



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Frau Dipl.-Phar. Enkeleda Meziu

Biopharmazie und Pharmazeutische Technologie
(Prof. Dr. Marc Schneider)

am

Mittwoch, 11. Juni 2025, 15:00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <https://bit.ly/3SJ6ST3>

Raum für die Prüfung: Gebäude C4.4; Raum 0.01

Thema der Dissertation:

Nanoparticle Interactions with Mucosal Barriers

Human pulmonary mucus represents a tenacious barrier to pulmonary drug administration. Designing effective inhalation therapies requires a detailed understanding of the mucus layer. This study investigates mucus structure, revealing a non-porous, heterogeneous, and composite architecture. A comparative analysis of Calu-3 *in vitro* mucus and human pulmonary *ex vivo* mucus - focusing on mucin macromolecules, small metabolites, and biophysical properties - provides valuable insights for the interpretation of data obtained using these models. Toxicity assessment of the impact of mucus modulation on the protective function of mucus emphasizes the importance of safety evaluations of therapy protocols involving mucus modulation.

Saarbrücken, 28. Mai 2025

Prof. Dr. Uli Kazmaier