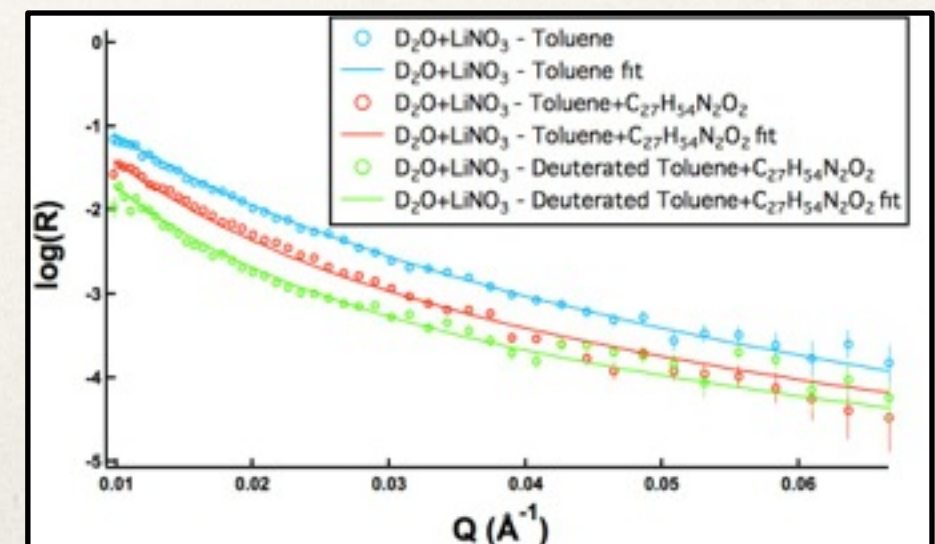
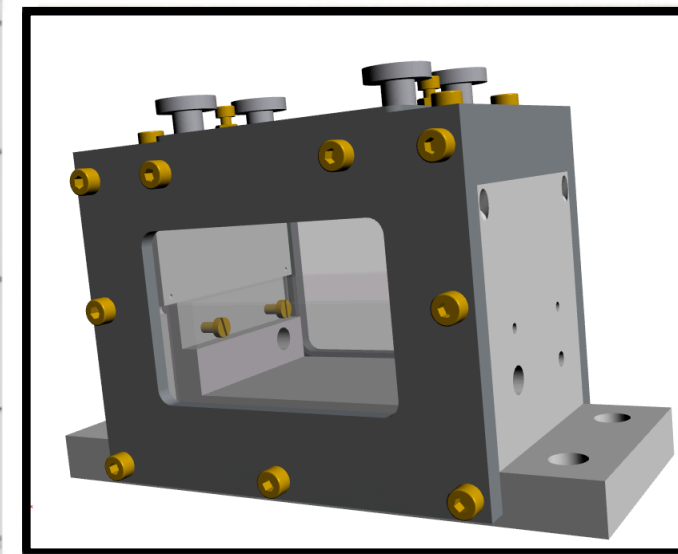
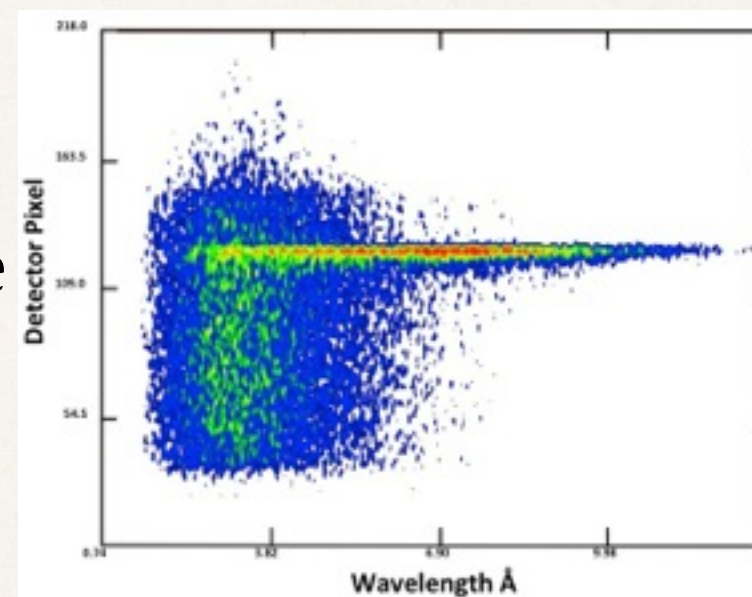
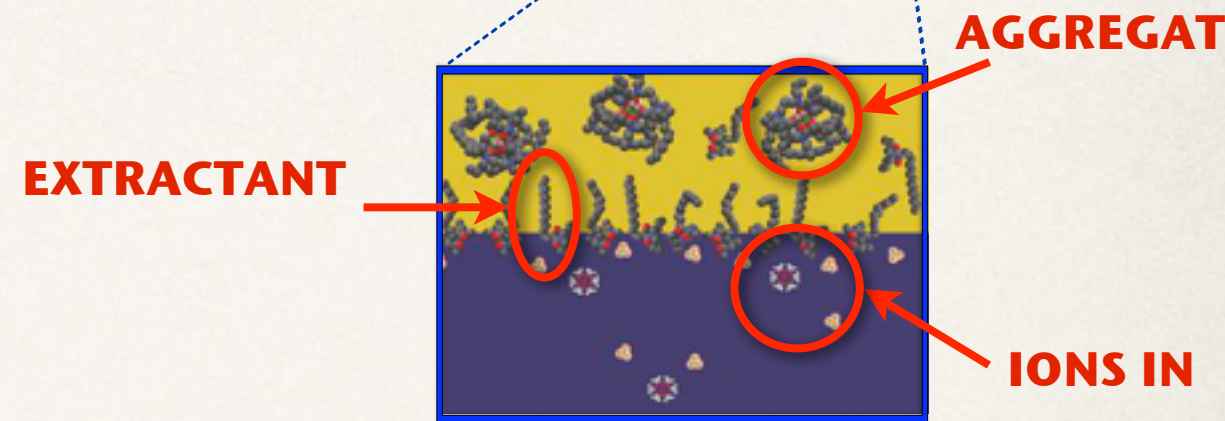
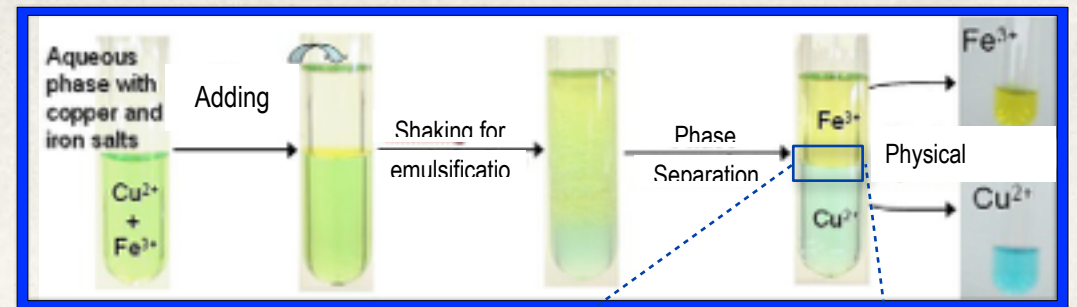


