



RTU

**MATERIĀLZINĀTNES
UN LIETIŠKĀS ĶĪMIJAS
FAKULTĀTE**

Funkcionālo materiālu tehnoloģiju zinātniskās laboratorijas

atvērtais zinātniskais seminārs

Trešdien 10. aprīlī 14.00

MLĶF konferenču zālē (272. Telpa)

Ar referātu „Starpmolekulāro spēku un koloidālas agregācijas kinētikas mērījumi” uzstāsies Dr. Gregor Trefalt no Ženēvas Universitātes, Analītiskās un neorganiskās ķīmijas departamenta, Koloidālās un virsmas ķīmijas laboratorijas.



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Measuring Interparticle Forces and Colloidal Aggregation Kinetics

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Interactions between charged surfaces in aqueous solutions are of substantial importance in material science, biological systems and environmental sciences. Physical processes in these applications often include control of particle aggregation or deposition. Therefore, forces between surfaces play a central role in these systems. In this presentation I will focus on two interesting systems, namely (i) colloidal particles in aqueous solutions containing multivalent ions and (ii) colloidal particles in ionic liquids and (IL) ionic liquid-water mixtures. In order to understand the mechanisms of particle aggregation in these complex solvents, we investigate their interactions by direct force measurements using the atomic force microscopy (AFM) and we study the aggregation kinetics with time-resolved light scattering techniques.

Funkcionālo materiālu tehnoloģiju zinātniskās laboratorijas vadītājs:
Asoc.prof. Andris Šutka