



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Frau Apothekerin Aline Vollmer

Experimentelle und Klinische Pharmakologie und Toxikologie
(Prof. Dr. Markus R. Meyer)

am

Freitag, 5. September 2025, 16:00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <https://bit.ly/3GSYH4C>

Raum für die Prüfung: Gebäude: 48.5 (PZMS, Campus Homburg)

Raum: 00.01.31

Thema der Dissertation:

Novel Approaches in Clinical Toxicology Using High-Resolution MS/MS and Dual LC for Analyzing Biological Samples

Liquid chromatography (LC)-high-resolution tandem mass spectrometry (HRMS/MS) analysis allows the detection and quantification of harmful compounds and drugs across various biological samples. Utilizing a state-of-the-art Orbitrap-based mass spectrometer paired with a dual LC system, focus is placed on advanced sample preparation techniques and LC separation methods to establish sensitive, time-efficient, and more sustainable analytical approaches for the analysis of compounds with diverse physico-chemical properties in plasma, urine, or oral fluid. These novel approaches underline the flexibility and versatility of current LC-HRMS/MS systems and demonstrate usefulness in answering complex toxicological questions.

Saarbrücken, 22. August 2025

Prof. Dr.-Ing. Georg Frey