European Conference on Neutron Scattering 2023



Contribution ID: 12

Type: Talk

Protein Production Sweden (PPS) and biological deuteration

Wednesday 22 March 2023 16:15 (15 minutes)

Protein Production Sweden (PPS; www.gu.se/pps) is a new national research infrastructure established in 2022 and focused on the production and purification of protein reagents for primarily Swedish researchers, both from academia and commercial entities. Well-established protein production platforms from five universities (the University of Gothenburg (host), Karolinska Institutet, KTH Royal Institute of Technology, Lund University, and Umeå University) collaborate to form the infrastructure and offer expert competence in 4 geographically distributed nodes (Gothenburg, Lund, Stockholm, Umeå). Researchers across Sweden can get access via a joint entry-point and have the possibility to get support based on their research needs throughout the whole process of protein production and purification, starting from project counselling and design to quality control, or for any single/multiple step(s) in the process.

PPS does allow protein expression in 6 different expression systems (*E. coli, P. Pastoris*, Insect cells (BEVS), Plant cells, Mammalian Cells and Cell free expression).

It also offers two Gateway modules, with one aiming at producing speciality reagents for use in X-ray crystallography. The other one aims at producing speciality reagents for and offer guidance to their use in neutron scattering experiments. (Per)deuteration of proteins is essential for neutron techniques such as neutron protein crystallography, neutron reflectometry and small angle neutron scattering. This module is thereby aiming to enable non-experts in protein production to get recombinant proteins fit for neutron scattering experiments.

Author:KNECHT, Wolfgang (Lund University)Presenter:KNECHT, Wolfgang (Lund University)Session Classification:Micro Symposium DEUNET 2

Track Classification: Micro-Symposium DEUNET