# Liquid/liquid interfaces

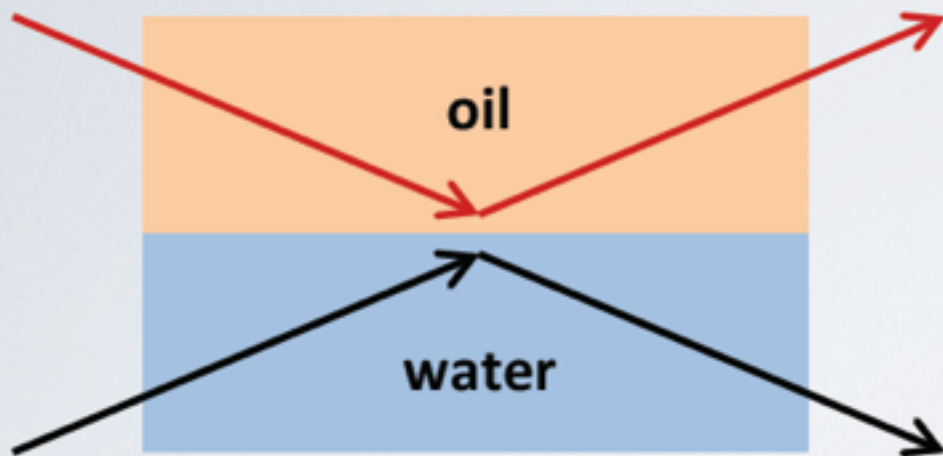


- ❖ High flux needed to cross bulk phases
- ❖ Minimum surface determined by meniscus - path length cannot be “dramatically” reduced
- ❖ Beam incoming from both sides of interfaces allows to choose the most suitable phase to cross depending on sample availability and constraints

