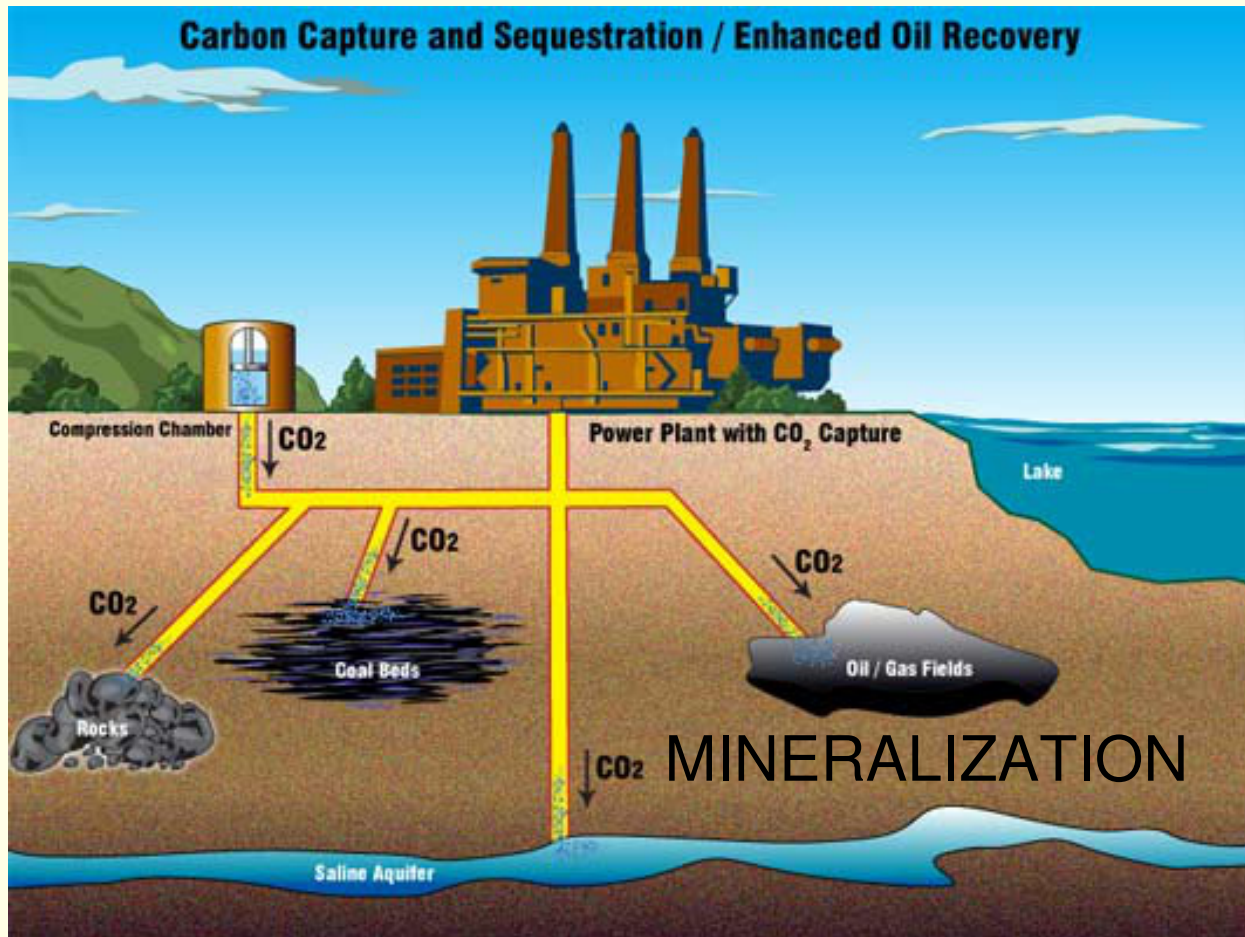


EXPERIMENTAL STUDY OF PATTERN FORMATION DURING CARBON DIOXIDE MINERALIZATION

Gábor Schuszter, Fabian Brau, and Anne De Wit

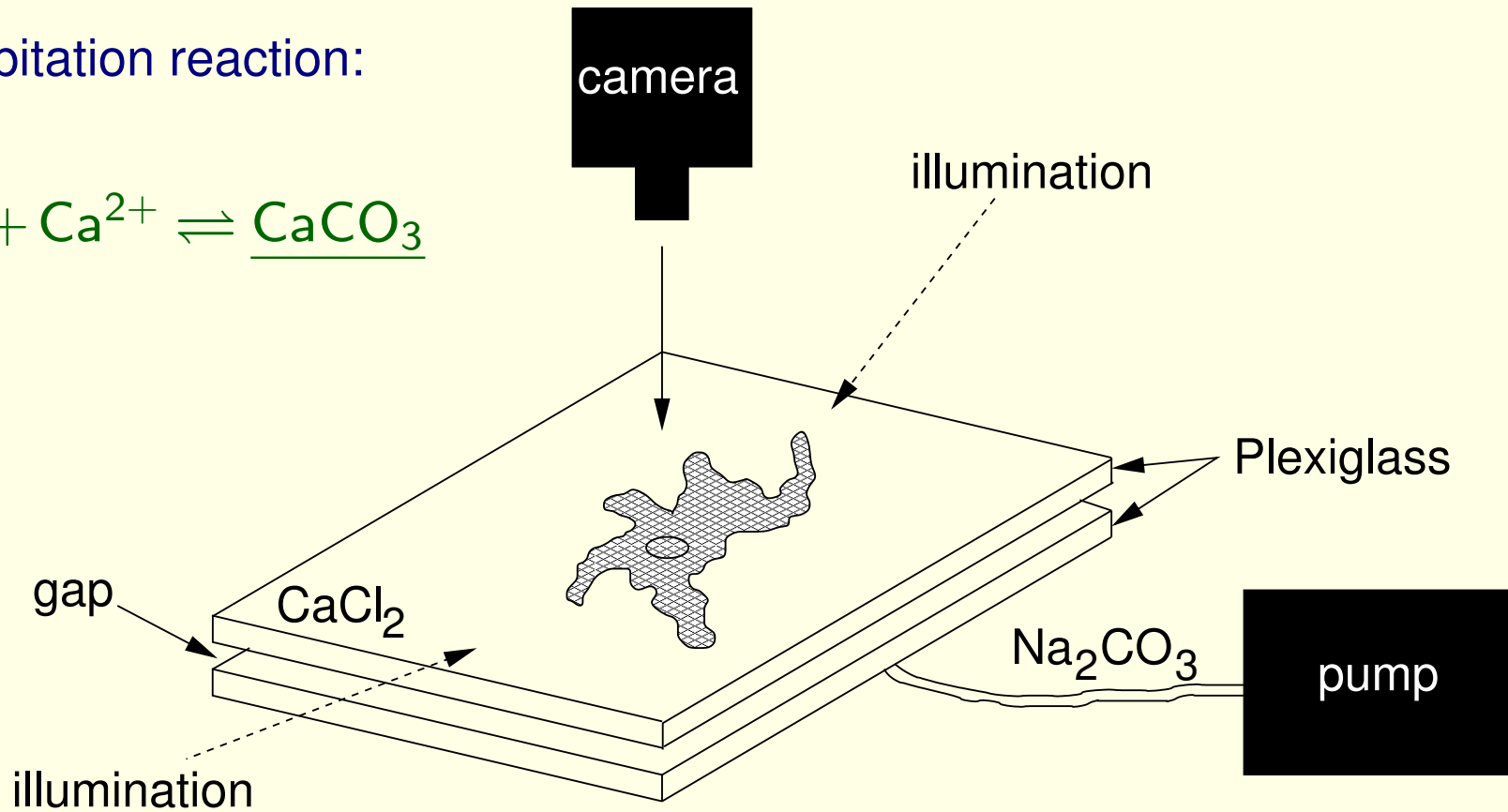
