Nguyen Trong Bach

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Faculty of Food Technology Nha Trang University, 02 Nguyen Dinh Chieu St., Nha Trang city, Vietnam

EDUCATION

KU Leuven Univesity, Leuven, Belgium

Short course training (graduate programs and research based education in Food Technology), 2-4/2016

CNRS, IMMM, France

Post-Doctoral (Chemistry, physico-Chemistry of food), 2014-2016

PhD, Univesité du Maine, Le Mans, France

PhD degree about Structure and rheology of the mixtures of the protein β -lactoglobulin and the polysaccharide κ -carrageenan, 2011-2014

Nha Trang University, Nha Trang, Vietnam

Master degree of Postharvest Technology, 2000-2005

Engineer of Aquatic product processing, 1995-2000

RESEARCH INTERESTS

- ✓ Proteins, polysaccharides and their interactions' functionalities;
- ✓ Food rheology:
- ✓ Milk ingredients' functional properties (dairy products);
- ✓ Nutraceutical potential of seaweed;
- ✓ Food emulsions.

TEACHING RESPONSIBILITY

Undergraduate

- 1. Food physics
- 2. Technology of chilling and frozen aquatic/Food products
- 3. Equipment in Food Technology

Graduate

- 1. Food Rheology/Rheological properties of Food
- 2. Biopolymers

PUBLICATIONS AND PRESENTATIONS

Publication

- 1. Bach T. Nguyen, Taco Nicolai, Christophe Chassenieux, Christophe Schmitt (2017). Effect of the pH and NaCl on the microstructure and rheology of mixtures of whey protein isolate and casein micelles upon heating. Food Hydrocolloids, 70, 114–122.
- 2. Bach T. Nguyen, Gireeshkumar Balakrishnan, Boris Jacquette, Taco Nicolai, Christophe Chassenieux, Christophe Schmitt, Lionel Bovetto (2016). Inhibition and Promotion of Heat-Induced Gelation of Whey Proteins in the Presence of Calcium by Addition of Sodium Caseinate. Biomacromolecules, 17, 3800–3807.
- 3. Bach T. Nguyen, Taco Nicolai, Christophe Chassenieux, Christophe Schmitt, Lionel Bovetto (2016). Heat-induced gelation of mixtures of whey protein isolate and sodium caseinate between pH 5.8 and pH 6.6. Food Hydrocolloids, 61, 433-441.
- 4. Bach T. Nguyen, Wenkai Wang, Brian Roy Saunders, Lazhar Benyahia, Taco Nicolai (2015). pH-Responsive Water-in-Water Pickering Emulsions. Langmuir, 31, 3605-3611.
- 5. Bach T. Nguyen, Taco Nicolai, Lazhar Benyahia, Christophe Chassenieux (2014). The effect of the competition for calcium ions between κ-carrageenan and β-lactoglobulin on the rheology and the structure in mixed gels. Journal of Colloids and Surfaces A: Physicochemical and Engineering Aspects, 475, 9–18.
- 6. Bach T. Nguyen, Taco Nicolai, Lazhar Benyahia, Christophe Chassenieux (2014). Synergistic effects of mixed salt on the gelation of κ-carrageenan. Carbohydrate Polymers, 112, 10-15.
- 7. Bach T. Nguyen, Taco Nicolai, Christophe Chassenieux, Lazhar Benyahia (2014). The effect of the protein aggregate morphology on phase separation in mixtures with polysaccharides. Journal of Physics: Condensed Matter 26, 464102.
- 8. Bach T. Nguyen, Tuan Phan-Xuan, Lazhar Benyahia, Taco Nicolai (2014). Combined effects of temperature and elasticity on phase separation in mixtures of κ-carrageenan and β-lactoglobulin aggregates. Food Hydrocolloids, 34, 138-144.
- 9. Bach T. Nguyen, Taco Nicolai, Lazhar Benyahia (2013). Stabilization of water-in-water emulsions by addition of protein particles. Langmuir, 29, 10658-10664.
- 10. Gireeshkumar Balakrishnan, Bach T. Nguyen, Christophe Schmitt, Taco Nicolai, Christophe Chassenieux (2017). Heat-set emulsion gels of casein micelles in mixtures with whey protein isolate. Food Hydrocolloids, 73, 213-221.