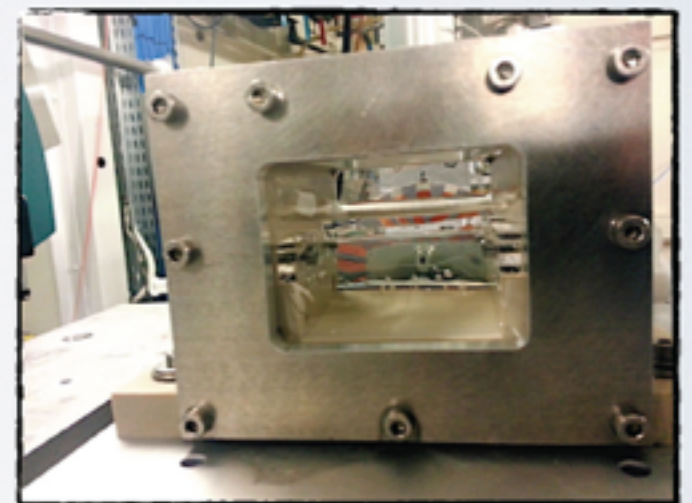
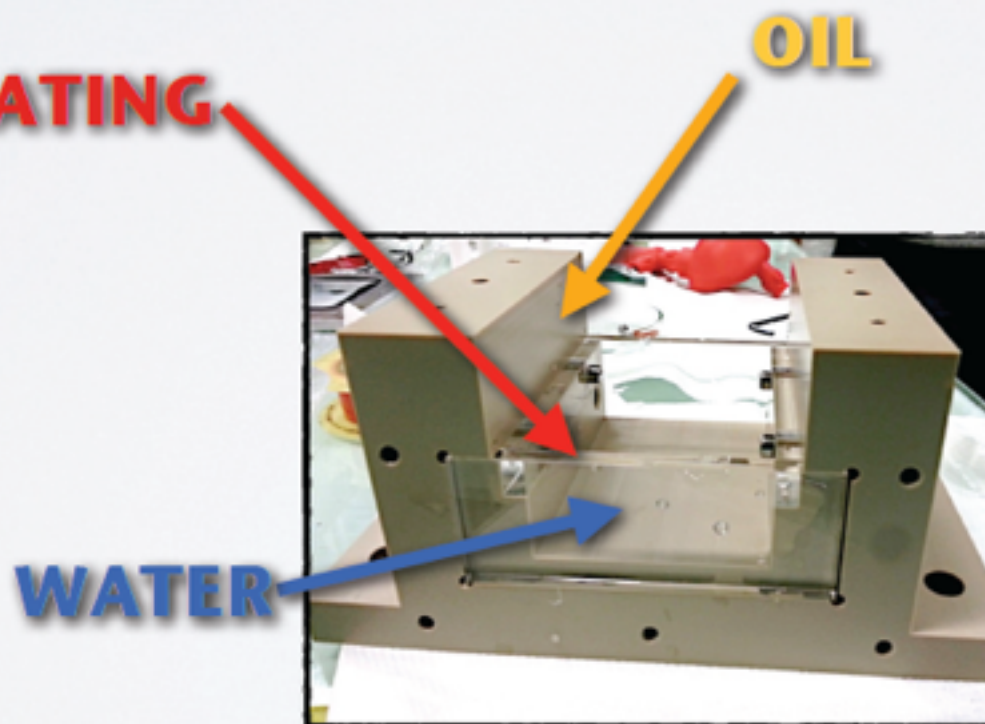
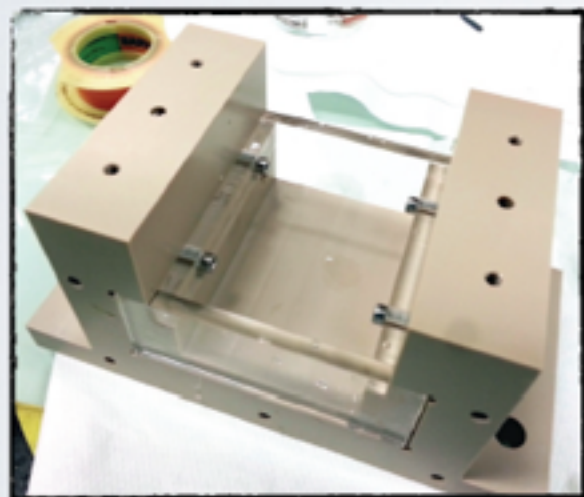
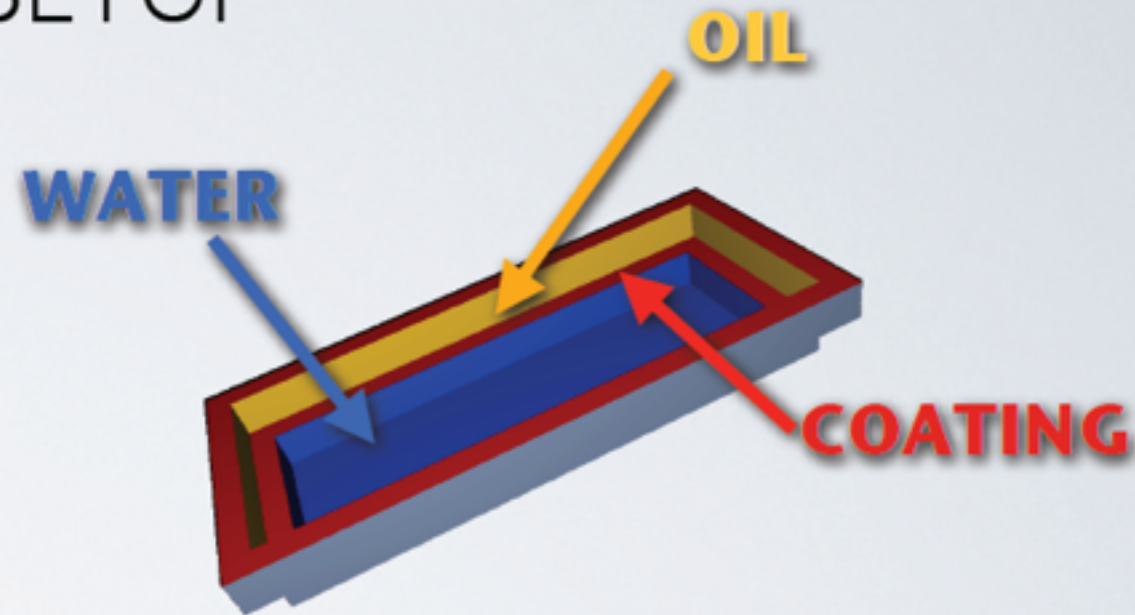


