

Aurel Radulescu, Anastasiia Fanova

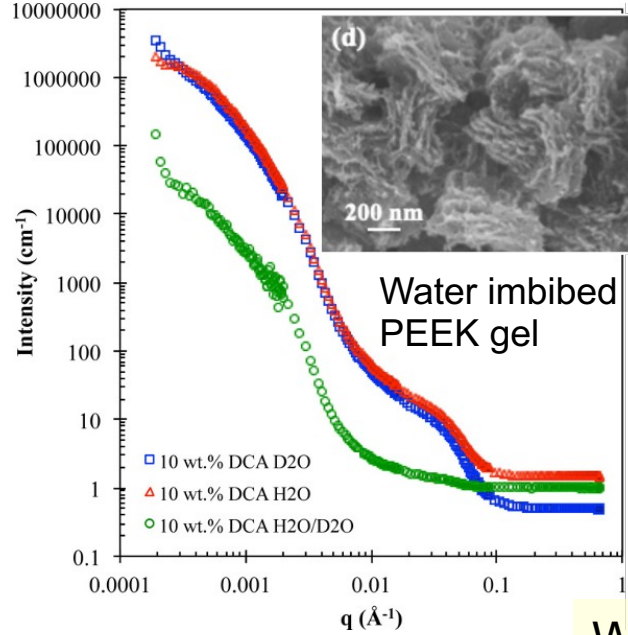
Jülich Centre for Neutron Science (JCNS), Forschungszentrum Jülich GmbH, Garching, Germany

Instrument Performance

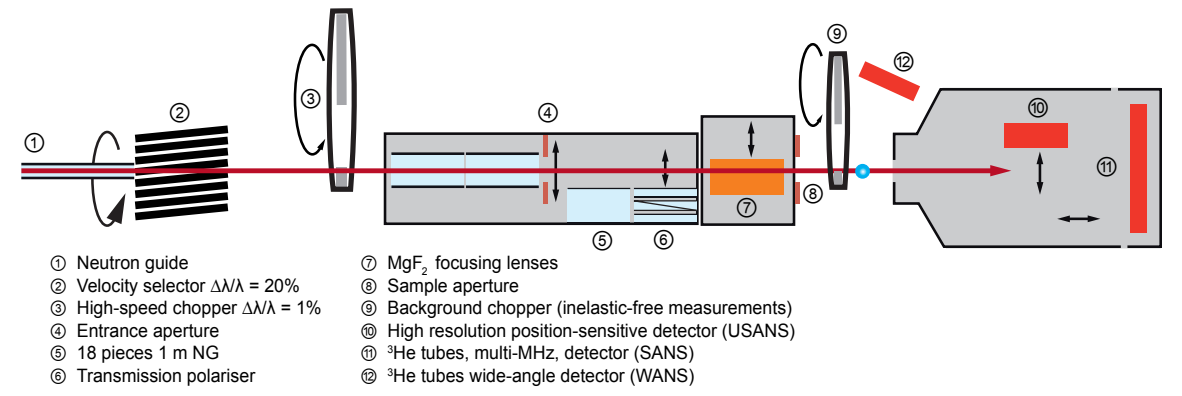
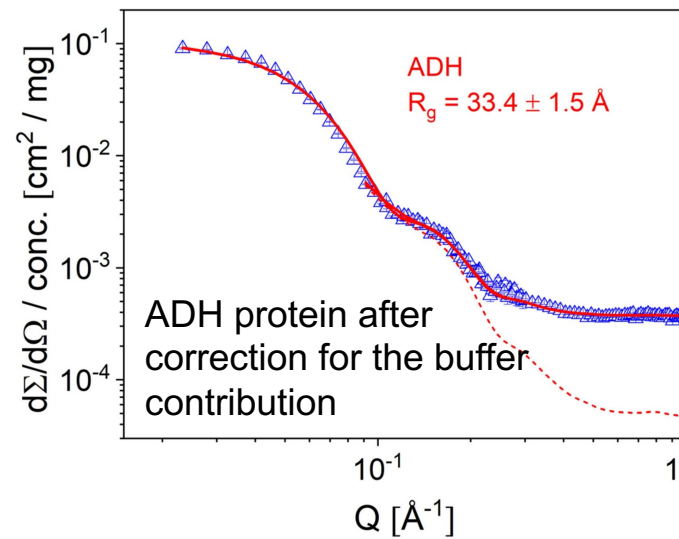
Pinhole, USANS (focusing lenses), WANS and TOF Modes & in-situ complementarities for Soft-Matter and Biophysics

