

### Der Vorsitzende des Promotionsausschusses

#### EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

### Frau M.Sc. Simone Rosinus

Pharmazeutische und Medizinische Chemie (Prof. Dr. Christian Ducho)

am

# Dienstag, 05. August 2025, 14.00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <a href="http://bit.ly/3GPhEF2">http://bit.ly/3GPhEF2</a> Raum für die Prüfung: Gebäude: C 1.7, Hörsaal 0.08

#### Thema der Dissertation:

## **Lipophilically Functionalized Analogs of Muraymycin Nucleoside Antibiotics**

Muraymycins are a class of nucleoside antibiotics with promising activities against many Grampositive and selected Gram-negative bacteria. To address their structural complexity, simplified derivatives were designed and synthesized to explore important structural features and provide new perspectives for drug development. Special focus was placed on the central amino acid and the influence of the attached lipophilic side chain. In a structure-activity relationship (SAR) study, several potent derivatives were identified that may serve as lead structures in the future. Furthermore, the crucial role of the lipophilic side chain was re-evaluated.

Additionally, the tripartite synthetic approach was optimized to enable more efficient access to new derivatives.

Saarbrücken, 21. Juli 2025

Prof. Dr. Uli Kazmaier