# Liquid/liquid interface neutron and x-ray cell

## EXPERIMENTAL SETUP

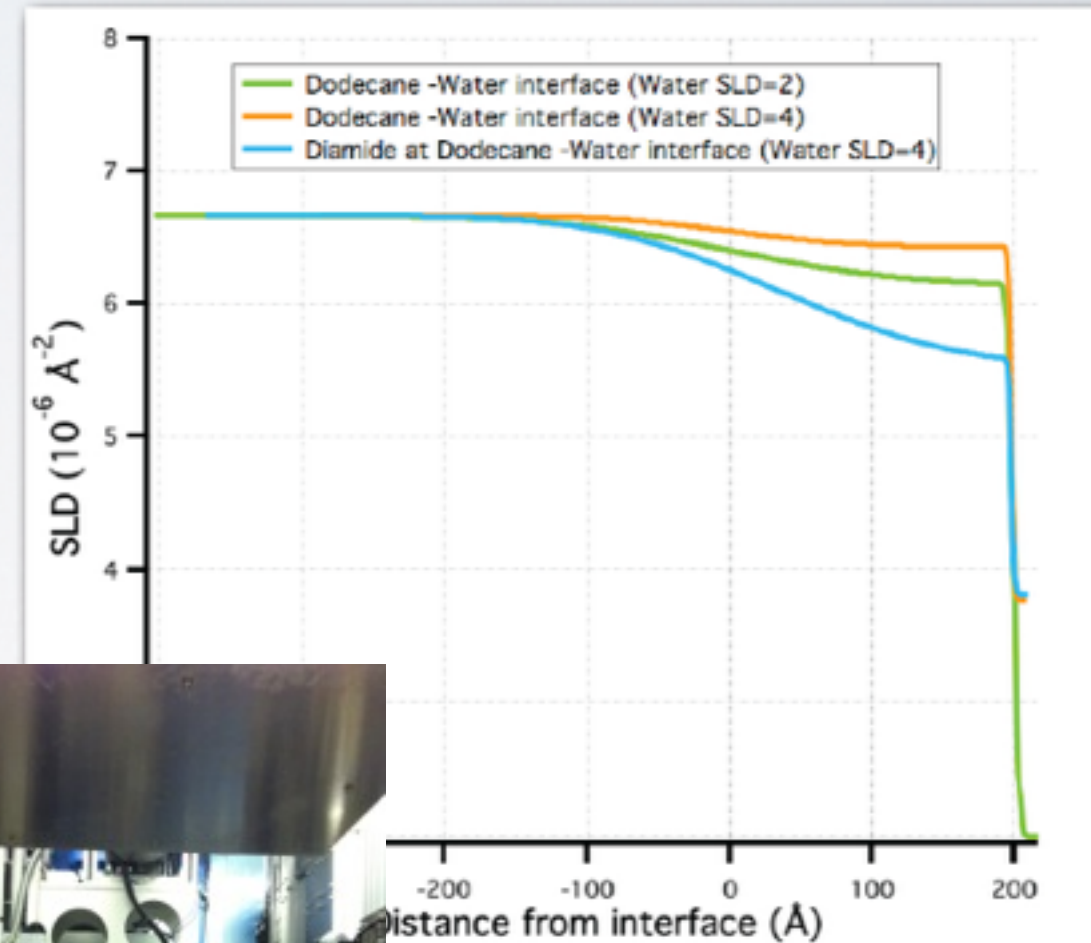
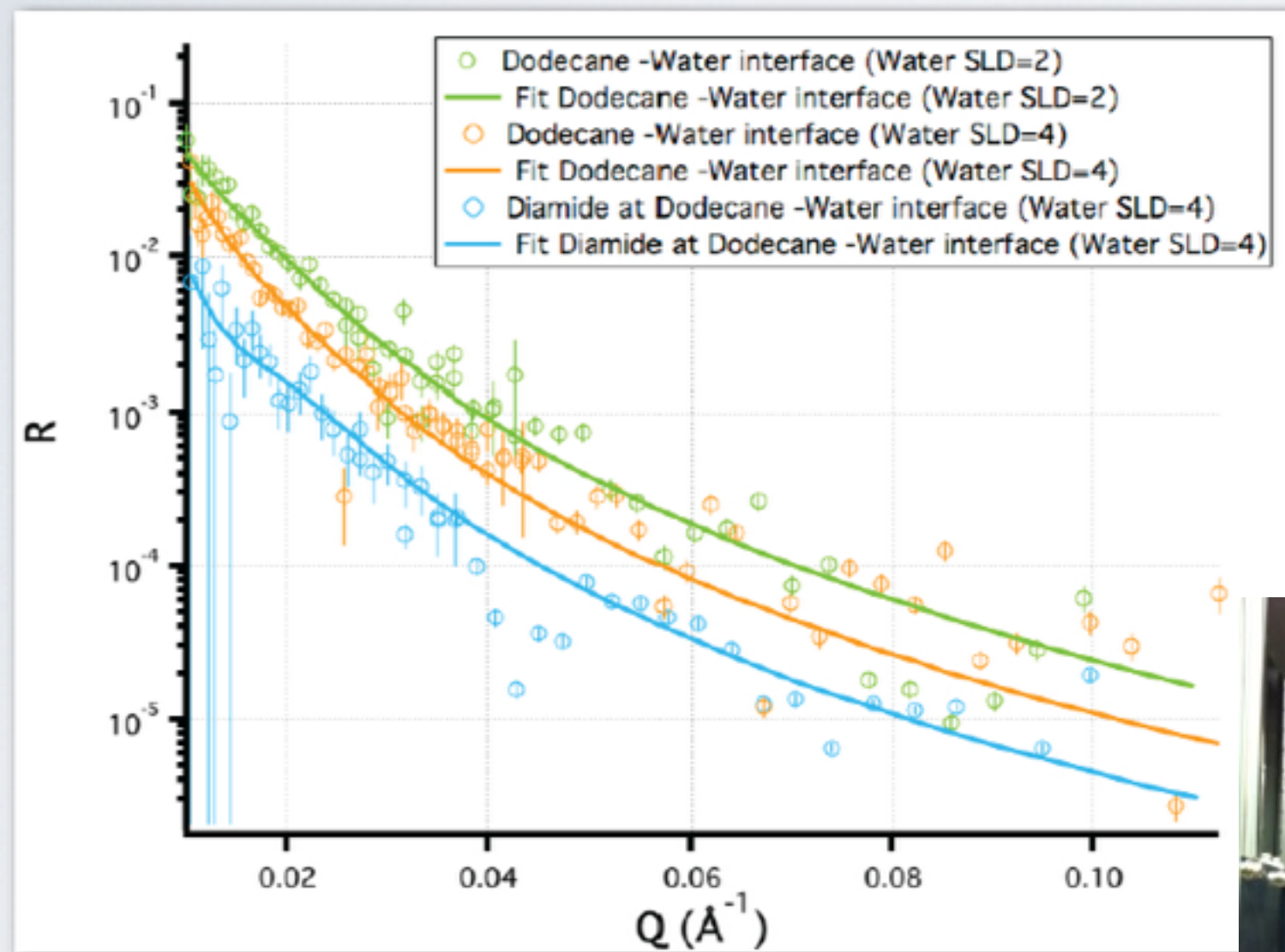