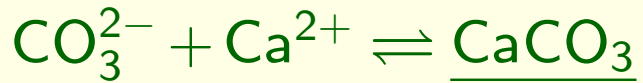
Nonlinear Physical Chemistry Unit, Université Libre de Bruxelles (ULB)



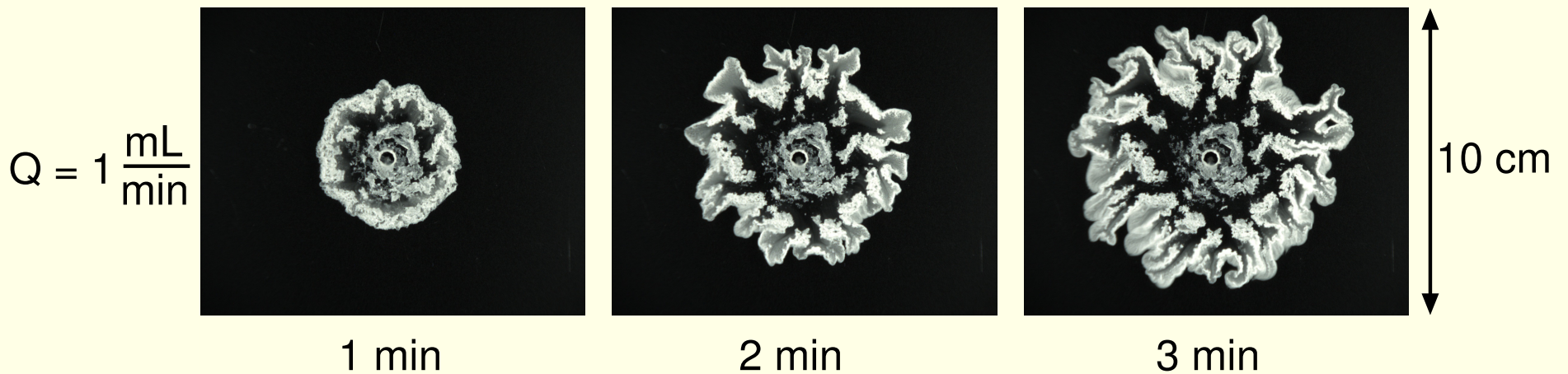
[www.zmescience.com/carbon capture tech.](http://www.zmescience.com/carbon%20capture%20tech)