Extended Q-range: $2 \times 10^{-4} - 2 \text{ \AA}^{-1}$

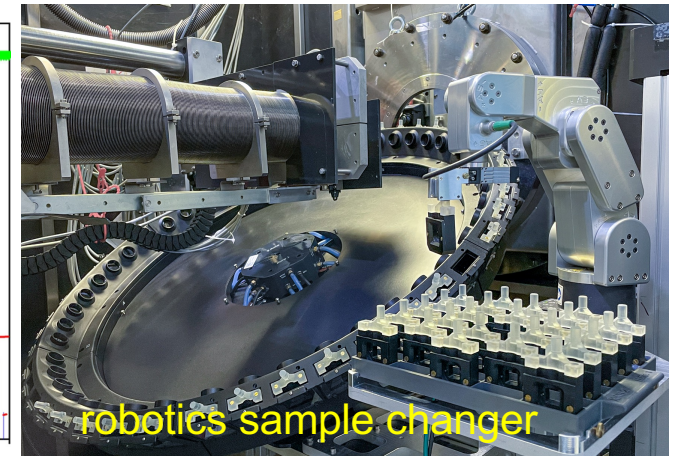
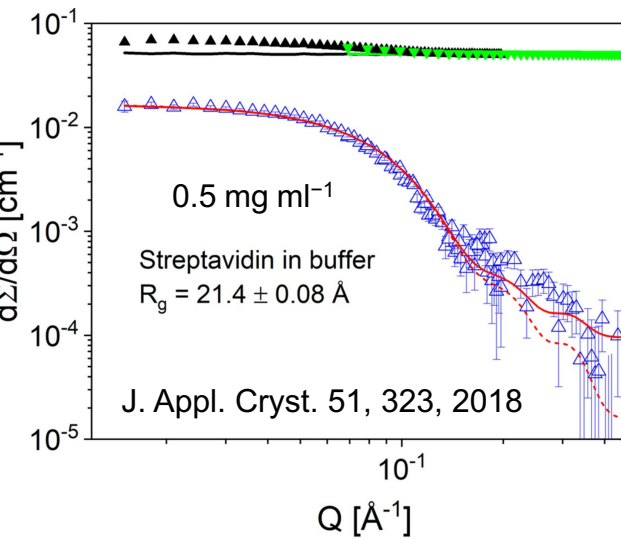
ACS Appl. Mater. Interfaces 11, 31508, 2019



J. Appl. Cryst. 58, 581, 2025

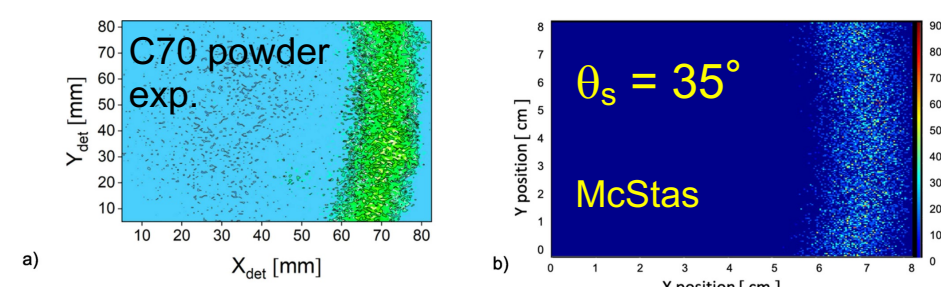
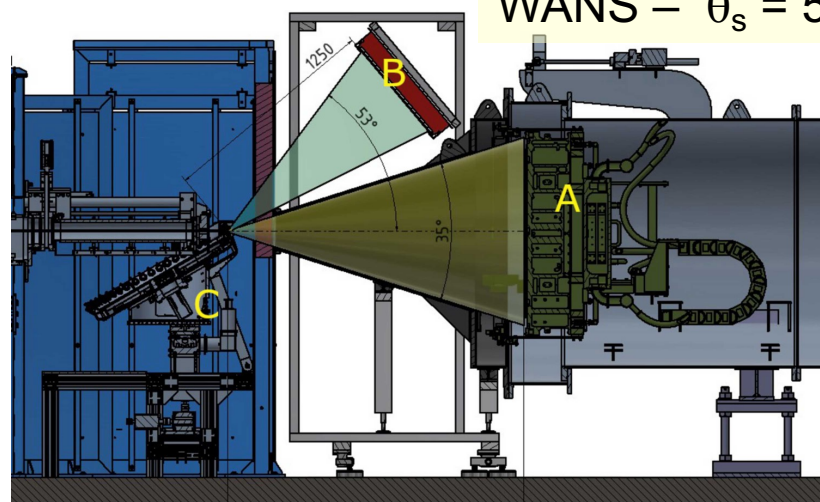