Curvature





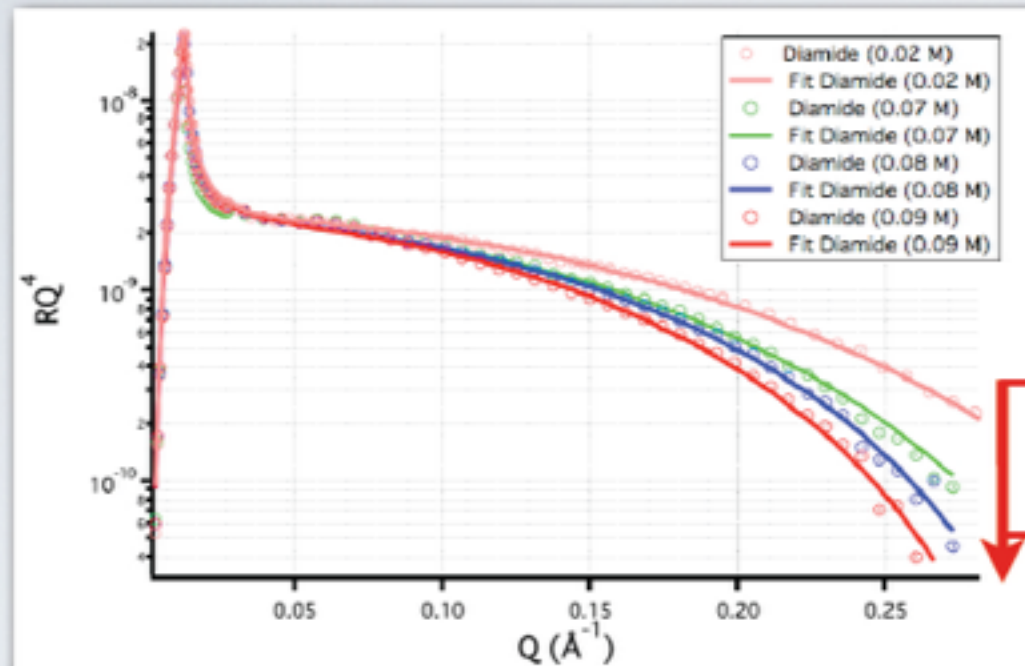
# Neutron reflectivity measurements: FIGARO@ILL, INTER@ISIS, SOFIA@J-Parc



