



Vortrag



Physical chemistry of foams

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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. We will also discuss the case of particles (micro and nano) which can be also used as stabilisers and are extremely efficient.

Termin: **23. Juni 2014, 11:10 Uhr**
Ort: **HSZ/403/H**

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ad personam

Dominique Langevin is one of the most renowned French scientists of our days due to her leading contributions across a wide range of topics in colloid and interface science.

In the 70's Dominique Langevin created the surfactant group at the l'Ecole Normale Supérieure, Paris, and later in the 90's, the Groupe de Recherches "Films de tensioactifs flexibles" (1991-1995). From 1994 to 1998, Dominique Langevin was director of Centre de Recherche Paul Pascal in Bordeaux, one of the largest laboratories in colloid science, where she founded a group investigating the surface of fluids. She is now leading the liquid interface group in the Laboratoire de Physique des Solides at the University Paris Sud.

Dominique Langevin was recently awarded the CNRS Silver Medal, the l'Oreal Prize for Women in Science, the Gentler-Kastler award of the French and German Physical Societies, the Kash Mittal Award for Surfactant in Solution Science, and the Overbeek Gold Medal 2012, to name but a few recognitions.

