

This thesis is partially based on the following original publications:

Chapter 2:

C. Gögelein, G. Nägele, R. Tuinier, T. Gibaud, A. Stradner,
and P. Schurtenberger,
*A simple patchy colloidal model for the phase behaviour of lysozyme
dispersions*,
Journal of Chemical Physics **129**, 085102 (2008).

Chapter 3:

C. Gögelein and R. Tuinier,
*Phase behaviour of a dispersion of charge-stabilised colloidal spheres
with added non-adsorbing interacting polymer chains*,
European Physical Journal E **27**, 171 (2008).

Chapter 4:

C. Gögelein, G. Nägele, J. Buitenhuis, R. Tuinier and J. K. G.
Dhont,
*Polymer depletion-driven cluster aggregation and demixing in charge-
stabilised colloidal dispersions*,
(in preparation).

Other publications by the author of this thesis:

T. Blochowicz, C. Gögelein, T. Spehr, M. Müller, and B. Stühn,
*Polymer-induced transient networks in water-in-oil microemulsions
studied by small-angle x-ray and dynamic light scattering*,
Physical Review E **76**, 041505 (2007).