

Self-assembly of functionalized organic molecules on metal substrates : intermolecular vs. molecule-substrate interactions

Kathrin MÜLLER

(Zernike Institute for Advanced Materials, University of Groningen, the Netherlands)

Lundi 23 mars 2015 – 14h

Amphithéâtre SOLEIL

Molecular self-assembly is one of the most promising routes to realize highly ordered molecular structures on surfaces. These structures are interesting from a fundamental point of view as well as for possible applications in organic electronic devices like organic field-effect transistor or photovoltaic. In this talk, I will discuss different examples of the self-assembly of functionalized molecular building blocks on metal substrates. [1] We use scanning tunnelling microscopy and spectroscopy, photoelectron spectroscopy, low-energy electron diffraction and density functional theory calculations to investigate the electronic and structural properties of the self-assembled patterns. [2]

[1] a) S. Gottardi, K. Müller, J. C. Moreno-López, H. Yildirim, U. Meinhardt, M. Kivala, A. Kara, M. Stöhr, Adv. Mater. Interfaces 2014, **1**, 1300025; b) F. Studener, K. Müller, N. Marets, V. Bulach, M. W. Hosseini, M. Stöhr, J. Phys. Chem. accepted for publication
[2] a) K. Müller, et al., Phys. Rev. B **79**, 245421 (2009); b) A. Scheybal, K. Müller, et al., Phys. Rev. B **79**, 115406 (2009); c) K. Müller, et al., J. Phys. Chem. C **116**, 23465 (2012); d) M. Sauvage-Simkin, A. Coati, Y. Garreau, A. Vlad, K. Müller, et al., J. Phys. Chem. C, doi: 10.1021/jp505403z



Ce séminaire sera suivi d'une pause café

Formalités d'entrée : accès libre dans l'amphi du pavillon d'Accueil.

Si la manifestation a lieu dans le Grand Amphi SOLEIL du Bâtiment Central merci de vous munir d'une pièce d'identité
(à échanger à l'accueil contre un badge d'accès)

SYNCHROTRON SOLEIL

L'Orme des merisiers - Saint-Aubin - BP48 - 91192 GIF S/YVETTE cedex

www.synchrotron-soleil.fr/Soleil/ToutesActualites

CONTACT : sandrine.vasseur@synchrotron-soleil.fr

SEMINAIRE