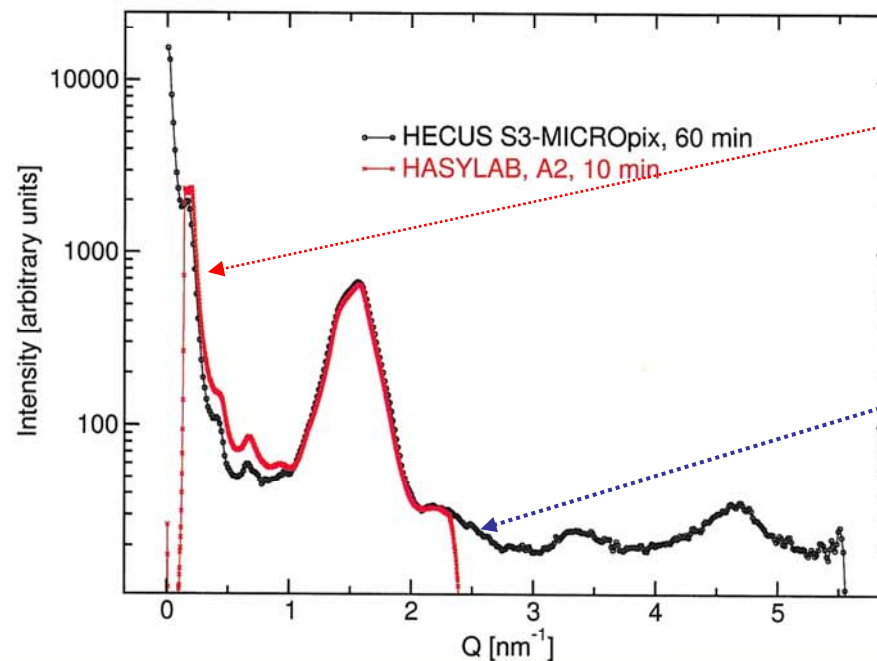


**USER TESTIMONIAL:**  
**„S3-MICROPIX PROVIDES EXCELLENT RESULTS  
AND MADE A GREAT LEAP TOWARDS  
2ND GENERATION SYNCHROTRON SAXS MACHINES“**

## Small angle X-ray scattering HECUS S3-MICROpix



**Megawatt  
Synchrotron  
at Beamline**

**50 Watt  
S3-MICROpix  
at Laboratory**

Sample: Triglyceride Nanoparticles in Solution  
Data by courtesy of Dr. Tobias Unruh ([tobias.Unruh@frm2.tum.de](mailto:tobias.Unruh@frm2.tum.de))

<b>Hecus S3-MICROpix</b>	
<b>Source/Micro-source</b> Max Tube Power W / Max kV	Genix/Xenocs GeniX 2009 50 W / 50 kV
<b>Optics</b>	Fox 3D for point focus Fox 1D for line focus
<b>max flux at sample</b>	2E8 Hz (photons/sec)
<b>q-min Å<sup>-1</sup> / q -max Å<sup>-1</sup></b>	q ≥ 0.003 Å <sup>-1</sup> / q ≤ 1.9 Å <sup>-1</sup>
<b>Collimator</b>	Precision machined from tungsten sinter metal, for minimum camera background. Includes three collimator settings to adapt for different experimental needs
<b>Beam size @ sample</b>	Min. 0.25 x 0.10 [mm <sup>2</sup> ]
<b>Beam @ detector</b> mm x mm	Min. 0.20 x 0.05 [mm <sup>2</sup> ] With Pilatus: HF: FWHM = 2.5 pix / S: FWHM = 1.5 pix / HR: FWHM = 1.3 pix
<b>Camera</b>	Fully evacuated camera body, internally window-less, pump-down time to 1 mbar less than 20 sec. Ports for sample control units: T-control (-20 – 120°C and/or room temp. to 300°C), controlled gas atmosphere (up to 60 bar), flow-through. X-ray safety control unit (vacuum control and front- and rear-window shield end switches).
<b>1D-Detectors</b>	<b>Hecus PSD-50M:</b> [gas detector (Ar/methane 8bar, quantum yield 45 %), Window length/width: 50 x 5 mm <sup>2</sup> ]  <b>Mythen 1K</b> (Dectris)
<b>2D-Detectors</b>	<b>Pilatus 100K</b> (Dectris; 34 x 84 mm <sup>2</sup> Pixel size : 172x172 μm <sup>2</sup> )  <b>CCD-Detector HS66</b> (Photonic Science)
<b>Options</b>	<b>GISAXS</b> micro-goniometer stage for angular control precision 10 <sup>-4</sup> degree/step <b>Gas Pressure Cell:</b> measurements under pressures of 1 to 100 bar