

Participation of the group in programmes and networks

Research enlarged groups (GDR/CNRS)

Our team has participated until 2001 to 2 different french CNRS enlarged research groups untitled GDR « Formes » concerning soft materials and GDR "Agréats" about metal aggregates respectively coordinated by Ilias Iliopoulos and C. Henry.

Nanomats Network

Nanomats is a french network coordinated by M. Drillon, concerning activities in the domain of nanomaterials.

DFG/CNRS Programmes

A program has been conducted in collaboration with the team of Pr H.H. Limbach from Berlin university (2002/2004), on the thematic « Metal nanoparticles as novel organometallic objects: synthesis and NMR studies of the structure, binding and reactivity of hydrogen and organic molecules in their coordination sphere ». This collaboration does not receive any more money now, but stays very active.

PAI Programmes

- A. Laguna-Castrillo, University of Zaragoza, « Synthesis of gold nanoparticles, characterization and optical properties » (UV-visible, photoluminescence), PAI PICASSO (2000/2001), coordinator: K. Philippot
- M. Gomez et G. Muller, University of Barcelona, « Synthesis, characterization and application in enantioselective catalysis of chiral ligand stabilized nanoparticles ». PAI PICASSO (2002/2003), coordinator: B. Chaudret.
- C. Claver et S. Castillon, University of Tarragona, « Chiral ligand stabilized metal nanoparticles and their application in enantioselective catalysis », PAI PICASSO (2004/2005), coordinator: K. Philippot.
- R. Fischer, Universität Bochum, « Aluminium derivatives stabilized nanoparticles », PAI PROCOPE (2005/2006), coordinator : C. Amiens.
- S. Kelly, University of Hull, « Mesoporous materials containing metal and metal oxide nanoparticles », PAI Alliance (2006-2008), coordinator: K. Philippot.

PICS Programme

PICS CNRS/Espagne (2004/2005): the thematic of this project is centered on « Nanoparticles in catalysis » (NANOMETCAT). 4 french and 4 spanish groups are implicated: M. Gomez et G. Muller from the University of Barcelona, C. Claver and S. Castillon from the University of Tarragona, M. Pericas from the Catalan Institute of Chemistry of Tarragona, M. Morenos-manas and R. Pleixats from the Autonom University of Barcelona, R. Corriu et Y. Guari from the University of Montpellier, A. Roucoux from the University of Rennes and M. Pfeffer from the University of Strasbourg. Coordinators: B. Chaudret et M. Gomez.

CTP Région Midi-Pyrénées/Catalogne Programme

CTP Midi-Pyrénées/Catalogne (2004-2006) : the thematic of this inter regional project is untitled « Nanomaterials : from elaboration to application in catalysis » 2 french and 2 catalan groups are implicated: R. Corriu et Y. Guari from the University of Montpellier, M. Gomez and G. Muller from the University of Barcelona, C. Claver and S. Castillon from the University of Tarragona, M. Pericas from the Catalan Institute of Chemistry of Tarragona, M. Morenos-manas and R. Pleixats from the Autonom University of Barcelona. Coordinators : B. Chaudret and M. Gomez.

C-NANO Région Grand Sud-Ouest Programme

The objective of this program is to gather competences from laboratories working in the nanomaterials domain in the South-West region of France (J.-J. Bonnet and B. Chaudret).

ANR Programmes

- Projet PNANO NANOCONFICAT (1/12/2005-30/11/2008), coordinator : P. Serp, ENSIACET Toulouse) : in this project, 4 groups from Toulouse are implicated : the *Laboratoire de Catalyse, Chimie fine et Polymères* (LCCFP-ENSIACET, P. Serp), the *Laboratoire d'Hétérochimie Fondamentale et Appliquée* (LHFA-UPS, M. Gomez), the *Centre d'élaboration des Matériaux et d'Etude Structurale* (CEMES, Y. Kihn) and the *Laboratoire de Chimie de Coordination* (LCC-CNRS, K. Philippot et B. Chaudret). The objective is the controlled synthesis of metal nanoparticles inside carbon nanotubes for catalytic applications.
- Projet PNANO CHESS (1/12/2005-30/11/2008, coordinator : D. Uzio, IFP Solaize) : in this project, 4 french groups from Toulouse are implicated : the *Laboratoire de Catalyse et Séparation* de Solaize (IFP, D. Uzio), the *Centre de Recherche en Matière Condensée et Nanosciences* de Marseille (CRMCN, C. Henry), the *Laboratoire d'Instrumentation* and the *Matériaux* d'Annecy (LAIMAN, M. Lomello-Tafin), the *Institut de Recherche sur la Catalyse* de Lyon (IRC, J.-L. Rousset) et le *Laboratoire de Chimie de Coordination* de Toulouse (LCC-CNRS, B. Chaudret et K. Philippot). The thematic of the project is the synthesis of heterogeneous catalysts having specific structures.
- Projet Blanc programme STIC PYRACT (1/12/2005-30/11/08), coordinator: C. Rossi) : this projet is a collaboration between 3 laboratories in Toulouse : the *Laboratoire d'Analyse et d'Architecture des systèmes* (UPR 8001, C. Rossi), the *Laboratoire des Interactions Moléculaires et Réactivité Chimique et Photochimique* (IRMCP-UMR5623, F. Mingotaud) and the *Laboratoire de Chimie de Coordination* avec les équipes "Architecture Organométallique et Catalyse" (LCC-, S. Sabo-Etienne) et "Nanostructures et Chimie organométallique" (B. Chaudret, P. Fau). The objective is the preparation of energy-materials for micro fluidics.