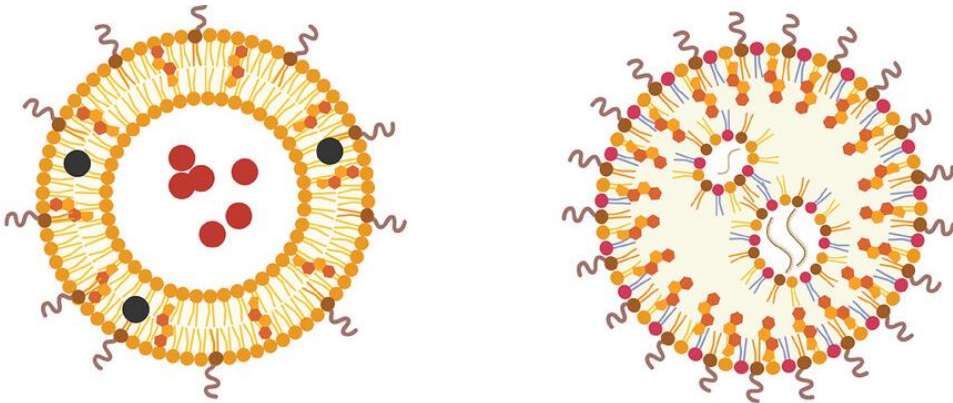


Investigating lipid order of liposomes and lipid nanoparticles with the LISO (Lipid State Observer)



Fernandes et al. "Emerging Strategies for Immunotherapy of Solid Tumors Using Lipid-Based Nanoparticles." Advanced Science 11.8 (2024): 2305769.



Supported by:

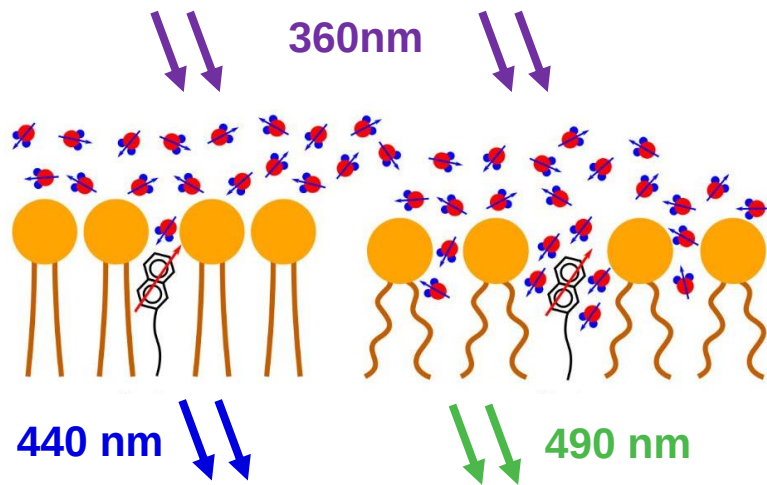


eXIST



Designing.
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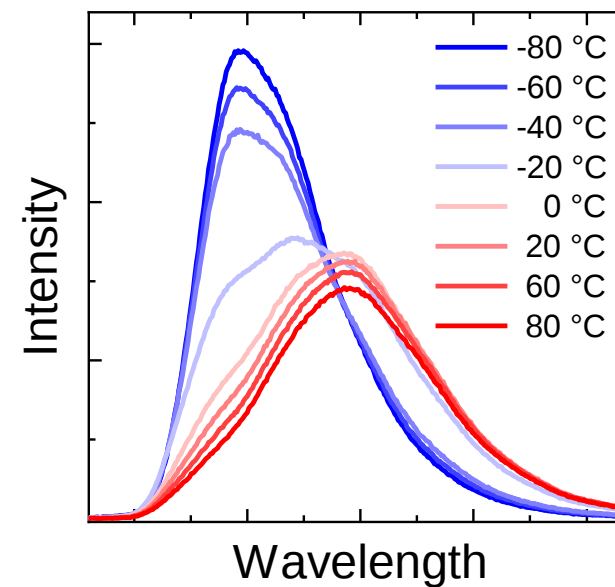
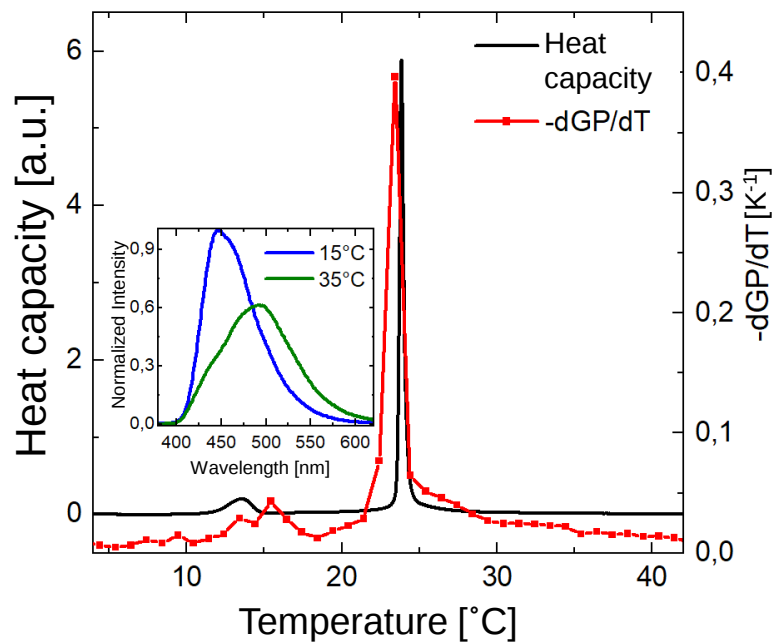
on the basis of a decision
by the German Bundestag

