## Scientific Program

## Monday, 29.7.2019 9:00-10:30 M. Hocek (Prague) Enzymatic synthesis of base-modified nucleic acids 10:30-11:00 Coffee break 11:00-12:30 P.I. Pradeepkumar (Mumbai) G-Quadruplexes (G4s): Structure, Function and Modulation 12:30-14:00 Lunch 14:00-15:30 **C. Kisker** (Würzburg) Insights into the nucleotide excision repair pathway 15:30-15:50 Coffee break Short talks 15:50-16:10 Renata Kasprzyk, University of Warsaw Development of binding and hydrolytic activity of mRNA cap-recognising proteins using fluorescent turn-on probes (P8) 16:10-16:30 **Elisabeth Mairhofer**, University of Innsbruck 3-Deazapurie nucleosides and their application in mechanistic ribozyme studies (P33) 16:30-16:50 Fabian Lang, Karlsruhe Institute of Technology Fluorescent probes for the detection of endogenous miRNA in human tissue (P15) 16:50-17:10 Erika Schaudy, University of Vienna Enzymatic reactions on high-density DNA microarrays – towards conversion to their RNA complements (P23) 17:10-17:30 **Jikang Zhu**, University of Greifswald Design of a hairpin ribozyme derived spliceozyme (P29)

## Tuesday, 30.7.2019

| 9:00-10:30  | R. Micura (Innsbruck)                              |
|-------------|--|
|             | Elucidation of ribozyme folding and mechanism (L4) |
| 10:30-11:00 | Coffee break                                       |
| 11:00-12:30 | G. Mayer (Bonn)                                    |

Expanding the chemical diversity of nucleic acid libraries for in vitro selection

| 12:30-14:00   | Lunch   |
|---|---|
| 14:00-15:30   | C. Beisel (Würzburg)  |
|   | CRISPR biology and technologies   |
| 15:30-15:50   | Coffee break  |
| 15:30-18:00   | Poster session I (even numbers)   |
|   |   |
| Wednesday, 31.7.2019  |   |
| 9:00-10:30  | S.G. Srivatsan (Pune)   |
|   | Probing Mood (Structure) Swings of Non-Canonical Nucleic Acid Motifs  |
| 10:30-11:00   | Coffee break  |
| 11:00-12:00   | J. Seibel (Würzburg)  |
|   | Bioorthogonal conjugation reactions with biopolymers  |
| 12:00-13:30   | Lunch   |
| 13:30-14:15   | K&A Presentation of DNA/RNA Synthesizer   |
| 14:30-16:00   | Workshops   |
|   |   |
|   |   |
| Thursday, 1.8   | 3.2019  |
| Thursday, 1.8 9:00-10:30  | B.2019  HA. Wagenknecht (Karlsruhe)   |
|   |   |
| 9:00-10:30  | HA. Wagenknecht (Karlsruhe)   |
| 9:00-10:30<br>10:30-11:00   | HA. Wagenknecht (Karlsruhe)  Nucleic acid chemistry with light  |
| 9:00-10:30<br>10:30-11:00   | HA. Wagenknecht (Karlsruhe)  Nucleic acid chemistry with light  Coffee break  |
| 9:00-10:30<br>10:30-11:00   | HA. Wagenknecht (Karlsruhe)  Nucleic acid chemistry with light  Coffee break  C. Kreutz (Innsbruck)  Structure and dynamics of nucleic acids by solution NMR spectroscopy   |
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## Short talks

12:40-13:00 Concluding Remarks

11:00-11:20 **Dhamodharan Venugopal**, Okinawa Institute of Science and Technology Mutational and kinetic profiling of a deoxyribozyme by high-throughput sequencing (P44) Raphael Plangger, University of Innsbruck 11:20-11:40 A secondary structure equilibrium in the group II intron domain 6 for reaction pathway selection (P20) 11:40-12:00 Satendra Kumar, IIT Bombay Synthesis and biophysical evaluation of G-quadruplex stabilizing and i-motif destabilizing ligands (P14) 12:00-12:20 **Ivana Ivancova**, Charles University in Prague Squaramate-modified nucleotides and DNA for specific cross-linking with Lyscontaining peptides and proteins (P13) 12:20-12:40 **Jielin Chen**, University of Bordeaux How to design high-activity G-quadruplex/hemin DNAzymes (P1)