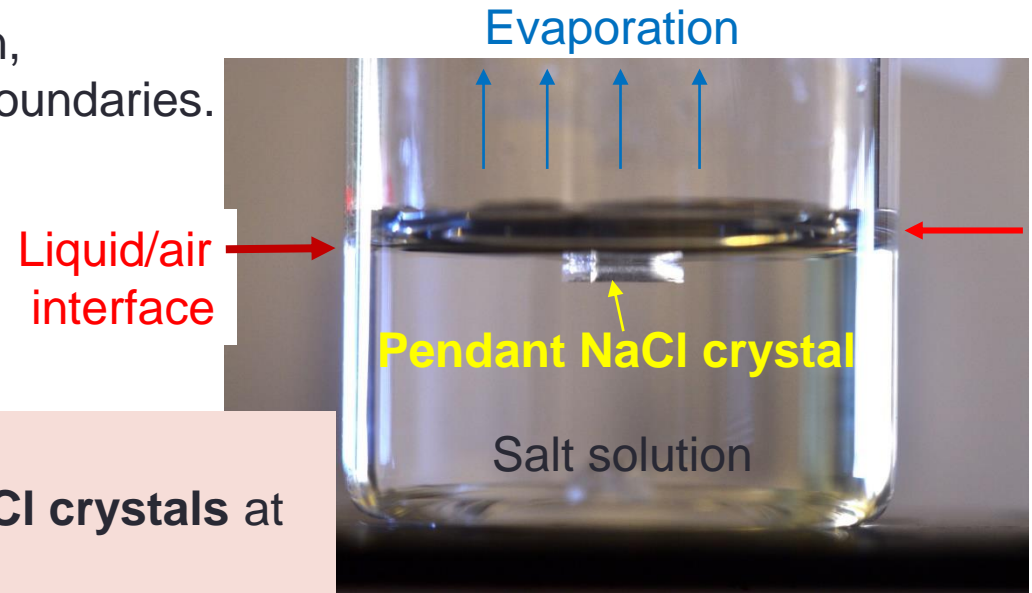




## Experimental determination of the surface energy of NaCl crystal

### Problematic :

The surface energy of a solid influences the growth rate, adsorption, catalytic behavior, surface segregation and the formation of grain boundaries. Their determination is of great importance for understanding mechanisms of many physical phenomena. Despite its importance, surface energy values are very difficult to measure experimentally although computer simulation results can be found.



### The Project consists of :

- ❑ Setting up an experiment for the control growth of **pendant NaCl crystals** at the liquid/air interface.
- ❑ Recording and Image analysis of the time evolution of the crystal growth till it falls in the solution.
- ❑ SEM analysis of the pendant crystals at different stage of growth
- ❑ By analogy to the **pendant drop method** for surface tension measurement of liquids, the surface energy of the crystal will be estimated.

**Place :** Soft matter group, WZI\_ Institute of Physics -UvA

### Supervisors :

Noushine Shahidzadeh , Associate professor ([n.shahidzadeh@uva.nl](mailto:n.shahidzadeh@uva.nl))  
Daniel Bonn, professor