- Influence of pattern formation during carbonate precipitation on storage efficiency
- Study in a simple confined geometry for a better understanding of hydrodynamics

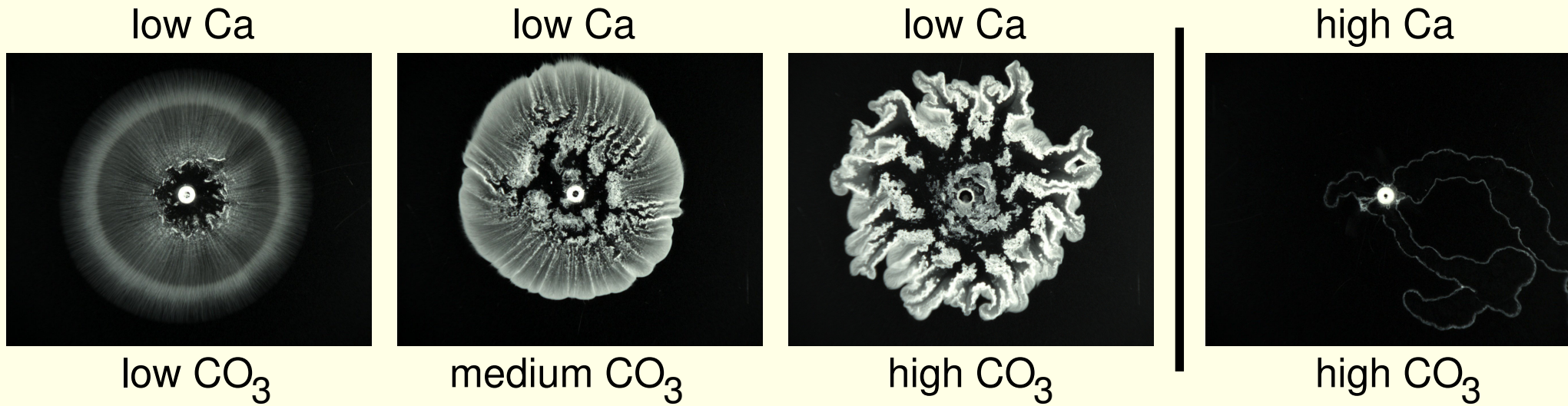
- precipitation reaction:



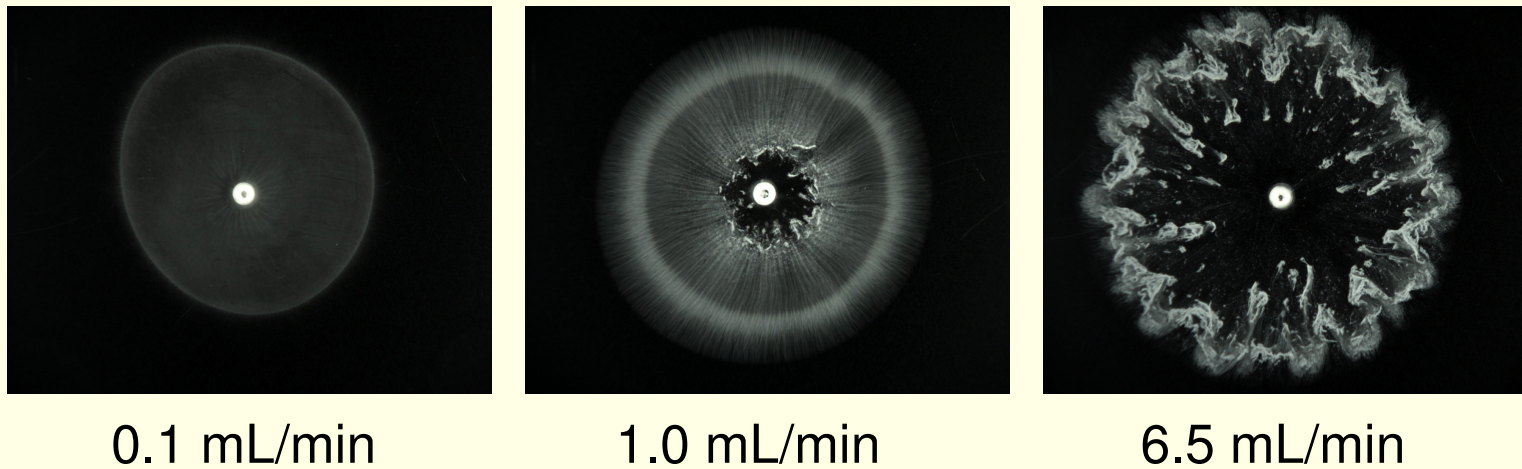
- injection of a solution of Na₂CO₃ into a solution of CaCl₂



- effect of reactant concentration at fixed flow rate



- effect of flow rate at fixed reactant concentration



⇒ the amount of precipitate produced (storage efficiency) depends on reactant concentration and flow rate