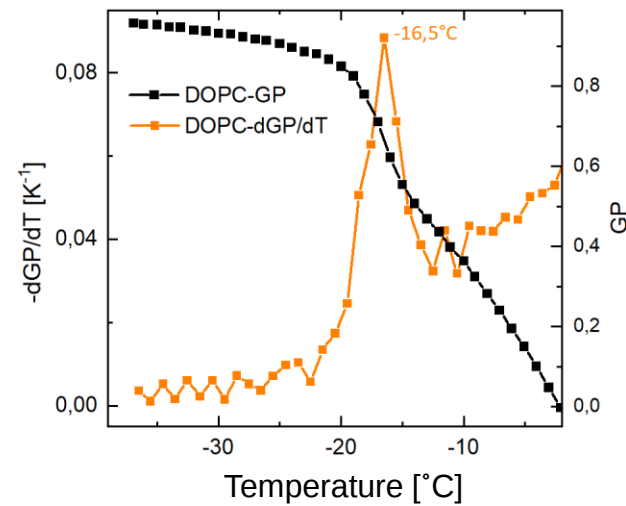
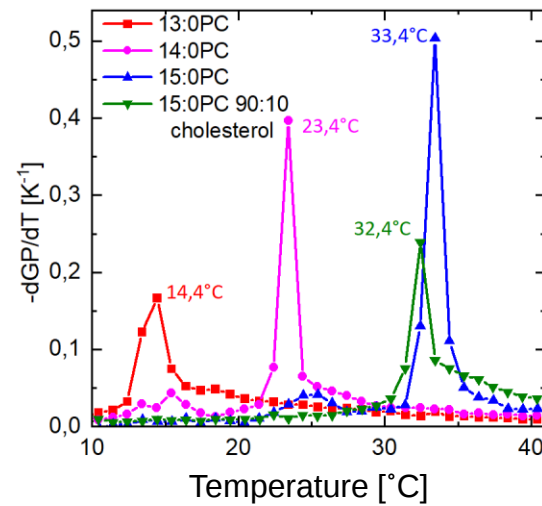
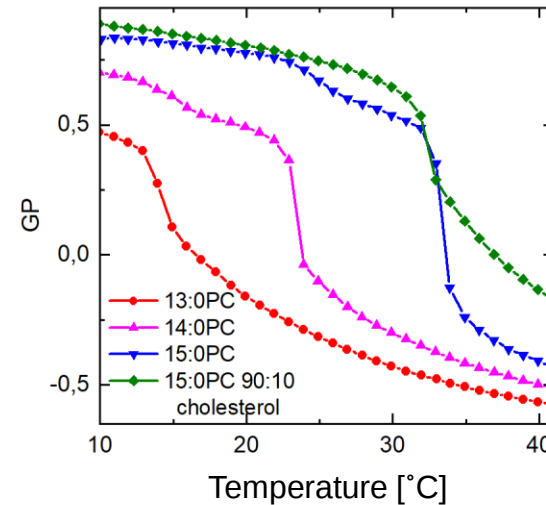
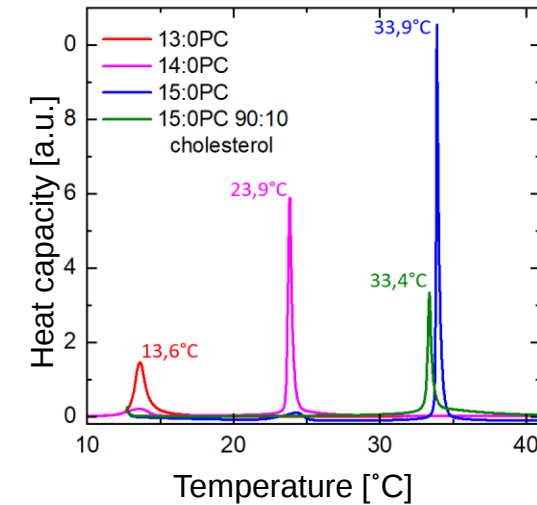


$$GP = \frac{I_{440nm} - I_{490nm}}{I_{440nm} + I_{490nm}}$$

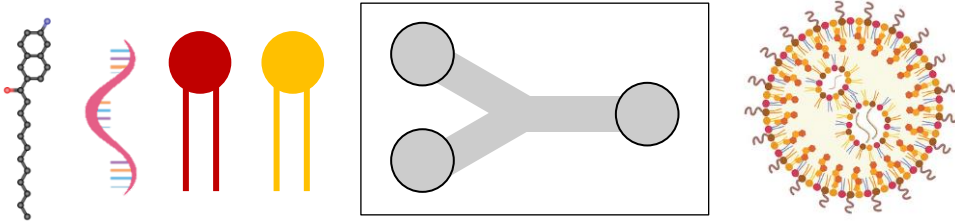
GP > 0: High lipid order

GP < 0: Low lipid order

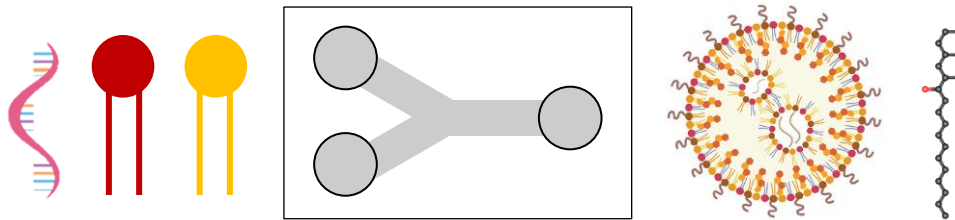




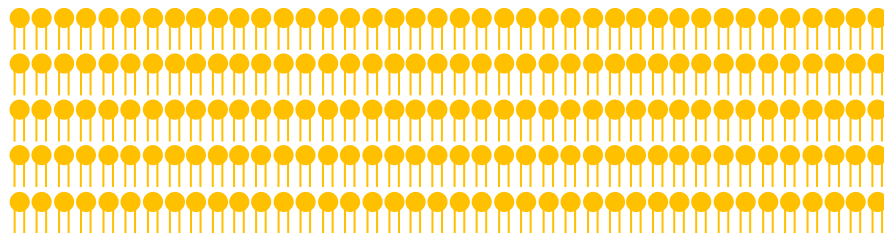
Laurdan in lipid phase **PRIOR** to synthesis



