



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Herrn Apotheker Fabian Frankenfeld

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

am

Freitag, 31. Oktober 2025, 16:00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <http://bit.ly/4mYeloN>

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

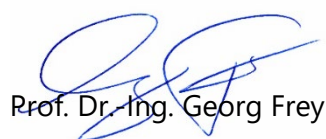
Raum: 00.01.31

Thema der Dissertation:

Possibilities and limitations of the sewage-based epidemiology approach in the context of clinical toxicology

Wastewater-based epidemiology enables the short- and long-term monitoring of (illicit) drug consumption in populations without the need for individual and invasive sampling. This thesis aimed to develop and validate new analytical methods for the surveillance of such compounds in wastewater using liquid chromatography-high-resolution mass spectrometry. Additionally, it explored biomarkers for the wastewater surveillance of new psychoactive compounds after elucidating their in vivo rat metabolism. The thesis highlights the potential of wastewater-based epidemiology in clinical toxicology, while also acknowledging its limitations.

Saarbrücken, 17. Oktober 2025



Prof. Dr.-Ing. Georg Frey