

DIRECTION DES SCIENCES DE LA MATIERE,
INSTITUT RAYONNEMENT MATIÈRE DE SACLAY

SERVICE DE PHYSIQUE ET DE CHIMIE DES SURFACES ET DES INTERFACES

SEMINAIRE *

Vendredi 8 octobre 2010 à 11h00

Bâtiment 466, salle 111 - CEA Saclay, 91191, Gif sur Yvette

Investigations and Applications of Spontaneous: Grafting of Aryldiazonium Salts

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Invitée par Julienne Charlier

Electrografting of thin organic films to conducting substrates by reduction of aryldiazonium salts is a widely studied reaction. More recently, spontaneous or open-circuit potential (OCP) grafting at carbon and industrial metals has received some focused attention. The mechanism of the spontaneous grafting of aryldiazonium cations to surfaces is not yet well-understood, particularly for materials such as carbon and gold. This presentation will describe our recent studies of the OCP reactions at gold and carbon substrates, using electrochemistry, atomic force microscopy and OCP measurements. Microcontact printing of surface layers, relying on the spontaneous reaction of the diazonium salt 'ink' with the substrate will also be discussed. Microcontact printing is a simple, fast and relatively low-tech approach to surface patterning. We have developed methods suitable for preparing single component patterned surfaces and also bi-functional two component patterns.

*** SERA PRECEDE D'UNE PAUSE-CAFE A PARTIR DE 10H30**

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