

Das **Institut für Biochemie** lädt gemeinsam mit dem Ortsverband  
der **Gesellschaft Deutscher Chemiker** zu einem

## ***K o l l o q u i u m d e r G D C h***

**Großer Hörsaal des Instituts für Biochemie**  
Felix-Hausdorff-Str. 4, Greifswald

**Montag, 12. Juni 2023, 16 Uhr c.t.**

**Dr. Gerald Lackner**

Leibniz Institute for Natural Product Research and Infection Biology,  
Universität Jena

**spricht zum Thema:**

### ***Discovery, biosynthesis and biotechnology of unusual microbial coenzyme***

#### **Abstract:**

Organic cofactors, crucial for the catalytic activity of enzymes, play a vital role in diverse biochemical processes. Despite the ubiquity of many cofactors in nature, unusual cofactors are found within specific microorganisms. Coenzyme F<sub>420</sub>, a redox cofactor, participates in specialized metabolic processes like methanogenesis and antibiotic biosynthesis. Enzymes dependent on F<sub>420</sub> have attracted increasing interest for their potential application in biocatalysis. However, the biotechnological use of F<sub>420</sub> is hampered by the low availability of the cofactor. A prominent model that showcases the occurrence of coenzyme F<sub>420</sub> in unusual contexts is *Mycetohabitans rhizoxinica*, a bacterial symbiont of the phytopathogenic fungus *Rhizopus microsporus*.

The laboratory of Dr. Lackner efforts to discover novel unusual cofactors, elucidate their biochemistry and physiological functions, and facilitate their application in the realm of biotechnology.

Einladender  
Prof. Dr. Michael Lammers

Dr. Christian Fischer  
Vorsitzender des Ortsverbandes der GDCh