilities will be presented in detail.

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