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# Conférence

au Département de chimie  
présentée conjointement avec  
PROTEO

CONFÉRENCIER

DATE

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Karlsruhe Institute of Technology  
Universität de Karlsruhe  
Allemagne

**Mercredi, 23 septembre 2015**

TITRE

## **Peptide-lipid interactions studied by solid-state NMR**

RÉSUMÉ

The orientation of peptides in lipid bilayers can be determined by solid-state NMR (SSNMR) methods. Studies of several peptides in many different lipid systems have given a better understanding of the factors influencing the peptide orientation. In this talk the focus will be on the effects of lipid properties on the orientation of hydrophobic and amphipathic  $\alpha$ -helical peptides. Two important effects will be described and discussed: (1) Hydrophobic matching, which can explain the tilt of transmembrane peptides (both hydrophobic and amphipathic) in membranes with different bilayer hydrophobic thickness; and (2) Lipid spontaneous curvature, which is related to the shape of the lipids, where a positive spontaneous curvature favours insertion of peptides and proteins into the bilayer.

La conférence aura lieu à **11h au VCH-3850 du Pav. A.-Vachon**  
*Cordiale invitation à toutes et à tous !*

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