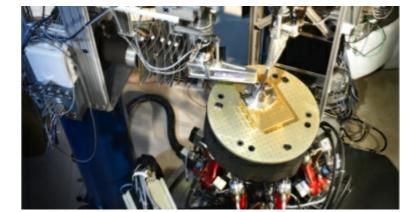


Glycolipids are essential constituents of membrane systems that naturally occur as densely packed membrane stacks, like in chloroplasts where photosynthesis takes place. A recent study conducted at the ILL combined neutron diffraction experiments and atomistic molecular dynamics simulations to comparatively investigate the interaction mechanisms of glycolipid and phospholipid membranes. More information can be found here.



Press-hardened boron steel is used across a variety of applications, including the automotive industry, as it provides high strength and weight-saving potential. A recent collaboration between the ILL, WMG at the University of Warwick, Tata Steel, and the Engineering and Physical Science Research Council (EPSRC) conducted a study to investigate the correlation between boron steel hardness and residual stress. More information can be found here.

## NEUTRONS FOR EUROPE



The ESS and ILL are fully committed to combining their forces in the interests of science, the neutron user community, and their stakeholders. They aim to reinforce Europe's leading position in neutron research and technology by optimising the use of the resources available for neutron research. This joint endeavour is being sealed by the signature of a memorandum of understanding on research and development activities on 20 June 2017.

The ESS and ILL presented their activities on a jointly-operated stand at the International Conference on Neutron Scattering in Daejeon, Korea, on 9-13 July.

Read more.

USER PROGRAMME



Call for proposals

The next deadline for standard proposal <u>and</u> Long Term Proposal submission is Thursday, **14 September 2017**, **midnight (EU time).** Proposals must be submitted via the Electronic Proposal Submission (EPS) system on our User Club.

Accepted proposals will be scheduled in 2018. Detailed information can be found here.

Please pay particular attention to the following topics: - change in the two/third rule poilcy - industry sponsored academic research

For quicker access to beam time you can apply for EASY time or DDT.



## IN6 - SHARP

In the framework of a collaboration between ILL and the LLB, the cold neutron time-of-flight spectrometer IN6 will become SHARP from September 2017 on.

SHARP will be a CRG-A instrument at which 50% of the available beam time will remain dedicated to the ILL user programme. The other 50% of the beam time will be exclusively accessible through the call to the user programme of the "fédération française de neutronique". In the year 2020, some of SHARP's key components will be upgraded. A new 3He-based position sensitive detector with an optimised vacuum flight box will offer an enlarged scattering angle of up to 135 degs and an overall enhanced detector coverage. With a higher 3He pressure a performance gain by a factor of 6 is expected in comparison to IN6. A foreseen exploitation of unique incident wavelength of 5.1A with the enlarged detector unit will access a wave vector coverage similar to the present one with the shortest incident wavelength available, however, with the better resolution and signal to noise performance.