High flux (up to $2 \times 10^8 \text{ n cm}^{-2} \text{ s}^{-1}$)
MHz counting rate & high throughput



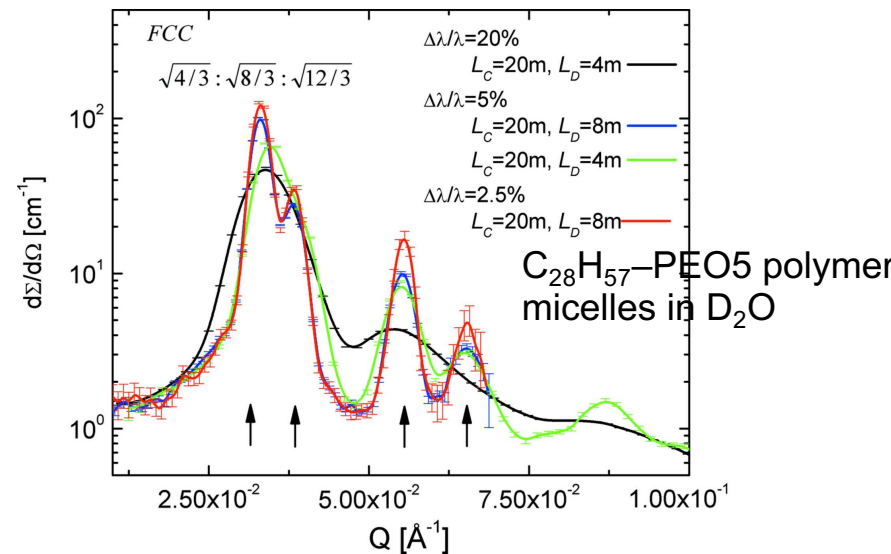
WANS – $\theta_s = 50^\circ$ ($Q_{\text{max}} = 2 \text{ \AA}^{-1}$)

