

Dr Audrey Bonduelle

Division Catalysis, Biocatalysis and Separation, IFP Energies Nouvelles

Website URL : <https://www.ifpenergiesnouvelles.fr/page/audrey-bonduelle>

Employment History

- 2016-now** **Project leader** "Materials and processes for the interconversion between carbon-free energies and chemical energies"
- 2014-2015** **Project leader** "Conversion of LCO (Light Cycle Oil) to BTX (Benzene Toluene Xylene)"
- 2005-now** **Research Engineer** at IFP Energies Nouvelles within the Catalysis, Biocatalysis and Separation division. Research of active phases for Hydrocracking catalysts for VGO 'Vacuum Gas oil' and Hydrotreatment catalysts (sulfide based materials), new electrode materials (based on S) for water electrolysis and semiconductor materials for CO₂ photoconversion. Participation in the design and development of catalysts for biomass conversion and olefin metathesis as well as in the development of a chemical recycling process for PET.

Education

- 2002-2005** **PhD at Paris VI**, in the Chemistry and Physics of Materials, at the LCAES and LCBOP of the Ecole Nationale Supérieure de Chimie de Paris (Chimie ParisTech), under the direction of S. Derenne and D. Gourier and in collaboration with F. Robert of the Muséum National d'Histoires Naturelles.
"The first traces of life on earth: a spectroscopic and mimetic approach to the problem"
- 2002** **Engineering degree** from the Ecole Nationale Supérieure de Chimie de Paris (Chimie ParisTech). Specialty: Materials.
Master in Chemistry of Condensed Matter at University of Jussieu, Paris VI

Scientific activities and responsibilities:

Publications: 42 Patents, 24 peer-reviewed articles, 6 Proceedings papers

Supervision: 7 PhD students (1 "Yves Chauvin" award), 3 post-doctoral students, 23 trainees, 14 technicians

Other: Chair of the national congress GECat 2018 (Trégunc), co-Chair of the International Conference FCCat 2019 (Fréjus), Organizing Committee for ICC 2024