

## Precipitation of lipid nanoparticles in microfluidic channels for pharmaceutical applications:

### Description:

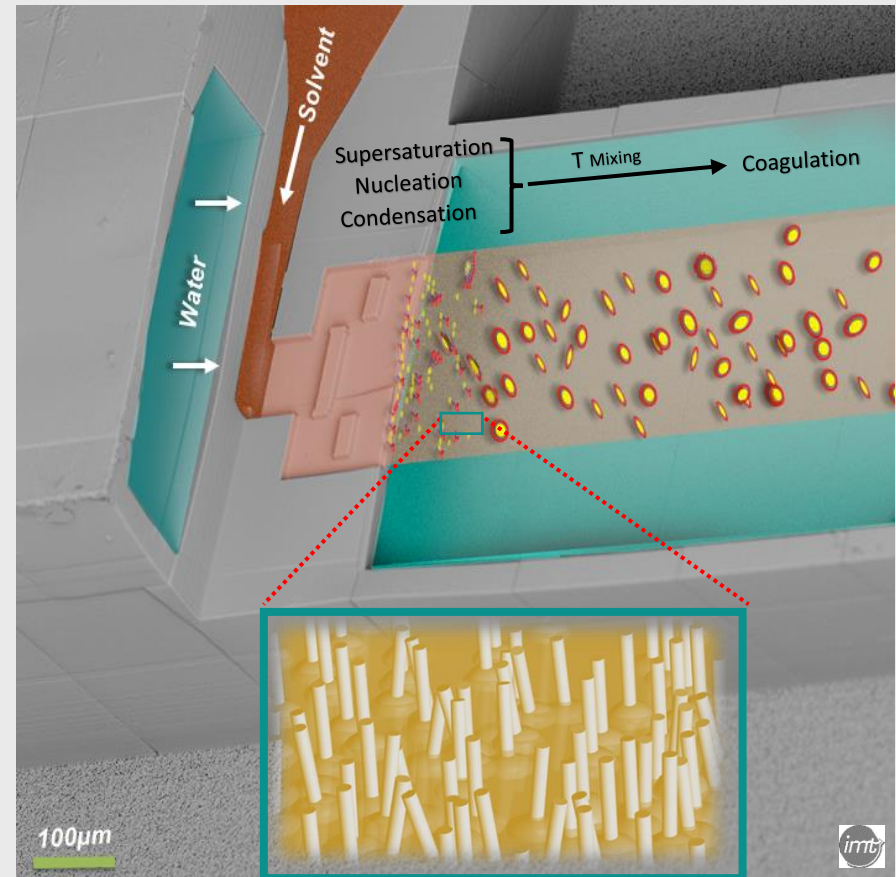
Lipid nanoparticles (LNPs) is a carrier for medical agents in the human body. Many modern active pharmaceutical ingredients have poor water solubility and strong lipophilic properties. As a result, the need for alternative dosage forms in order to apply these drugs appropriately is increasing. However, the dosage form can be improved by reducing the size of the drug particles, which results in fundamentally different biophysical properties compared to systems with macroparticles, and increases the specific surface area relevant for mass transfer.

This eligible person contributes to the project “Detected”, which is about integration of controllable microfluidic nanoparticle generation from the Institute for Microtechnology (IMT) at the TU Braunschweig with the FlowDLS developed at the Fraunhofer Institute for Micro technology and Microsystems (IMM) in Mainz.

you will perform a high-impact research in the field of Lipid nano particle and then you participate in experiment part that includes designing and fabrication a suitable microfluidic channels for generating a small mean particle sizes as well as with a narrow particle size distribution. The analysis, characterisations undoubtedly the next step.

### Qualifications

- Good motivation for research and experiment.
- The communication language is English.



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