



Protein Production and Purification  
Partnership in Europe



## 1<sup>st</sup> P4EU Workshop

# Biophysical Methods to Assess Protein Quality

NKI, Amsterdam, November 6<sup>th</sup> 2019

13.00 – 14.30 **Open access mass spectrometry in recombinant protein expression**

Rod Chalk, PhD, Structural Genomics Consortium, Oxford University

- The elephant in the room - case studies in QC failure and its cost
- What can mass spec really tell you?
- Where is General Blucher? - the importance of access to data in real-time
- Making mass spectrometry accessible, affordable and fast – the SGC experience



14.30 – 14.45

14.45 – 16.15 **Use of SEC-MALS and DLS for the characterization of proteins in solution**

Pierre Poussin-Courmontagne, Integrative Structural Biology Platform, IGBMC, Illkirch, France

- Theory and applications of Multi-Angle Light Scattering and Dynamic Light Scattering
- How SEC-MALS overcomes the limitations of conventional SEC
- Advantages and limits of these techniques



16.15 – 16.30

16.30 – 18.00 **Sedimentation analysis in analytical ultracentrifuge: old methods with new horizons**

Ondřej Vaněk, Department of Biochemistry, Charles University, Prague, Czech Republic

- physical principles of the technique - modern instrumentation
- principles of sedimentation velocity and sedimentation equilibrium
- data analysis
- examples of AUC utilization in biomolecule research