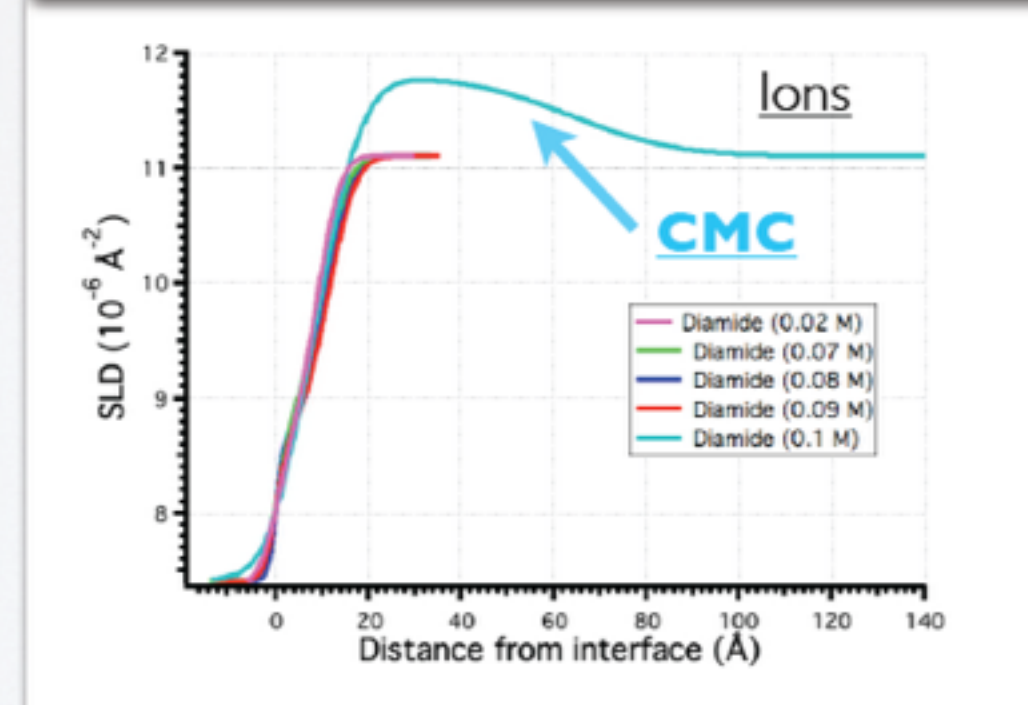
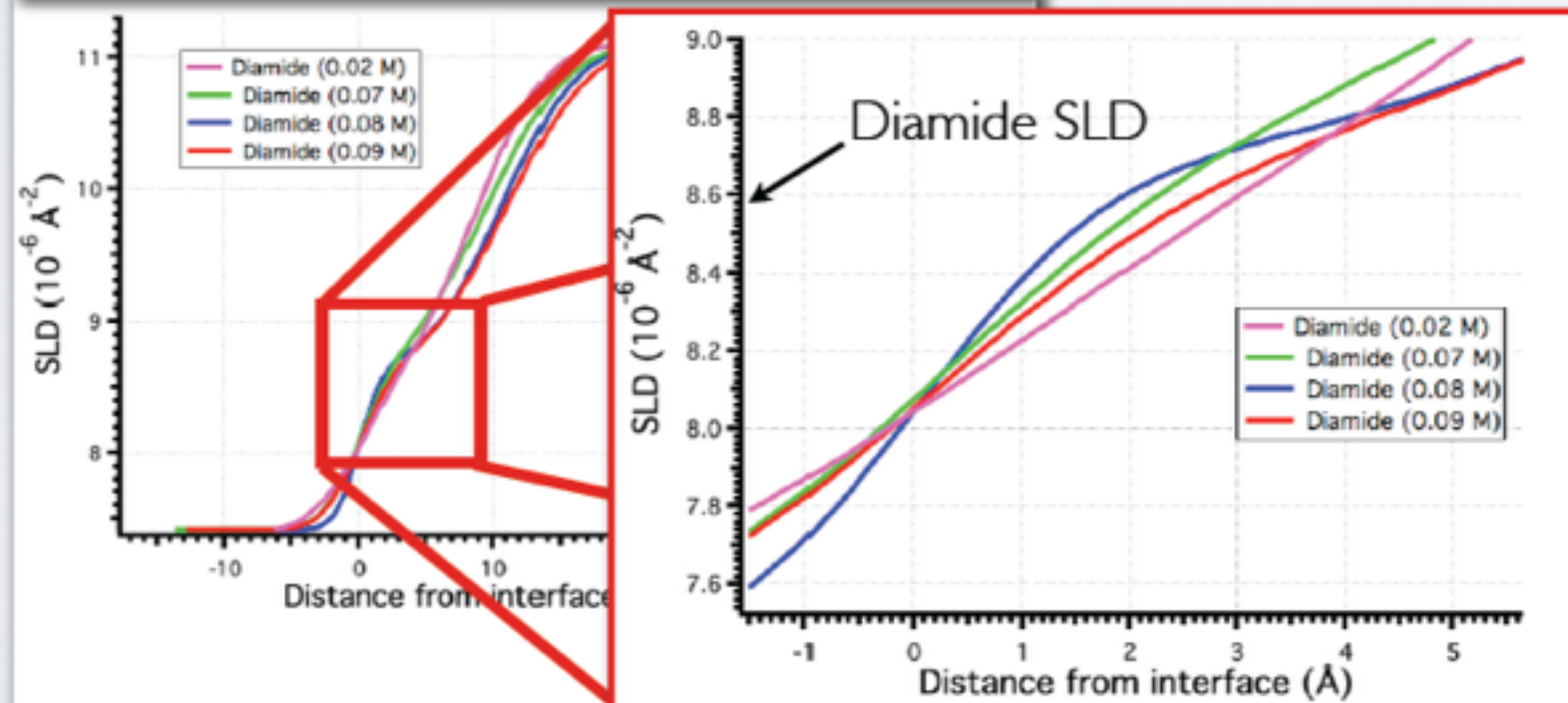
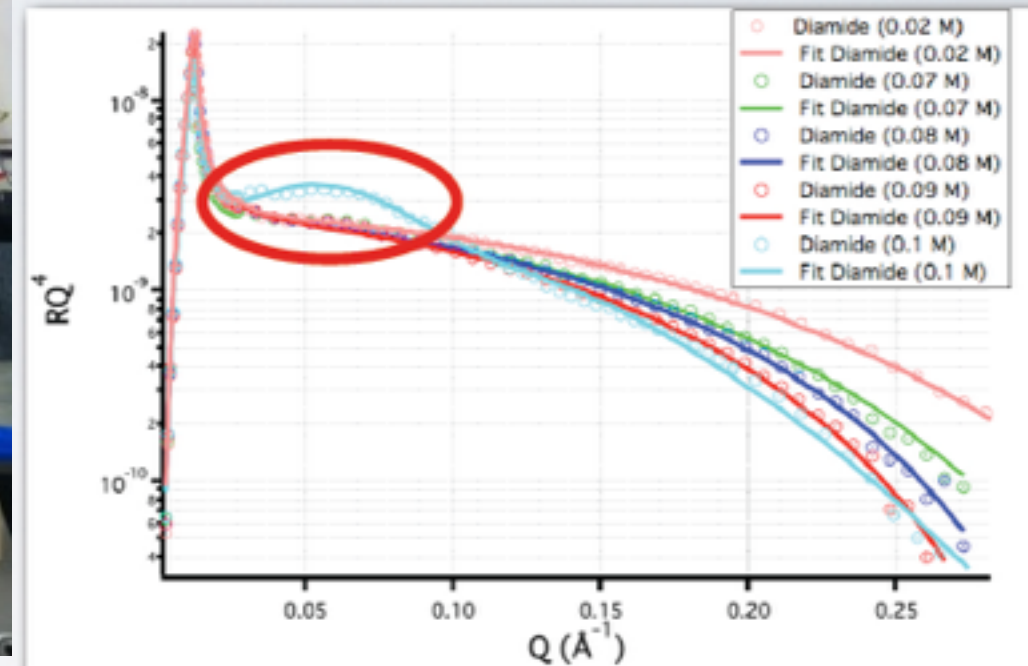


