



**IRINA PETTERSSON**

*From Sweden to France*



Project: **Acoustical Materials**

Research topic: **Engineering**

Swedish Institution: **University of Gävle**

French Institution: **Université de Lorraine, Metz**

Dates of mobility: **31/03/2019 to 19/04/2019**

Program: **SFVE-A (ex FRÖ)**



## PRESENTATION

[Irina Pettersson](#) is currently associate professor at [Chalmers University of Technology](#). She worked previously as an associate professor at the [University of Gävle](#) and at the [Artic University of Norway](#). She graduated 2011 with a PhD degree in Applied Mathematics from l'[Ecole Polytechnique](#) and 2009 with a PhD degree in Mathematics at [Luleå University of Technology](#). Her research interests focus on modelling of signal propagation in nerves and describing damping properties of composite media.

## ACTIVITIES IN FRANCE

Irina Pettersson met with numerous researchers, including with [Renata Bunoiu](#), associate professor, and PhD students during her stay at the [University of Lorraine](#). They discussed the derivation of a cable equation for a model of myelinated axons.

Potential research projects have been considered, including spectral asymptotic for some elliptic problems with interface conditions arising in biology.

Moreover, Irina Pettersson participated to a laboratory seminar with researchers and PhD students such as [Jean-Claude Vivalda](#), [INRIA](#) (National Institute for Research in Digital Science and Technology) senior researcher.