



VABILO NA PREGLOV KOLOKVIJ / INVITATION TO THE PREGL COLLOQUIUM

Prof. dr. Jeremy H. Lakey

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Četrtek / Thursday, 13. 09. 2012, ob / at 13:00

**Velika predavalnica Kemijskega inštituta / Lecture Hall at the
National Institute of Chemistry; Hajdrihova 19, Ljubljana**

Title Studying complex biomolecular structures with neutrons

Structural biology owed its early success to the development of high resolution X-ray crystallography of well defined protein structures. Later, complexes and co crystals were successfully resolved such that even ribosomes and viruses are now known to high resolution. For many complexes the combined use of electron microscopy or small angle scattering with x-ray models has also proven successful. Scattering methods such as small angle scattering and reflectivity are particularly useful for dynamic and disordered structures and in our research this involves membrane proteins. In recent years we have increasingly used neutron scattering since this method allows us to separately resolve lipids and proteins through the use of selective deuteration.

In my lecture I shall highlight our progress in developing neutron methods for membrane protein research and suggest that with the new generation of powerful neutron sources such approaches should become more common throughout biomolecular research.

Vljudno vabljeni! / Kindly invited!