# Synchrotron radiation measurements at ID10B ESRF

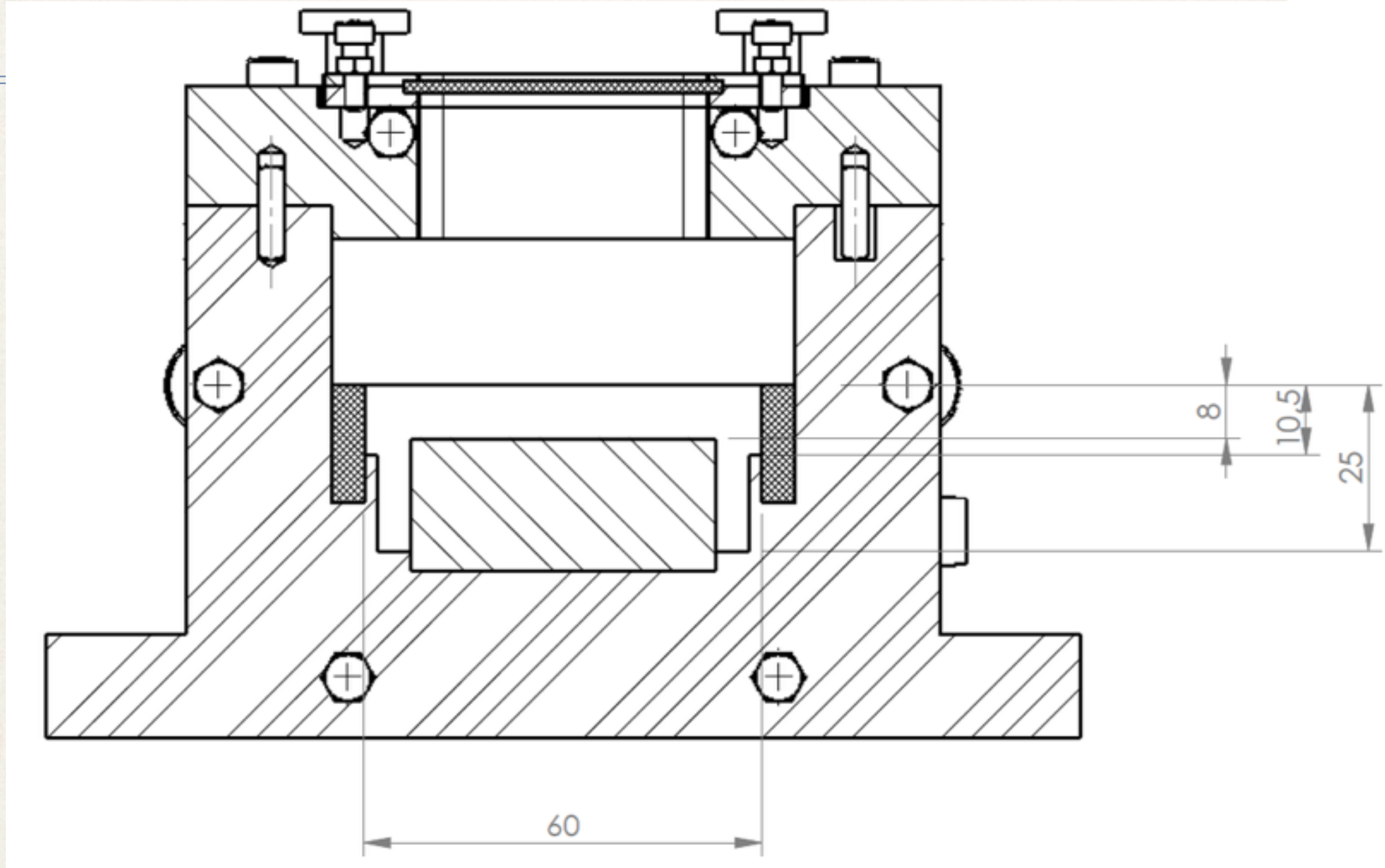
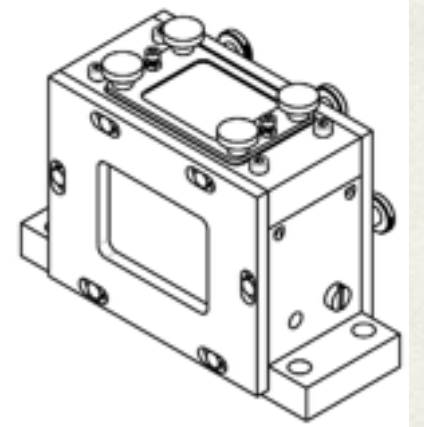
Extractant (Diamide) Concentrations between **0.02 M and 0.09 M**