J. Appl. Cryst. 57, 1040, 2024

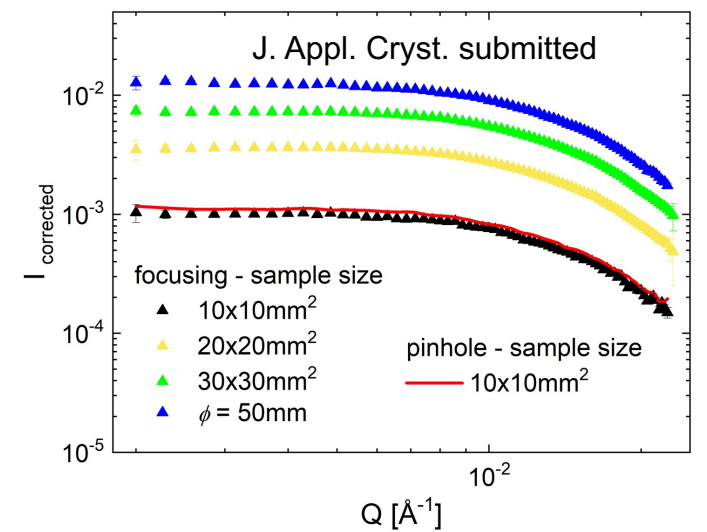


Tunable resolution $\Delta\lambda/\lambda$: 2% - 20%

J. Appl. Cryst. 48, 1849, 2015



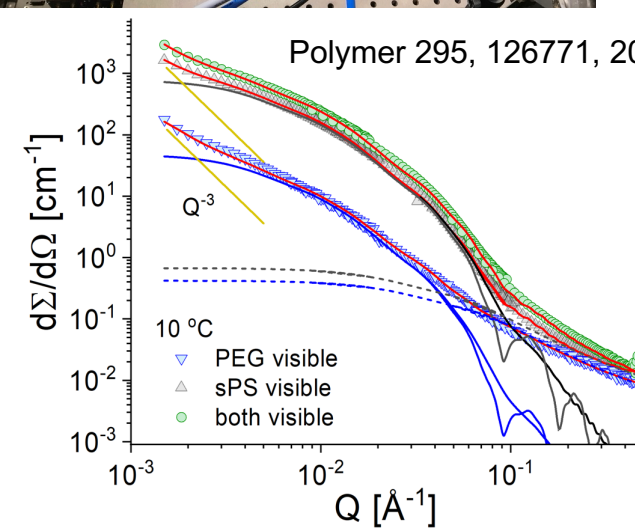
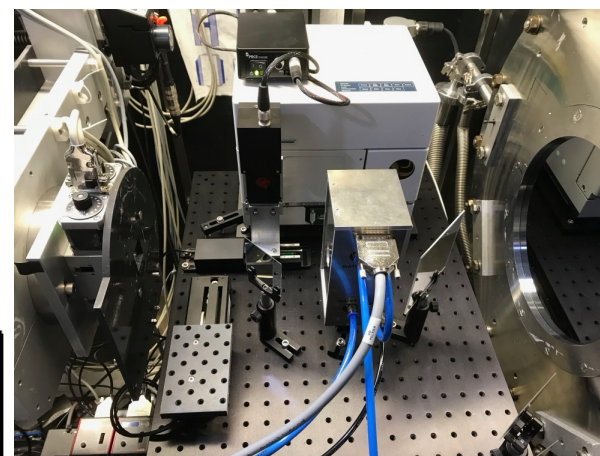
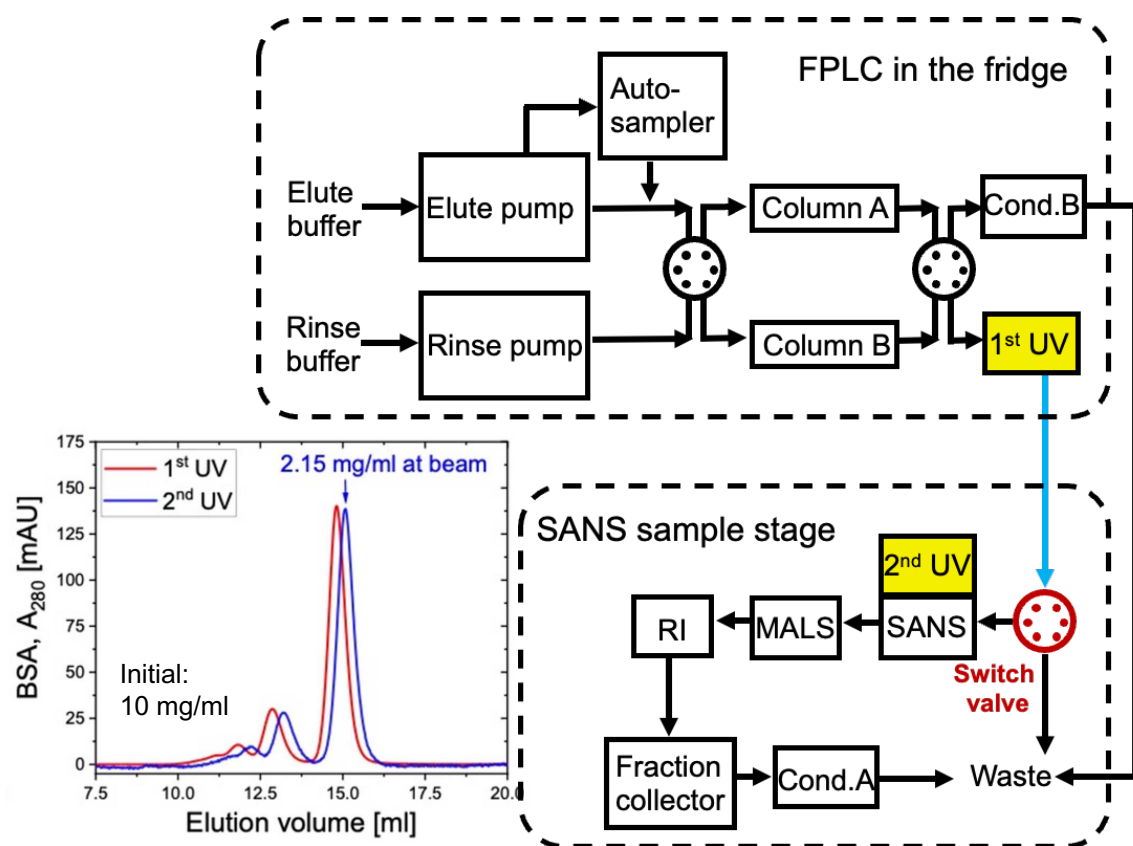
Intensity enhancement mode : lenses & large sample $\rightarrow 11\times$ gain factor



