

BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA

**INSTITUTO DE FÍSICA
“LUIS RIVERA TERRAZAS”**



**SEMINARIO
“DR. JESUS REYES CORONA”**

“Physical Chemistry of Foams”

**Dra. Dominique Langevin
Laboratoire de Physique des Solides,
Université d’Orsay, Orsay.**

Foams are dispersions of bubbles in liquids (or solids). We will discuss the case of aqueous foams, usually stabilized by surfactants. Among applications, let us mention: detergency, food industry, petroleum industry (injection of foams for oil recovery). Foams are also used to obtain insulation materials (glass and polymer foams), and for car industry (metallic foams). Despite the large amount of work devoted to the understanding of foaming and foam stability, many questions still remain unclear. Improving this knowledge is very important for the understanding and improvement of different technological processes. We will describe the different destabilisation mechanisms: gravity drainage, coarsening (gas diffusion from small to large bubbles) and coalescence. We will discuss the relevance of the surface viscoelasticity concept in the case of foams stabilised by surfactants and proteins. We will also discuss the case of particles (micro and nano) which can be also used as stabilisers and are extremely efficient (as in Pickering emulsions).

**Auditorio-IFUAP
Viernes 13 de Enero de 2012
13:00 Hrs.**