



SYLVIE NEYERTZ

*From France to Sweden*



Project: **Molecular-level characterization of complex materials' microstructure and transports**

Research topic: **Chemistry**

Swedish Institution: **Lund University / Chalmers / KTH**

French Institution: **University of Savoie Mont Blanc**

Dates of mobility: **14/05/2017 to 21/05/2017**

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

## PRESENTATION

[Sylvie Neyertz](#) is a Senior Lecturer at the [University of Savoie Mont Blanc](#). She works at the Laboratory of Electrochemistry and Physical-Chemistry of Materials and Interfaces ([LEPMI](#)). She is interested in the atomistic level of the microstructure and transport phenomena in complex macromolecular materials, by means of modelling different polymers and nanocomposites to complement experimental evidence. She obtained her PhD in Chemistry from [Uppsala University](#) in 1995.

## ACTIVITIES IN SWEDEN

Sylvie Neyertz started her mobility by visiting the [Polymer Science and Technology](#) group at the [Centre for Analysis and Synthesis](#) of the [Department of Chemistry](#) of [Lund University](#), where [Prof. Patric Jannasch](#) and [Asst. Prof. Baozhong Zhang](#) work. She held a seminar on molecular modelling of polymer-based materials. They mainly discussed the possibility of introducing MC-type techniques in synthetic and bio-based polymers; the problems of relaxation of macromolecular chains; and the deformation, nanocomposites and molecule transport within polymers. The second part of the mobility was spent at [Chalmers](#) in Göteborg, where [Prof. Patrik Johansson](#) and his research group at the [Department of Physics](#) attended Neyertz seminar on molecular modelling in glassy polymer membranes. A new collaboration with Prof. Johansson was initiated.

The third and final visit took place at [KTH](#), where Neyertz held a seminar on molecular modelling of polymer-based membranes at the [Fibre and Polymer Technology Department](#) in front of the [Division of Polymeric Materials](#), directed by [Prof. Ulf Gedde](#) and [Asst. Prof. Fritjof Nilsson](#), with whom a collaboration on metal oxide nanoparticles was envisaged. They discussed renewable polymer materials, nanostructures, applications in medicine and energy, and molecular modelling utilisation. A French-Swedish [ANR](#)-funded project was tabled.