



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Frau M.Sc. Laxmi Neupane

Mikrobielle Naturstoffe
(Prof. Dr. Rolf Müller)

am

Montag, 22. September 2025, 13:00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <https://hips.saarland/promotion>

Raum für die Prüfung: HIPS, Gebäude E 8.1, Seminarraum EG 0.27

Thema der Dissertation:

**Isolation and characterization of myxobacteria from underexplored habitats
as source of new anti-infectives**

Myxobacteria are renowned for their capability to produce structurally diverse natural products with a wide range of biological activities. In this study, a total of 105 myxobacterial strains were isolated from ecologically diverse and underexplored habitats in Nepal and Germany. Interestingly, strain MCy14032 from Nepal appears to represent a new species (*Vitiosangium nepalensis* sp. nov.) and was discovered to produce a novel compound family called cyferinic acids. On the other hand, strain MCy13507 became an interesting isolate from Saarland to represent a novel species, proposed as *Myxococcus saraviensis* sp. nov. Furthermore, the characterization of HIPS in-house isolates as represented by strains MNa13366 and MSr11624 has demonstrated potential for novel natural product discovery. These findings highlight underexplored habitats as rich sources of novel myxobacteria with potential for new secondary metabolites.

Saarbrücken, 8. September 2025

Prof. Dr.-Ing. Georg Frey