

2nd SANDiE Workshop on

# Characterization and modelling of self-assembled semiconductor nanostructures

12 - 13 December 2007

Paris



CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE



UNIVERSITÉ PARIS-SUD XI

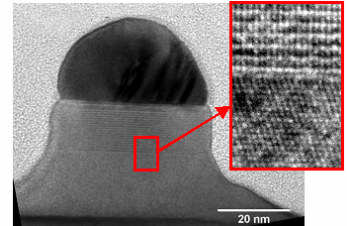
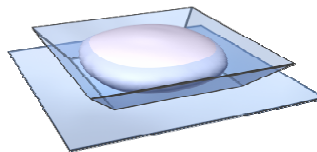
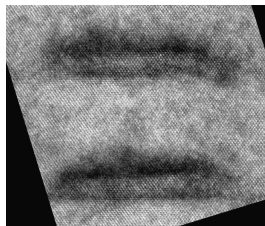


Carré des Sciences, Paris

This workshop is organized in the framework of the SANDiE European Network of excellence. It follows the successful meeting of the same title held in TU Eindhoven in November 2005. It will take place in the historic building of Carré des Sciences at French Ministry of Higher Education and Research, at the very core of old Paris Latin Quarter, 25 rue de la Montagne Sainte-Geneviève in the 5th arrondissement.

## SanCharMod 2007

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### Invited talks:

**Christian Colliex** - University Paris-Sud

STEM/EELS atomic level characterization of individual nanostructures

**Marc-André Dupertuis** - Ecole Polytechnique Fédérale de Lausanne

The interest of a maximal symmetrization and reduction of fields in semiconductor nanostructures: application to electrons, holes, excitons and polarons

**Paul Koenraad** - Eindhoven University of Technology

STM analysis of magnetic impurities and magnetically doped nanostructures

**Peter Kratzer** - University of Duisburg-Essen

Atomistic modelling of the growth of InAs quantum dots on GaAs

**Francois Peeters** - University of Antwerp

Electronic structure calculation of self-assembled quantum dots and molecules

**Julian Stangl** - University Linz

x-ray analysis of semiconductor nanostructures: beyond the ensemble average



### Workshop Scope

The meeting will bring together experts in the fields of characterization and modelling of self-assembled semiconductor nanostructures, such as quantum dots, quantum wires, nanorods and quantum rings. It will also be a unique opportunity for PhD-students and postdocs to get an excellent introduction to the exciting fields of semiconductor nanostructure analysis and modelling and to present their own results.

The meeting intends to review and confront different experimental analysis techniques and modelling efforts of self-assembled nanostructures. At the meeting the latest developments in the **characterization** of self-assembled nanostructures by techniques such as Transmission Electron Microscopy and nanoanalysis, Scanning Tunnelling and Atomic Force Microscopy and other near-field techniques and X-ray diffraction will be addressed. A second focus of the meeting will be the recent advances in the **theory and modelling** of both the **physical properties** of self-assembled nanostructures and their **modes of formation**.

Organized by:



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Abstract submission and registration :

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