

Thursday, September 14th, 2017
8:30 a.m.

Characterization and exploitation of processing-induced changes of structural and interfacial properties of proteins

Ex situ and in situ characterization of cake layer formation on membrane surfaces during filtration
M. Hartinger (TUM)

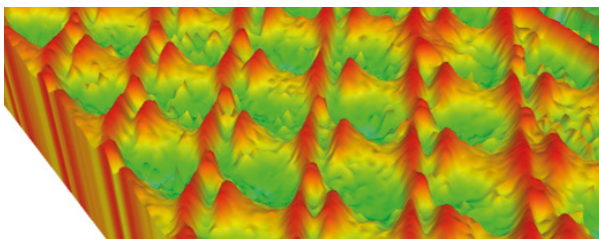
Film formation and coating reactions by proteins
Prof. Dr. R. Gebhardt (RWTH Aachen)

Functionalization of separated casein by using different processing side streams as diafiltration media during microfiltration
M. Reitmaier (TUM)

Selective thermal aggregation of whey proteins and subsequent centrifugal separation to obtain allergen-free whey
N. Haller (TUM)

Systematic design to control whey protein hydrolysis for the production of value-added products
Y. Mao (TUM)

Structure formation of animal and plant proteins: comparison of methods and resulting properties
Prof. Dr. U. Kulozik (TUM)



Organizer

Foundation of Dairy Research at TUM e.V.,
 Weihenstephaner Berg 1, 85354 Freising, Germany

Participation Fee

850 € Standard (3 days)
 780 € Members of foundation/TUM Alumni Associations
 500 € Members of public institutions

Registration and Contact

Online registration www.technologieseinar-lmvt.de

Any questions? Please contact us via mail:
info@technologieseinar-lmvt.de

Hotel information www.technologieseinar-lmvt.de

Dinner information Self-payment, see website

Chair of Food and Bioprocess Engineering
 Weihenstephaner Berg 1, 85354 Freising
 Phone: +49(0)8161.71.4205 / Fax: +49(0)8161.71.4384

Conference Venue

Lecture Hall 17
 Freising, Campus Weihenstephan (close to the Munich Airport), Liesel-Beckmann-Str. 1, 85354 Freising.

Following Events

If you plan to visit the Munich Oktoberfest, starting Sept.16th, 2017, or Drinctec, starting Sept. 15th, please book accommodation in time.

Seminar on Emerging Dairy and Food Technologies

Micro- and Macrostructure – Design and Analysis, Gels, Foams, Emulsions, Interfacial Reactions



Technical University of Munich, TUM School of Life Sciences Weihenstephan

Conference Chair
 Univ.-Prof. Dr.-Ing. Ulrich Kulozik
 Chair of Food and Bioprocess Engineering

Tuesday, September 12th, 2017
12:30 p.m.

Characterization and application of gels

Mechanisms of gel formation: protein and polysaccharide gels in food systems
C. Kleemann (TUM)

Rheological techniques for the assessment of structures in food systems
Dr. A. Braun (Anton Paar GmbH)

Functionalization of proteins by means of gelling mechanisms: targeted denaturation and microparticulation
M. Wolz (TUM)

Hybrid gels: synergistic effects and limitations between proteins, polysaccharides and inorganic gelling agents
Prof. Dr. I. Smirnova (TU Hamburg-Harburg)

Innovative application of protein gel systems: supercritically dried aerogels as transportation or protection matrix
I. Selmer (TU Hamburg-Harburg)

Characterization and application of emulsions

Innovative approaches for the stabilization of emulsions by functionalized proteins or particles of biogenic origin
F. Kurz (TUM)

Functionalization of egg yolk by means of fractionation and pre-treatment with focus on freeze-thaw stability of oil in water emulsions
O. Gmach (TUM)

7:00 p.m. Get together at Hotel/Restaurant Bayerischer Hof, Untere Hauptstraße 3, 85354 Freising

Wednesday, September 13th, 2017
8:30 a.m.

Characterization and application of emulsions

Physical characterization of biopolymers and visualization of structures in complex food systems
S. Sedlmeier (TUM)

Functional properties of whey protein hydrolysates
D. Saalfeld (TUM)

Characterization and application of foams

Measuring techniques for the characterization of foaming properties
Dr. S. Bäßler (Krüss GmbH)

Structural characterization of milk and plant protein-stabilized foams: a multiscale approach
Dr. J. Dombrowski (TUM)

Possibilities for the acceleration of drying processes: surface area increase by means of vacuum application and pre-foaming
S. Ambros (TUM)

Mechanistic understanding of structure-function-relationships to facilitate gentle drying of biomolecules in aerated matrices
P. Kubbutat (TUM)

Innovative applications for plant proteins in food: development of all-natural fruit snacks
M. Özcelik (TUM), E. Dachmann (TUM)

Wednesday, September 13th, 2017
2:00 p.m.

Practical Demonstrations at the Food and Bioprocess Engineering Pilot Plant & Labs

Guided tours of the pilot plant and lab area will deepen the understanding of topics presented during the seminar and highlight unit operations of particular interest.

- Bioprocessing technologies
- Membrane separation technologies
- Centrifugal separation and fractionation techniques
- Drying techniques
- Techno-functional properties (physical characterization)
- Thermal processing technologies
- Microparticulation techniques
- Analytical techniques

7:00 p.m. Get together at Gaststätte Huber Weissbräu, General-von-Nagel-Str. 5, 85354 Freising