Extractant (Diamide) Concentrations at **CMC**



# Latest drawings

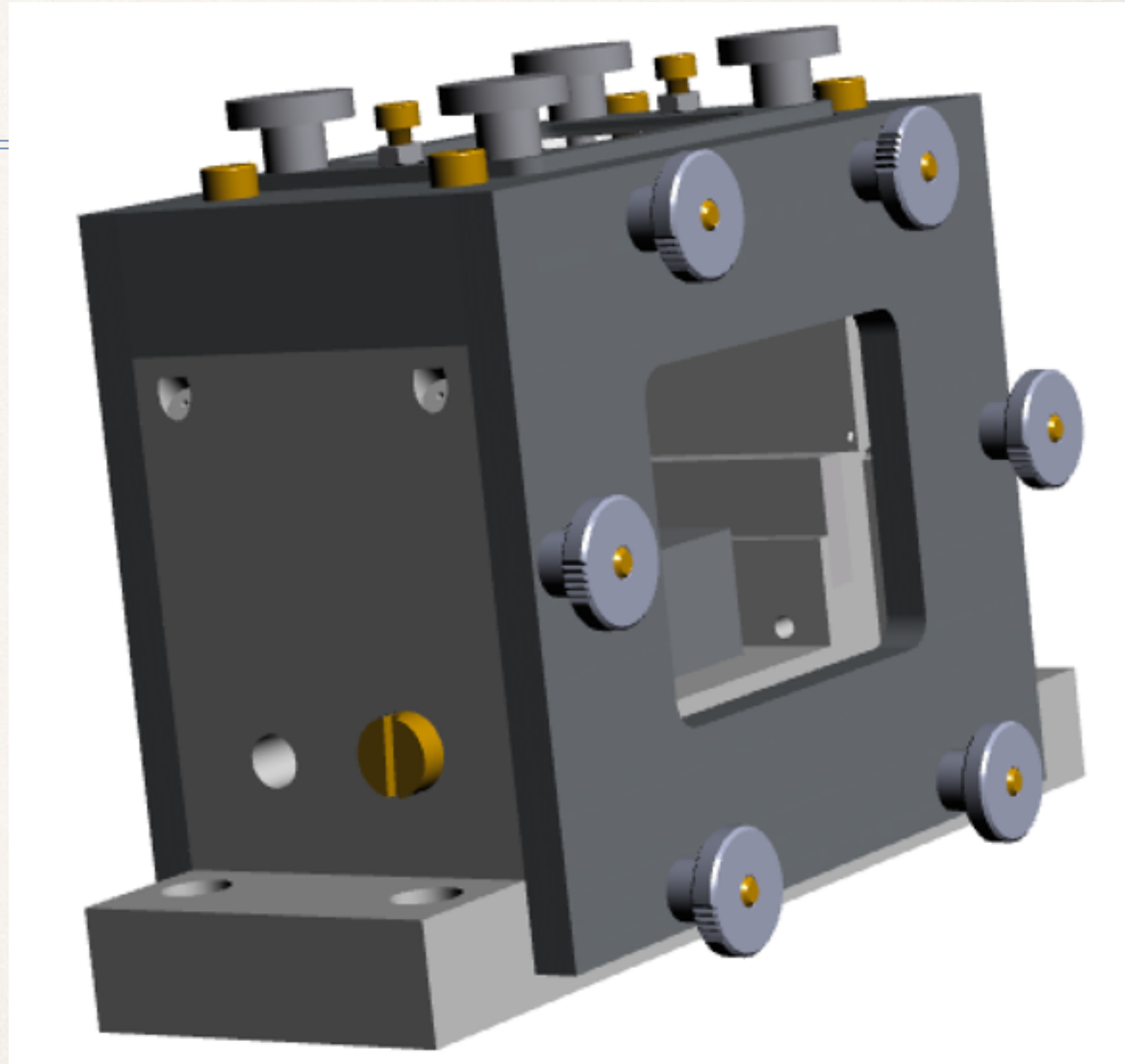


❖ SANE and drawing office @ ILL



# Latest drawings

- ❖ Smaller neutron path through liquid (35mm); reduced liquid volume; optimised windows tightening
- ❖ To be tested in July on FIGARO (hopefully....)



- ❖ SANE and drawing office @ ILL

# Plans for the future

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- ❖ Full implementation of preparation and characterisation labs
- ❖ Start of studentship to continue with extraction, separation and analysis of deuterated natural lipids
- ❖ Optimisation of liquid / liquid cell for use with membrane systems