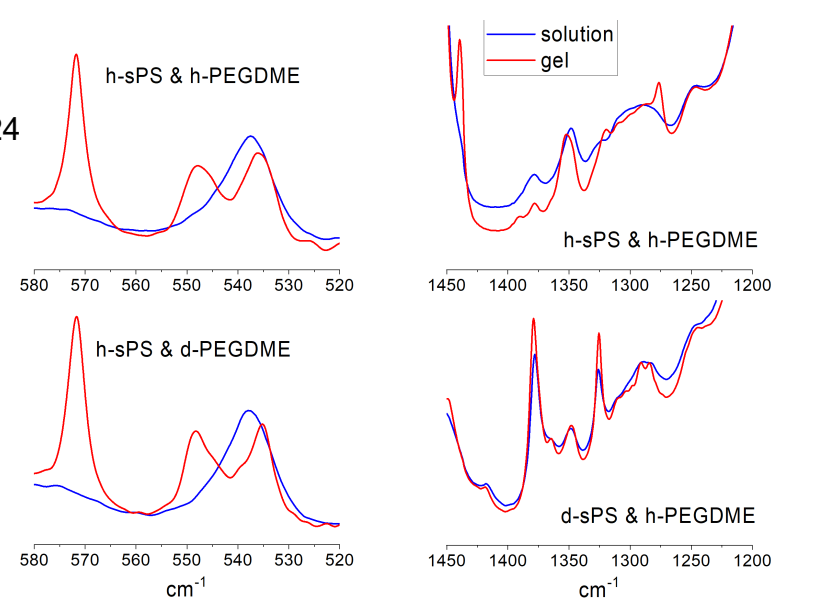
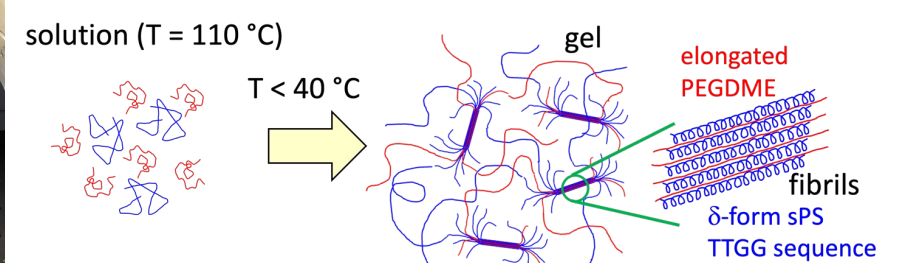
In-situ Complementarities

