



Institut de Minéralogie et de Physique des Milieux Condensés  
Unité Mixte de Recherche 7590  
Code 115, 4 Place Jussieu F-75252 Paris CEDEX 05

# SÉMINAIRE

## Lundi 23 mai, 10h30

*Salle de Conférence, 4ème étage, Tour 22-23, Salle 1  
IMPMC, Université P. et M. Curie, 4, Place Jussieu, 75005 Paris*

# Elin SØNDERGÅRD

*Laboratoire de Surface du Verre et Interfaces, UMR 125CNRS/Saint-Gobain, Aubervilliers, 93303  
cedex, France*

## EXPLORING GLASS ELABORATION AND GLASS SURFACES

I will give an overview the research done in the laboratory. Afterwards, I will concentrate on topics linked to the melting of silicate glass and silica surfaces. Our understanding of the structure of silicate materials has improved in the last decades due to both theoretical and experimental advances. In parallel, the industrial production of glass has made tremendous progress since the 1950. However, parts of the melting process of glass still lack understanding. Till now mostly the late stage of the melting process has been investigate, but recent results indicates the initial arrangements of the piling of raw materials greatly impacts the chemical homogeneity of the melt. I will show some of our first results in this area. I will end with recent results on the surface of quartz and silica investigated in elastic and inelastic helium diffusion giving insight on both the structure and vibrational dynamics.