



SANDRINE BOUQUILLON

*From France to Sweden*



Project: **Bio-based surfactants, biomass derived ionic liquids & functionalized dendrimers**

Research topic: **Chemistry**

Swedish Institution: **Lund University / Stockholm University**

French Institution: **University of Reims Champagne-Ardenne**

Dates of mobility: **19/10/2014 to 23/10/2014**

Program: **SFVE-A (ex-TOR)**



## PRESENTATION

[Sandrine Bouquillon](#) is Professor at the Reims Institute of Molecular Chemistry ([ICMR](#)) at the [University of Reims Champagne-Ardenne](#). She obtained her PhD from the [University Toulouse III-Paul Sabatier](#) in 1993, was habilitated in 2002 and became a full professor in 2014. She is specialized in among others catalysis (e.g., oxidation, hydrogenation) in common solvents and ionic liquids, organometallic chiral complexes of Pd and Cu and the valuation of renewable agricultural resources or waste.

## ACTIVITIES IN SWEDEN

Sandrine Bouquillon started her mobility by visiting the Chemical Center ([Kemicentrum](#)) of [Lund University](#), where she was hosted by Prof. [Ola Wendt](#) and Prof. [Tommy Nylander](#). They discussed a range of topics for future collaborations, and her experience with dendrimers and metal nanoparticles for catalysis found a positive echo. She held a seminar entitled "Contributions of the biomass to dendrimer's and ionic liquid's fields". Nylander showed her the laboratory with numerous physico-chemical measuring instruments that can be used to determine the specific properties of amphiphilic compounds. Nylander and Bouquillon also laid out the plans to the shipping of dendrimers to Reims, a joint "COST" project and a co-tutored PhD program.

She then travelled to Stockholm University, where she was hosted by Prof. [Jan-Erling Bäckvall](#) and [Nicklas Selander](#). They discussed palladium chemistry, catalysis, and heterocyclization. Bäckvall is interested in palladium or platinum nanoparticles stabilized in water by glycol- or glycerodendrimers, whereas the discussions with Selander were dedicated to a synthetic approach related to the field of green chemistry in ionic liquids and the use of microwaves as an activating process. A collaboration was envisaged by sending hydrophilic or hydrophobic ionic liquids to France. Bouquillon also held the same seminar as in Lund.