



Contribution ID: 6

Type: **Poster**

Optimization of the in-line SEC-MALS at the Small-Angle Neutron Diffractometer KWS-2

Tuesday, 5 December 2023 14:00 (3 hours)

The small-angle neutron scattering (SANS) diffractometer KWS-2, operated by the Jülich Centre for Neutron Science at Heinz Maier-Leibnitz Zentrum in Garching, is equipped with an *in-line* size exclusion chromatography (SEC) followed by the multi-angle light scattering (MALS) machine. The established SEC-SANS-MALS setup facilitates the *in-situ* fractionation of the sample solution, the collection of SANS data, and the analysis of molar mass, subsequently. In addition, a UV-vis spectrometer is installed on the SANS flow cell holder, to examine the sample concentration during SANS data collection. In the present work, the performance of the setup is assessed and optimized, and the work on signal synchronization aims at better management of the multi-task measurement.

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Session Classification: Poster Session

Track Classification: Soft Matter