

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

SERVICE DE PHYSIQUE ET DE CHIMIE DES SURFACES ET DES INTERFACES

SEMINAIRE *

Vendredi 29 janvier 2010 à 14h30

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

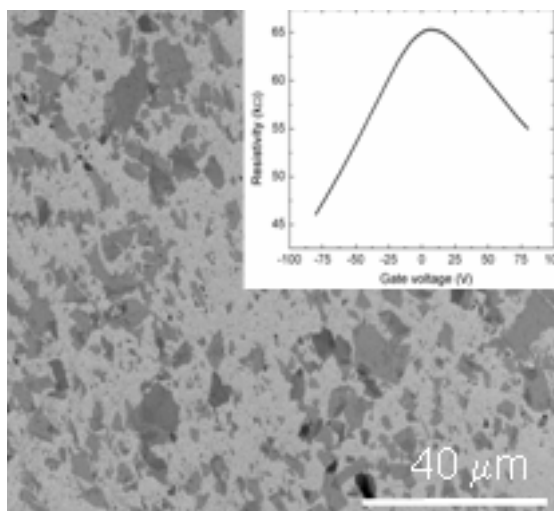
Single graphene sheets on various substrates

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Professeure invitée à l'Institut Universitaire de France (IUF)*

Invitée par Patrick Soukiassian

Graphene is an intriguing material with properties that are distinct from other graphitic systems. Even though this material presents outstanding electric and thermal conductivities, systematic studies and developments of potential applications have been restricted so far by the lack of a reliable and straightforward method to prepare graphene on different substrates. I shall discuss the different ways to prepare graphene on various substrates and give an overview on interesting properties concerning the electronic properties that have been discovered with these methods. Then I shall present a new approach which allows the deposition of graphene on a variety of substrates with a coverage that can be varied as desired from isolated sheets to a densely packed 2D arrangement. In contrast to the currently most common preparation protocols which rely on micromechanical cleavage, the yield of successful deposition of our approach is 100%, qualifying it as one of today's most trustworthy and promising methods. The characterization of the material by surface analysis tools and transport measurements will also be presented.



*** SERA PRECEDE D'UNE PAUSE-CAFE A PARTIR DE 14H00**

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