

French - German opportunities of cooperation to face the European revolution in neutron science



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Pressure-Dependence of the Formation of Poly(N-isopropyl acrylamide) Mesoglobules above the Cloud Point

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Influence of pressure on the formation of mesoglobules of the thermoresponsive polymer poly(N-isopropyl acrylamide) (PNIPAM) in aqueous solution, when heated above its cloud point is investigated using very small angle neutron scattering. At a critical pressure, a remarkable increase in the size of PNIPAM mesoglobules is noted. We presume that the observed increase in the size of mesoglobules is due to the pressure induced enhancement in hydration and subsequent aggregation of mesoglobules.

Authors: Dr MELEDAM, Geethu P. (TU München, Physik-Department, Garching, Germany); NIEBUUR, Bart-Jan (TU München, Physik weicher Materie); PIPICH, Vitaliy; Dr APPAVOU, Marie-Sousai (Jülich Centre for Neutron Science (JCNS) at Heinz Maier-Leibnitz Zentrum (MLZ), Forschungszentrum Jülich GmbH); SCHULTE, Alfons (University of Central Florida); PAPADAKIS, Christine (Technische Universität München, Physik-Department, Fachgebiet Physik weicher Materie)

Presenter: Dr MELEDAM, Geethu P. (TU München, Physik-Department, Garching, Germany)

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