

## RESULTATS DE L'APPEL A PROJETS 2010

### Soutien aux Chaires d'Excellence

Principale Thématique Concernée	Type d'action	Titre et Description	Partenaires			Soutien accordé
			1	2	3	k€
Nanoélectronique Quantique	Chaire d'Excellence * Temps Plein	<p><b>JoQOLaT</b></p> <p>The new expertise in microwave quantum optics and dynamical Coulomb blockade brought by <b>Max HOFHEINZ</b> is at the core of this project that will include the development of various specific devices and circuits - based on his experience with superconducting quantum circuits (phase qubits and microwave resonators).</p>	<a href="#">INAC/SPSMS</a>	<a href="#">Institut Néel</a>	<a href="#">LPMMC</a>	500
Nanomatériaux	Chaire d'Excellence * Temps Partiel	<p><b>NISHI</b></p> <p><b>Yoshio NISHI</b> and his team at Stanford have a strong expertise in the field of MOS devices and technology and have made recent breakthroughs in the technology of Ge channel NMOS devices. The know-how of Prof. Nishi regarding Ge material, Metallic source and drains MOSFET will strongly benefit to the local community and will allow making significant progress in terms of technological and scientific aspects.</p>	<a href="#">CEA Léti</a>	<a href="#">IMEP</a>		330
Nanomodélisation	Chaire d'Excellence * Temps Partiel	<p><b>CORTRANO</b></p> <p><b>Harold BARANGER</b> has a track record of making connections between theorists working with computational techniques and those making analytic progress. He will bring specific expertise in several computational and theoretical areas: path-integral quantum Monte Carlo simulation, molecular electronics using DFT combined with one-body Green function and in particular one of the first applications to spintronics.</p>	<a href="#">INAC/SPSMS</a>	<a href="#">LPMMC</a>		300
Nanomodélisation	Chaire d'Excellence * Temps Partiel	<p><b>NSCGP</b></p> <p>This project is to benefit from the expertise of Prof. <b>David GRAVES</b> in the field of Molecular Dynamic Simulations applied to plasma-surface interactions. The goal is to determine under which plasma conditions graphene layers can be etched without damage. If it succeeds it will provide a technology to get the high quality samples that are required for fundamental studies of graphene properties as well as the possibility to pattern large area wafers for industrial applications.</p>	<a href="#">LTMI</a>	<a href="#">Institut Néel</a>	<a href="#">CEA Léti</a>	300
Nanocaractérisation	Chaire d'Excellence * Temps Partiel	<p><b>3D-CDI</b></p> <p>At University of Illinois, Prof. <b>Jian Min ZUO</b> has dedicated the past 8 years on the development of electron Coherent Diffractive Imaging (CDI) for structure characterization of nanoparticles and carbon nanotubes. This project on semiconductor, oxide nanowires, and organic nanostructures provides a further opportunity to broaden the application of electron CDI and to improve this technique with comparison with synchrotron.</p>	<a href="#">INAC/SP2M</a>	<a href="#">CERMAV</a>	<a href="#">CEA Léti</a>	300
<b>TOTAL (k€)</b>						<b>1730</b>