

Curriculum vitae

Bachelor project: Biophysical Analysis of the Self-Assembly of Phospholipid Nanodiscs.

Supervisor: Lise Arleth, https://scholar.google.dk/citations?user=4clVQ_wAAAAJ&hl=da

Master project: Micro- and Macro-Rheological Properties of Porcine Gastrointestinal Mu-cus with Permeation Enhancers.

Supervisor: Hanne Mørck Nielsen, <https://scholar.google.dk/citations?user=6cbaUQoAAAAJ&hl=en>

Performed experiments at large-scale facilities:

2022 – July – Facility: MAXIV (Lund)

Instrument: CoSAXS (SAXS)

Experiments: Drug solubility during digestion of commercially available milk products.

Contribution: Measurements, data treatment and fitting

2022 – December – Facility: MAVIV (Lund)

Instrument: CoSAXS (SAXS)

Experiments: Unveiling the mesophase phase transformations with exposure to endogenous gastrointestinal molecules (Part 1)

Contribution: Proposal co-author, sample preparation, measurements, data treatment and fitting.

2023 – February – Facility: ASTRID2 (Aarhus)

Instrument: AU-CD beamline (Synchrotron Radiation Circular Dichroism)

Experiments: Protein integrity after incubation with gastrointestinal molecules (Part 1)

Contribution: Proposal co-author, sample preparation, measurements, data treatment and fitting

2023 – March – Facility: MAXIV (Lund)

Instrument: CoSAXS (SAXS)

Experiments: Unveiling the mesophase phase transformations with exposure to endogenous gastrointestinal molecules (Part 2)

Contribution: Measurements, sample preparation, data treatment and fitting

2023 – March – Facility: ASTRID2 (Aarhus)

Instrument: AU-CD beamline (Synchrotron Radiation Circular Dichroism)

Experiments: Protein integrity after incubation with gastrointestinal molecules (Part 2)

Contribution: Proposal co-author, sample preparation, measurements, data treatment and fitting

2023 – April – Facility: MAXIV (Lund)

Instrument: CoSAXS (SAXS)

Experiments: Automated high-resolution phase diagram determination of monoolein/oleic acid mixtures using a pH titration and peristaltic pump setup

Contribution: Proposal co-author, sample preparation, measurements, data treatment and fitting

2023 – May – Facility: ANSTO (Lucas Heights)

Instrument: Bilby (SANS)

Experiments: 1) Silica nanoparticle GI corona formation. 2) Contrast-matched mesophase particles with GI molecules

Contribution: Measurements, sample preparation (2 only), data treatment and fitting

2023 – October – Facility: Elettra (Trieste)

Instrument: Austrian SAXS beamline at Elettra

Experiments: 1) Milk and plant juice digestion. 2) Digestion of dispersed monoolein with bile components and cyclodextrins.

Contribution: 1) Preparation, measurements. 2) Concept, preparation, and measurements.