

Showcasing research from the Nonlinear Dynamics and Kinetics Group in the Department of Physical Chemistry and Materials Science, University of Szeged, Hungary.

Macroscale precipitation kinetics: towards complex precipitate structure design

Our group focuses on non-linear physico-chemical phenomena coupled to transport processes occurring either in homogeneous or heterogeneous systems, both on Earth and in Space. Our expertise covers theoretical and experimental knowledge as well. In the present study we investigate how the kinetic description of a chemical precipitation can be based either on classical nucleation theory or on handy mass action theory equations. Results, also applicable under flow conditions, may pave the way for engineering product properties by synchronizing chemical and hydrodynamic time scales. Such a capability bears with pharmaceutical and catalytic relevance as well.

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As featured in:



See Gábor Schuszter et al., Phys. Chem. Chem. Phys., 2018, **20**, 19768.