SEC-SANS with optional MALS-RI

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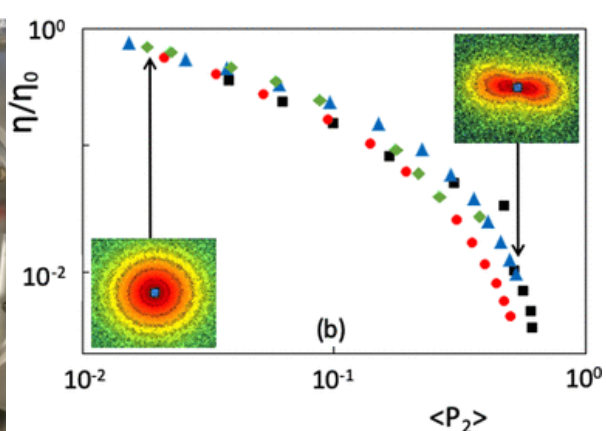
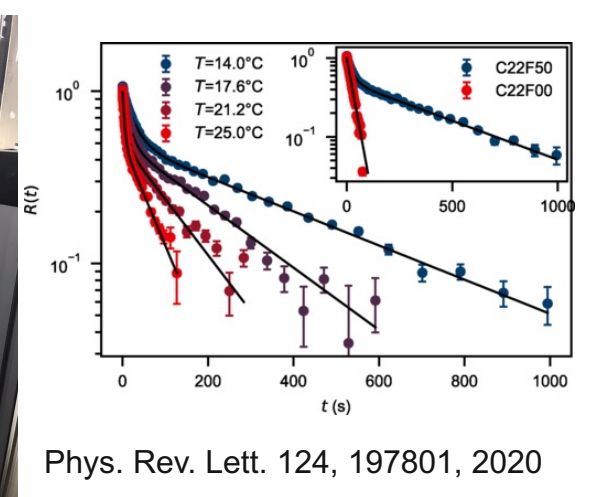
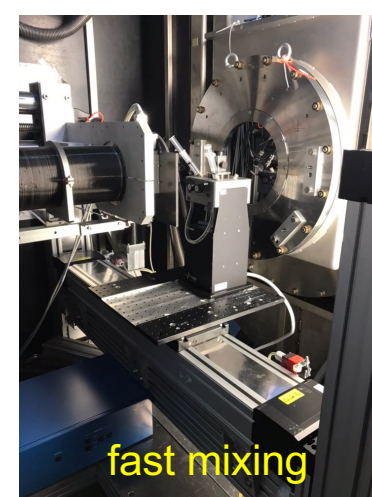
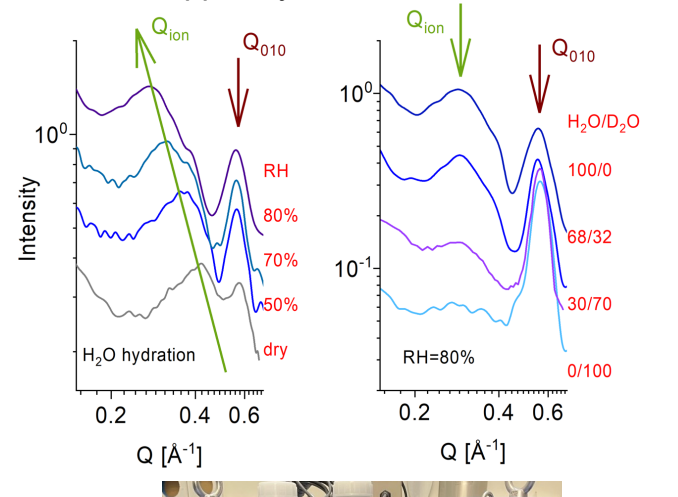
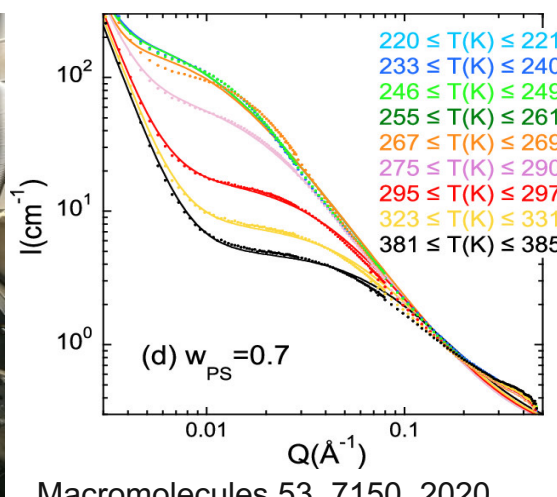


FTIR Transmission & ATR, polarization

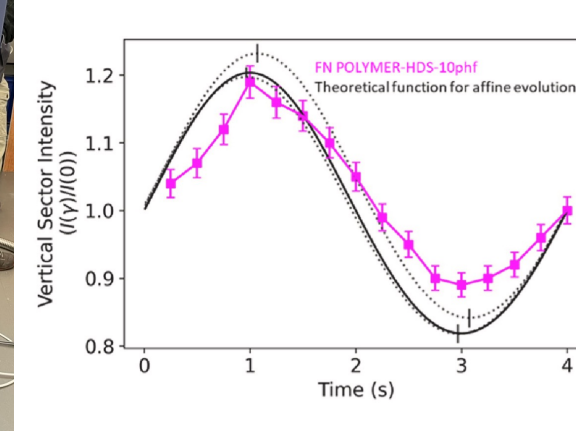


Sample Environments

J. Appl. Cryst. 56, 947, 2023



Macromolecules 52, 9604, 2019



Polymer 251, 124927, 2022

