

Lingsam TEA

Assistant professeur (Maître de conférences)

29 years old
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Education

10.2017-10.2020 PhD in physical chemistry of polymers, Le Mans Université, France
Stabilization and characterization of water-in-water emulsion

09.2015-06.2017 Master degree in Polymer and surfaces
(14.5/20, rank : 1/8), Université de Rouen, France

09.2012-06.2015 Bachelor degree in chemistry
(12.6/20, rank : 7/41) Université de Rouen, France

Research experience

09.2022-present Assistant professor (Maître de Conférences), Sorbonne Université, France

10.2020-08.2022 Postdoctoral researcher, Forschungszentrum Jülich, Germany
Synthesis and characterization of surface charged micelles by light and neutron scattering.

10.2017-10.2020 PhD student, Le Mans Université, France
Stabilization and characterization of water-in-water emulsions by polymer in solution. Chemical modifications of chitosan and its influence on the stabilization of water in water emulsions. Characterization of the emulsion stability by analytical centrifuge. Viscosity and morphology of emulsions under shear, relation between rheological behavior and morphology.

01.2017-06.2017 Internship, Université de Rouen, France
Characterization of polysaccharides extracted from novel microalgae by rheology and microrheology. Chemical modification of hyaluronic acid by hydrophobic groups and its influence on rheological behavior.

05.2015-06.2015/04.2016-05.2016 Internships, Université de Rouen, France
Formulation, characterization and microbiological study of polysaccharides based microparticles for drug delivery.

Skills

Rheological study of polymer solutions and water-in-water emulsions. Confocal microscopy at rest and under shear of water-in-water emulsions. Interaction between polymers, polymer size, and molar mass determination by light scattering. Polymer synthesis and chemical modification of polysaccharides to stabilize water-in-water emulsions. Characterization of emulsions stability by monitoring of the turbidity by analytical centrifuge

Teaching

09.2022-present Assistant professor (Maître de Conférences), Sorbonne Université, France
Thermodynamics applied to chemistry and solution chemistry for undergraduate students,
bibliography study for master students

2017-2019 Analytical chemistry , practical exercises.

Preparation of solutions for calibration curves and sample analysis on gas chromatography,
high performance liquid chromatography, flame and plasma absorption spectroscopy, NMR,
infrared and UV spectroscopy.

Publications

Lingsam Tea, Frédéric Renou, Taco Nicolai, Effect of Hydrophobicity and Molar Mass on the Capacity of Chitosan and κ -Carrageenan to Stabilize Water in Water Emulsions, Carbohydrate polymers, **2021**, 271, 14, 118423.

Lingsam Tea, Frédéric Renou, Lazhar Benyahia, Taco Nicolai, Assessment of the stability of water in water emulsions using analytical centrifugation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, **2021**, 608, 125619.

Mathieu Potier , Lingsam Tea, Lazhar Benyahia, Taco Nicolai, Frédéric Renou, Viscosity of aqueous polysaccharide solutions and selected homogeneous binary mixtures, Macromolecules, **2020**, 53, 23, 10514-10525.

Lingsam Tea, Taco Nicolai, Lazhar Benyahia, Frédéric Renou, Viscosity and morphology of stabilized water-in-water emulsions under shear, Macromolecules, **2020**, 53, 10, 3914–3922.

Lingsam Tea, Taco Nicolai, Frédéric Renou, Stabilization of Water-in-Water Emulsions by Linear Homo-Polyelectrolytes, Langmuir, **2019**, 35, 9029–9036.

Congres

Oral communications : **2018**, 8th Rencontres biologie physique grand ouest (RBPGO), Vannes, France

2019, Softcomp annual meeting, Portonovo, Italy

Posters : **2019**, Edible soft matter, Le Mans, France

2019, Journées de l'école doctorale, Brest, France

Best poster of science popularization at the contest « Expose ta thèse » , Le Mans, France.

Languages

French	Mother tongue
English	Fluent
German	Level B1

References

PhD supervisors :

Dr Taco Nicolai : taco.nicolai@univ-lemans.fr

Dr Frédéric Renou : frederic.renou@univ-lemans.fr