Program of "Neutrons & Food 3"

Wednesday 9 July

Visit of the Léon Brillouin Laboratory (LLB), CEA de Saclay

• 9h30: Welcome at the LLB

• 10h: Visit of the facility

> 13h: Registration at La Maison du Lait ,Paris

<u>14h: Welcome and Opening</u> Christiane Alba Simionesco (LLB) and Pierre-André Maréchal (AgroSup Dijon)

Session 1:

- 14h15: Monique Axelos, Understanding global challenges also needs to probe nano scales!
- 15h: Peter Lillford, What the food industry needs to know.
- 15h45: Hervé This, Building food at every scale: toward Note by Note Cooking.
- 16h30: Posters Presentation
- 17h- 18h30: welcome party

Thursday 10 July

> Session 2:

- 9h: C.G. Kees de Kruif, The structure of casein micelles: a review of small angle scattering data.
- 9h30: Elke Scholten, Design of oleogels with the use of structuring agents.
- 10h: Ali Assifaoui, Insights into the mechanism of interactions of the divalent cations Ca²⁺ and Zn²⁺ with low methoxy pectin.
- 10h20: Audrey Arnould, Dispersion of fatty acids in presence of choline hydroxide: effect of the molar ratio.

10h40: Coffee Break

> Session 3:

- 11h: Wim Bouwman, Direct measurement of mesoscopic bulk structure of food materials by spin echo small angle neutron scattering.
- 11h30: Bart Nicolaï, X-ray and neutron tomography of fruit and vegetables.
- 12h: Aurélie Tachon, The cork viewed from the inside.

12h20-14h30: lunch and Posters session

Session 4:

- 14h30: Andrew Jackson, Casein micelles under pressure-SANS and SAXS for food.
- 15h: Daniela Russo, Combining structure and dynamics: high pressure effect on biomolecules solution.
- 15h30: Hans Tromp, Casein micelles at non-ambient pressure studied by neutron scattering.
- 15h50: Adrien Lerbret, Protein-matrix interactions in trehalose/glycerol mixtures at low water contents.

• 16h10: Sophie Combet, Influence of macromolecular crowding on myoglobin unfolding and stability.

16h30: Coffee Break

> Session 5:

- 17h: Elliot Gilbert, Monitoring changes in structure at the molecular level during food processing the uniqueness of neutron scattering
- 17h30: Florence Porcher, Chocolate tempering: an example of the use of neutron diffraction in food science.

19h30: Conference Diner at "le Moulin de la galette",83 rue Lepic, Montmartre, Métro Abbesse

Friday 11 July

> Session 6:

- 9h: Anne Laure Fameau, Multi-stimuli responsive foams based on lipids materials.
- 9h30: François Muller, Characterization of lipids-based self-assembled nanomaterials by SANS and VSANS.
- 10h: Tommy Nylander, Changing the lipid-aquous interface and lipid self-assembly structure by means of lipase action.

10h20: Coffee Break

> Session 7:

- 11h: Isabelle Capron, A SANS study to describe cellulose nano-rods organisation at the oil/water interface.
- 11h30: Isabelle Grillo, Small angle neutron scattering applied to the characterization of a worldwide popular beverage: Pastis.
- 12h: Tuan Phan-Xuan, Nanocrystalline cellulose Colloidal stability and self-assembly in different solvent conditions.

12h20-14h: lunch

> Session 8:

- 14h: Thomas Karbowiak, Sustainable food packaging.
- 14h30: Olivier Vitrac, The safety of food contact materials.
- 15h: Steven Le Feuntun, Mathematical modelling as a tool to better understand the impact of food structure digestion.
- 15h30: Nathalie Perrot, Coupling deterministic and random sequential approaches for structure and texture prediction of dairy oil in water emulsion.

16h: Closing Remarks, End