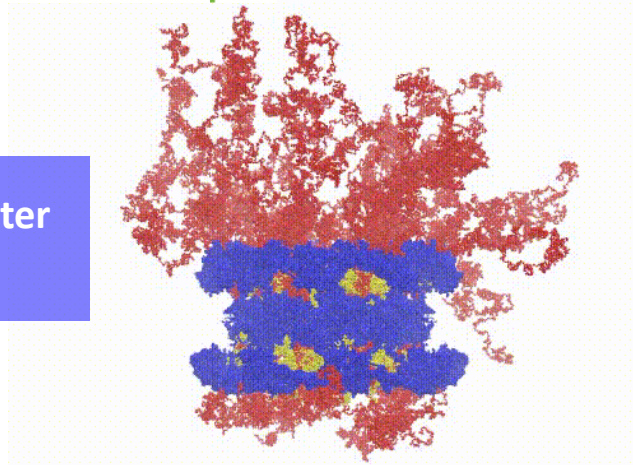
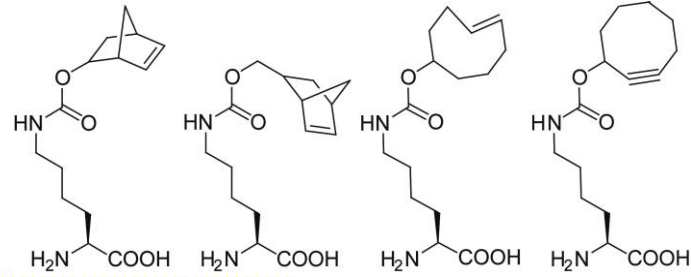
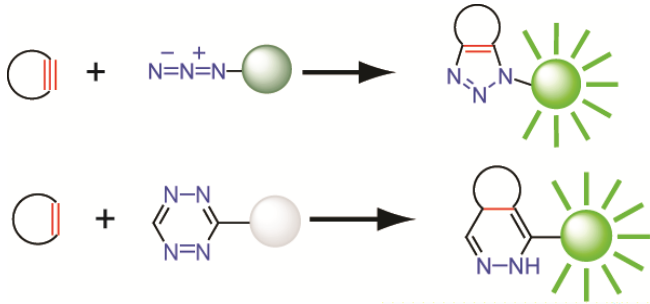


# Master Module 14: Chemical Biology & Molecular Biophysics

Responsible person: Prof. Dr. Edward Lemke (Lemke-teaching@uni-mainz.de)

Two fully biocompatible chemical labeling reactions in biology:  
Azide and Tetrazine ligation (highly fluorogenic)



Offered winter semester  
Language: English

## Part A: practical course

Exemplarily, students work on problems from chemistry and/or biophysics of IDPs and/or other biopolymers. The problems will be adjusted to stay contemporary, examples are:

- Time resolved single molecule spectroscopy
- New Chemistries for biopolymers inside cells.
- Fluorescence technologies.

## Part B: Scientific project (protocol & presentation)

Projects on current research topics, especially in the field of biopolymers.

## Part A+C: Lectures and Seminar (presentation & oral exam)

Exemplarily, students work on problems from synthetic biophysics of biopolymers:

- Time resolved multiparameter single molecule spectroscopy
- Multiparameter PALM/STORM
- Genetic code expansion
- Chemistry and labeling of biopolymers/IDPs