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A glass capillary of 0.5mm diameter was filled with NIST 660b LaB6 standard material and mounted on a STOE STADI P in Debye-Scherrer geometry using a STOE MULTI MYTHEN2 R 3K detector (450 μ m chip thickness) and Mo Ka1 radiation.

STOE MULTI-MYTHEN DETECTOR

MYTHEN2 R nK (n = NUMBER OF MODULES WITH n = 2 OR 3)

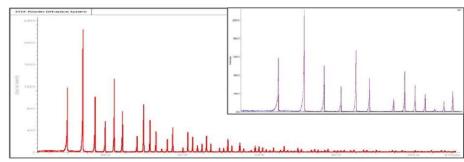
STOE offers this new product for it's STADI P and MP series to afford high resolution data collection in shortest measuring times

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Design study of the left- and right-handed STOE MYTHEN2 R 2K

STOE MYTHEN2 R 3K shown in picture above



The powder pattern above was measured from 2 to 110° 2q in 120 s, using the one step technique, and the data taken to refine the cell. The first 40° 2q of the fit are magnified in the upper right corner of the figure. The impressive results of the refinement are listed in the table below.

File title: LaB6

Wavelength: 0.709300

Number of accepted peaks: 68

2Theta window: 0.050

2Theta zeropoint: 0.0023 (refineable)

Symmetry: Cubic P

Spacegroup: P m-3m (No. 221)

Initial cell parameters: Cell_A: 4.1569

Refined cell parameters :

Cell_A: 4.15698(11)

Cell_Volume: 71.834(3)

Number of single indexed lines: 68

Number of unindexed lines: 0

2Theta zeropoint: 0.0014(23)

Average delta(2Theta) = 0.005

Figure of Merit F(30) = 460.4 (0.002, 31)