WP 20 « ADVANCED NEUTRON TOOLS FOR SOFT AND BIO MATERIALS »

4 tasks:

- Platform for model biological membranes Task 1
- Specific sample environments for soft materials
 - Kinetic & Dynamics experiments Task 2
 - Humidity chamber with sample changer Task 3
 - Cryogen free cryostat with sample changer Task 4

Milestones, Deliverables and reports 1st report in July 2013

References

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Task 1

D20.1) Optimization of model bilayer systems including natural membrane lipids: [month 36]

D20.2) Set up a lipid extraction facility to extract and fractionate membranes from real cells: [month 18] done

D20.3) Protocols for reliable reconstitution of membrane proteins: [month 48] D20.4) Characterization of biomembranes: D lipids extraction. Characterization of biomembranes with scattering and complementary techniques. [month 48]

Task 2

D20.5) Designs of new stop flow observation heads for SANS: [month 18]
D20.6) Conception and design of MA-LS setup: [month 18] done
D20.7) Design an electric field cell for SANS: [month 18] done
D20.8) Conception and design of a pressure cell for NSE: [month 36]
D20.9) Tests of MA-LS prototype setup: [month 24]

D20.10) Tests of new stop flow observation heads for SANS.: [month 30]
D20.11) Prototype of pressure cell for NSE. Tests: [month 48]
D20.11) Prototype of pressure cell for NSE. Tests: [month 48]
D20.12) Prototype of EF for SANS. Tests. Design of EF for TOF.: [month 48]

Task 3

D20.13) Specifications of the next-generation humidity chambers. Drawings and procurement of components for humidity chambers [month 36] D20.14) Assembly of the humidity chamber. Tests: [month 48]

Task 4

D20.15) Design and performance estimations of cryostats with sample changer [month 36]

D20.16) Drawings of the cryostat: [month 48]

Next meeting

Saclay hosted by LLB In May 2015