Contribution ID: **80**   Type: **Poster**

ORSO- The Open Reflectometry Standards Organisation

ORSO is a group of reflectometry scientists from across the globe that are interested in im-proving neutron and X-ray reflectometry through collaboration. The annual meeting for this collaboration will be held at the end of the SXNS conference an so we would like to update the SXNS community on what ORSO has been working on since it was established in 2017 and the most recent developments. In particular we will update on some key ORSO outputs:

• A standard file format for use across X-ray and neutron reflectometry. This is an im-portant step towards interoperability across facilities. The architecture of this .ort for-mat will be presented together with the python libraries (orsopy) to read and write it.

• A scattering length density database is now available which is intended to provide both calculation tools and user maintained wisdom about appropriate usage of scat-tering length density.

• The establishment of cross-facility collaboration on standardized data analysis "best practices" and shared resources to make it easier to build and use reflectometry analysis software

• The creation of teaching resources that are free and maintained by the community.

• Advice on ensuring reproducible analysis and publication, for example we have re-cently published advice on how to report the results of Bayesian analysis as applied to neutron and X-ray reflectometry. https://doi.org/10.1107/S1600576722011426 ORSO is open to everyone, meaning its working groups are open to all. To find out more, go to our web page www.reflectometry.org or come along to the ORSO annual meeting. To-gether we can do better science.

Please select the related topic from the list below

Instrumentation and methods

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Session Classification: Poster session