

# Symposium

The Biology and Biotechnological Application  
of Archaea

&

Re-Opening of the  
Archaea Fermentation Facility

26./27. September 2019



Thursday, 26<sup>th</sup> September 2019

1:30 pm Welcome Dina Grohmann

## SESSION I: MOLECULAR BIOLOGY OF ARCHAEA

1:35 pm Archaeal RNA stabilization mechanisms Lennart Randau (Marburg)

1:55 pm Life and death of ribosomes in archaea Sébastien Ferreira-Cerca (Regensburg)

2:15 pm Archaeal proteins and NMR Remco Sprangers (Regensburg)

2:35 pm Small but effective Ruth Schmitz-Streit (Kiel)

2:55 pm Coffee break

## SESSION II: ARCHAEAL CELL BIOLOGY

3:25 pm Vital role of the S-Layer from *S. solfataricus* revealed by CRISPR-mediated gene silencing Christa Schleper (Wien)

3:45 pm The archaellum: How archaea swim Sonja-Verena Albers (Freiburg)

4:05 pm Gas vesicle formation in Haloarchaea Felicitas Pfeifer (Darmstadt)

## RE-OPENING OF THE ARCHAEA FERMENTATION FACILITY

4:30 pm **KEYNOTE LECTURE/FESTVORTRAG** **KARL OTTO STETTER**  
**"Kultivierung des Unmöglichen" -  
Entwicklung des Biotechnikums an  
der Universität Regensburg**

5:05 pm Welcome by the Vice President of the University of Regensburg, the Dean of the Faculty of Biology and Preclinical Medicine and the head of the Department of Microbiology Prof. Dr. Nikolaus Korber  
Prof. Dr. Inga Neumann  
Prof. Dr. Dina Grohmann

5:45 pm Re-Opening and tour of the Archaea Fermentation Facility

6:45 pm Dinner (Lichthof Neubau Biologie)

### SESSION III: ARCHAEOAL METABOLISM AND ENZYMES

8:30 am	Energy conservation in methanogenic archaea	Uwe Deppenmeier (Bonn)
8:50 am	Aromatic compounds in archaea: rather a building block than a carbon and energy source?	Matthias Boll (Freiburg)
9:10 am	Diversity of autotrophic CO <sub>2</sub> fixation pathways in thermophiles	Ivan Berg (Münster)
9:30 am	Relationship of catalysis and active site loop dynamics in a ( $\beta\alpha$ ) <sub>8</sub> -barrel enzyme from <i>S. solfataricus</i>	Reinhard Sterner (Regensburg)
9:50 am	<i>Sulfolobus</i> - From genome to function and application	Bettina Siebers (Duisburg - Essen)
10:10 am	Scientific concept changes obtained with halophilic archaea	Jörg Soppa (Frankfurt)
10:30 am	<b>Coffee break</b>	

### SESSION IV: DIVERSITY OF ARCHAEA AND ARCHAEOAL VIRUSES

11:00 am	<b>KEYNOTE LECTURE</b> <b>On the archaeal origin of eukaryotes</b>	<b>THIJS ETTEMA</b> (Wageningen)
11:35 am	Archaeal parasites in the continental subsurface	Alexander Probst (Duisburg - Essen)
11:55 am	Archaeal virology: An archaeal plasmid goes viral	Susanne Erdmann (Bremen)
12:15 pm	From extremophiles to omnipresent microorganisms: archaea in the context of the (human) microbiome	Christine Moissl-Eichinger (Graz)
12:40 pm	Concluding Remarks	Dina Grohmann



Wishing you a happy and successful  
**Archaea centre  
Reopening  
Symposium 2019,**  
as well as continued success  
for all your research endeavours.

New England Biolabs  
– Enzymes & Reagents for:

Sample Preparation for **Next-Gen-Seq** **Genome Editing**  
Genomics **qPCR** **Amplification** **DNA** RNA Analysis  
Synthetic Biology **Cloning** **PCR** Modification  
Glycobiology **RNA** Cellular Analysis **Competent Cells**  
Protein Expression **Epigenetics** Gene Expression  
Nucleic Acid Purification **CRISPR/Cas**