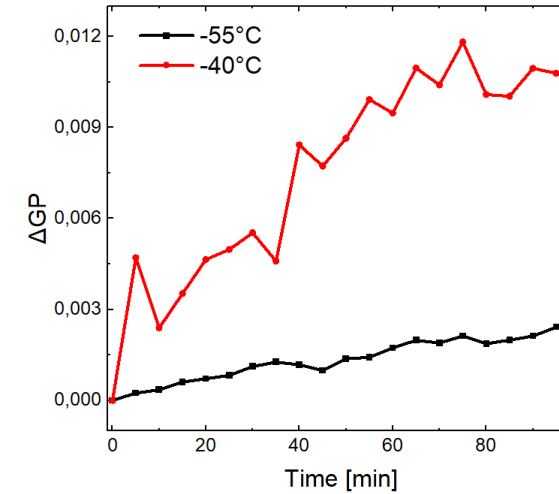
Incubation with Laurdan in DMSO **AFTER** synthesis



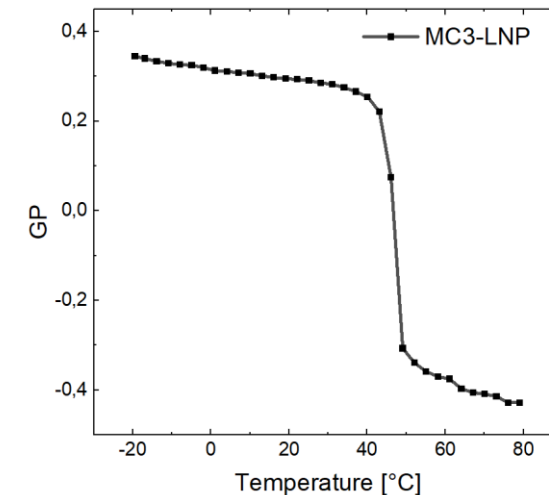
200 Lipids : 1 Laurdan

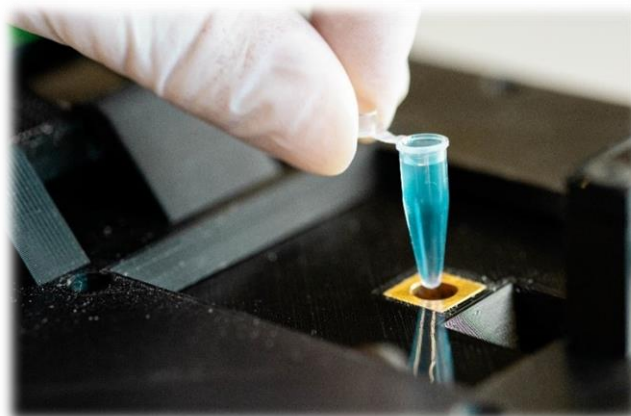


In-situ cold storage studies



Phase transition analysis





Join the LISO-Project any time as collaborator and get access to:

- Broad temperature range
- High temperature precision
- Easy handling and data analysis
- Small sample volume: 260 μ L
- Lipid concentration: 0.05 – 5 mg/mL

Get ready for the MVP in March 2025

- CE certified
- State of the art measurement software
- Improved housing, cooling system, sample holder, multiple fluorescent probes, ...

Supported by:



on the basis of a decision
by the German Bundestag

Get in Touch



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