

Practical Course on the Biophysical Characterisation of Macromolecular Complexes



Structural Biology of macromolecules complexes needs to always be complemented by biophysical studies to understand the details of the molecular interactions that determine function. In this practical “hands-on” course we will examine in detail:

- **Surface Plasmon Resonance (SPR)**

Determination of kinetic parameters of interaction (k_{on} , k_{off}) and affinity (K_D) from time-resolution experiments; screening of ligand arrays for protein binding.

- **Isothermal Titration Calorimetry (ITC)**

Determination of thermodynamic parameters of interactions (ΔG , ΔH) and (K_D) from ligand titration experiments.

- **Multi-Angle Laser Light Scattering (MALLS)**

Determination of molecular weight of complexes concurrent with size exclusion chromatography.

ORGANIZERS

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TUTORS

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PROGRAM

WEDNESDAY 21

Arrival (around noon), first practical session, participant presentations.

THURSDAY 22

Second practical session and analysis of results, theory lectures, course dinner.

FRIDAY 23

Third practical sessions and analysis of results, final analysis session with group discussion, general discussion and departure (after 18:00).

APPLICATIONS

Should be sent by a simple text (no attachments) email to a.fish@nki.nl

The course is open to all applicants but please clearly indicate your affiliation to a TEACH-SG, SPINE-2 or RUBICON lab (or to the ‘connected’ EU project 3D-Repertoire and BIOXHIT) if applicable and your motivation for joining the course. All participants are expected to cover their travel and local expenses from own sources and no financial support will be provided.

Deadline for applications is 4th April.