Beitrag ID: **47** Typ: **Keynote**

Dewetting as a probe of properties of polymers at interfaces and in thin films

Mittwoch, 10. November 2021 09:00 (45 Minuten)

The process of dewetting allows to probe the dynamic behavior of polymers within thin films as the response to an applied force, generated directly and intrinsically by interfacial forces and forces acting within the film itself. In addition, taking advantage of the fact that on a single sample the process of dewetting is not initiated everywhere at the same time, one can follow the evolution of a sequence of temporally delayed dewetting processes. Thus, one can examine how nonequilibrium properties of thin polymer films evolve in time. Such sequential dewetting experiments provide a means for determining the time required for equilibration and how viscoelastic properties of the polymer film evolve in time. As one example, the relaxation of residual stresses in thin polymer films can be quantified through the measurement of characteristic parameters of dewetting.

Primary author: REITER, Günter (Institute of Physics, University of Freiburg)

Vortragende(r): REITER, Günter (Institute of Physics, University of Freiburg)