



Contribution ID: 261

Type: **not specified**

ForMAX – a beamline for multiscale and multimodal structural characterization of hierarchical materials for the Swedish forest industry

Wednesday, 20 November 2024 11:30 (15 minutes)

Magnus W. Larsson, Joaquín B. González, Vahid Haghighat, Jackson Silva, Mira Viljanen, Santiago P. Fernandez Bordín, Anuj Prajapati, Samuel A. McDonald, and Kim Nygård
MAX IV Laboratory, Lund University, Sweden

The ForMAX beamline at the MAX IV Laboratory provides multiscale and multimodal structural characterization of hierarchical materials from nm to mm length scales, by combining small- and wide-angle x-ray scattering (SWAXS), scanning SWAXS imaging, and full-field microtomography [1]. The beamline is funded by the Knut and Alice Wallenberg Foundation and industrial partners to advance research and development of sustainable materials and specialty chemicals from forest raw materials, but the beamline is also open for general users within, e.g. materials science, food science, and biomedical imaging. We will present the journey towards a beamline at MAX IV and selected scientific results from the first year of user operation.

[1] K. Nygård et al., J. Synchrotron Rad. 31, 363-377 (2024).

Presenter: Prof. LARSSON, Magnus (MAX IV)

Session Classification: Plenary