Programme

Faraday Discussion 158: Soft Matter Approaches to Structured Food
2 – 4 July, 2012
Hof van Wageningen, Netherlands

Monday 2 July

11:45	Lunch *Held in the Terraszaal Suite*
12:45	**Welcome and Introductions** Dr Ruud van der Sman
13.00 **Paper 1**	**Introductory Lecture:** Dr Job Ubbink *Nestlé Research Centre, Switzerland*
Session 1	Structuring Formation via External Fields (Shear, Intensive Heating, Electric) Session Chair: Professor Martien Cohen-Stuart
14:00 **Paper 2**	**Designing colloidal structures for micro and macro nutrient content and release in foods** David A. Garrec, Sarah Frasch-Melnik, John V. L. Henry, Fotios Spyropoulos and Ian T. Norton* *University of Birmingham, UK*
14:05 **Paper 3**	**Protein cluster formation during enzymatic cross-linking of globular proteins** Yunus Saricay, Surender Dhayal, Kumar Dhayal, Peter Alexander Wiereng and Renko de Vries* *Wageningen University, The Netherlands*
15:00	Afternoon Tea Session Chair: Professor Sandra Hill
15:30 **Paper 4**	**Anomalies in moisture transport during broccoli drying monitored by MRI?** Xin Jin,* Antonius J. B. van Boxtel, Edo Gerkem, Frank J. Vergeldt, Henk T. van As, Gerrit van Straten, Remko M. Boom and Ruud G. M. van der Sman *Wageningen University, The Netherlands*
15:35 **Paper 5**	**Structural changes of deposited casein micelles induced by membrane filtration** R. Gebhardt,* T. Steinhauer, P. Meyer and U. Kulozika *Technische Universität München, Germany*
15:40 **Paper 6**	**Model for particle migration in bidisperse suspensions by use of effective temperature** Martijintje Vollebregt*, Ruud van der Sman and Remko Boom *Wageningen UR Food & Biobased Research, The Netherlands*
17:00	Close of Sessions
17:00 – 18:30	Poster Session and Wine Reception
	Free evening

Tuesday 3 July

Session 2	Structuring Formation via Self-Assembly (Adsorption at Interfaces/Organogels) Session Chair: Dr Ramille Ettelaie
09:00 **Paper 7**	**Stability of aqueous food grade fibrillar systems against pH change** Ardy Kroes-Nijboer, Hassan Sawalha, Paul Venema, Erik van der Linden*, Arjen Bot, Eckhard Flöter, Ruud den Adel and Wim G. Bouwman *Wageningen University, The Netherlands*
09:05 **Paper 8**	**Quinoa starch granules as stabilizing particles for production of Pickering emulsions** Marilyn Rayner, Malin Sjöö, Anna Timgren, and Petr Dejmek* *Lund University, Sweden*
09:10 **Paper 9**	**Soy milk oleosome behaviour at the air–water interface** Gustav Waschatko*, Ann Junghans and Thomas A. Vilgis *Max Planck Institute for Polymer Research, Germany*
10:30	Morning coffee Session Chair: Professor Martien Cohen-Stuart
11:00 **Paper 10**	**Critical laminar shear-temperature effects on the nano- and mesoscale structure of a model fat and its relationship to oil binding and rheological properties** Nuria C. Acevedo, Jane M. Block and Alejandro G. Marangoni* *University of Guelph, Canada*
11:05 **Paper 11**	**Surface shear rheology of hydrophobin adsorption layers: laws of viscoelastic behaviour with applications to long-term foam stability** Krassimir D. Danov, Gergana M. Radulova, Peter A. Kralchevsky, Konstantin Golemanov and Simeon D. Stoyanov* *Unilever Research & Development Vlaardingen, The Netherlands*
11:10 **Paper 12**	**Elucidation of density profile of self-assembled sitosterol + oryzanol tubules with small-angle neutron scattering** Arjen Bot*, Ruud den Adel, Eckhard Flöter, Elliot P. Gilbert, Wim G. Bouwman, Hassan Sawalha, Paul Venema, Erik van der Linden and Vasyl M. Garamus *Unilever, The Netherlands*
12:30	Lunch : *Held in the Terraszaal Suite*
Session 3	Slow Dynamics in Stabilized/Jammed Foods Session Chair: Dr Bill Firth
14:00 **Paper 13**	**New routes to food gels and glasses** Thomas Gibaud, Najet Mahmoudi, Julian Oberdisse, Peter Lindner, Jan Skov Pedersen, Cristiano L. P. Oliveira, Anna Stradner and Peter Schurtenberger* *University of Lund, Sweden*
14:05 **Paper 14**	**Protein structure and interactions in the solid state studied by small-angle neutron scattering** Joseph E. Curtis, Arnold McAuley, Hirsh Nanda and Susan Krueger* *NIST Center for Neutron Research, USA*
14:10 **Paper 15**	**The role of quench rate in colloidal gels** C. Patrick Royall* and Alex Malins *University of Bristol, UK*
15:30	Afternoon Tea Session Chair: Professor Sandra Hill
16:00 **Paper 19**	**Delayed solidification of soft glasses: new experiments, and a theoretical challenge** Yogesh M Joshi, A. Shahin and Michael E. Cates*

	University of Edinburgh, UK
16:05 **Paper 17**	**Slow dynamics and structure in jammed milk protein suspensions** Peggy Thomar, Dominique Durand, Lazhar Benyahia, Taco Nicolai* *Université du Maine, France*
16:10 **Paper 18**	**Arrested coalescence of viscoelastic droplets with internal microstructure** Amar B. Pawar,Marco Caggioni, Richard W. Hartel and Patrick T. Spicer* *University of Wisconsin, USA*
17:30	Close of sessions
19:00	Pre-Dinner Drink
19:30	Conference Dinner

Wednesday 4 July

Session 4	Simulation of Structured Soft Matter/Foods at Multiple Length Scales Session Chair: Dr Ruud ven der Sman
08:45 **Paper 16**	**Viscoelastic phase separation in soft matter and foods** Hajime Tanaka* *University of Tokyo, Japan*
08:50 **Paper 23**	**Kinetic model for the mechanical response of suspensions of sponge-like particles** Markus Hütter*, Timo J. Faber and Hans M. Wyss *Eindhoven University of Technology, The Netherlands*
08:55 **Paper 21**	**Nanoscale characteristics of triacylglycerol oils: phase separation and binding energies of two-component oils to crystalline nanoplatelets** Colin J. MacDougall, M. Shajahan Razul, Erzsebet Papp-Szabo, Fernanda Peyronel, Charles B. Hanna, Alejandro G. Marangonic and David A. Pink* *St.Francis Xavier University, Canada*
10:15	Morning Coffee Session Chair: Dr Ramille Ettelaie
10:45 **Paper 22**	**Soft matter approaches as enablers for food macroscale simulation** Ashim K Datta*, Ruud van der Sman, Tushar Gulati and Alexander Warning *Cornell University, USA*
10:50 **Paper 20**	**Numerical study of the effect of thiol–disulfide exchange in the cluster phase of b-lactoglobulin aggregation** R.N.W. Zeiler* and P.G. Bolhuis *University of Amsterdam, The Netherlands*
10:55 **Paper 24**	**A multiscale approach to triglycerides simulations: from atomistic to coarse-grained models and back** Antonio Brasiello, Silvestro Crescitelli, Giuseppe Milano* *Università di Salerno, Italy*
12:15	**Concluding Remarks** Kees De Kruif *Utrecht University, Utrecht*
12:45	Acknowledgements
13:00	Close of Meeting