1. Vietnamese publication

Bach T. Nguyen (2004). Application of chitosan membranes combined with other biopolymers on the preservation food (meat and fish). Journal of Fisheries Science and Technology (in Vietnamese)

Presentation

Oral presentation

- 1. Bach T. Nguyen (2017). Some factors affect stability of water-in-water emulsion (Dextran/PEO). ENCAPSEA2017, Nha Trang, Vietnam (oral)
- Bach T. Nguyen, Taco Nicolai, Christophe Chassenieux, Christophe Schmitt, Lionel Bovetto (2016). The Effect of Competition for Calcium Ions on Heatinduced Aggregation and Gelation of Mixtures of Whey Protein Isolate and Sodium Caseinate. The 16th Food Colloids conference in Wageningen, Holland. (oral)
- 3. Bach T. Nguyen, Christophe Chassenieux, Taco Nicolai (2015). Competition for Calcium ions on WPI formation in the presence of Sodium Caseinate. PCI congress, Sablé, France. (oral)
- 4. Bach T. Nguyen, Christophe Chassenieux, Lazhar Benyahia, Taco Nicolai (2014). The morphology and the rheological properties of mixed carrageenan/-lactoglobulin in the presence of CaCl₂. Journées de l'E.D., Nantes, France. (oral)
- 5. Bach T. Nguyen, Christophe Chassenieux, Lazhar Benyahia, Taco Nicolai (2014). Effect of the competition for Ca^{2+} on the morphology and the elasticity of mixed gels of κ -carrageenan and β -lactoglobulin. The 15th Food Colloids conference in Karlsruhe, Germany. (oral)
- 6. Bach T. Nguyen, Christophe Chassenieux, Lazhar Benyahia, Taco Nicolai (2013). Formation of globular protein particles and their role in structuring mixtures with polysaccharides. Biopolymers conference in Nantes, France. (oral)
- 7. Bach T. Nguyen, Lazhar Benyahia, Taco Nicolai (2013). Stabilization of Water-in-Water Emulsions by Addition of Protein Particles. PCI congress, Sablé, France. (oral)
- 8. Bach T. Nguyen, Christophe Chassenieux, Lazhar Benyahia, Taco Nicolai (2012). Behavior of mixtures of proteins and polysaccharides: Effects of Temperature and Elasticity on phase separation in k-car/β-lg mixtures. PCI congress, Sablé, France. (oral)
- 9. Bach T. Nguyen, Tuan Phan-Xuan, Lazhar Benyahia, Komla AKO, Taco Nicolai (2012). The effects of temperature and elasticity on phase separation in Polysaccharide/Protein mixtures. The 14th Food Colloids conference in Copenhagen, Denmark.

Poster presentation

 Nghia Nguyen-Do-Trong, Seppe Driesen, Michelle Hallemans, Ivana Mikušová, Floor Vanelderen, Bach T. Nguyen, Bart De Ketelaere, Wouter Saeys. Visible and near infrared spectroscopy for rapid

- detection and monitoring of cleaning water contaminant in egg products. VBFoodnet 2017, HCMC, Vietnam. (poster)
- 2. Bach T. Nguyen, Lazhar Benyahia, Taco Nicolai (2013). Stabilization of water in water emulsions. Doctoriales Forum, Le Mans, France. (poster)
- 3. Bach T. Nguyen, Tuan Phan-Xuan, Lazhar Benyahia, Taco Nicolai (2012). Effects of temperature and elasticity on phase separation in mixtures of polysacharides and protein particles. Journées de l'E.D., Nantes, France. (poster)