

## Topics for Bachelor Theses

1. Synthesis of triphos ligands for hydrogenation reactions with base metals (Marko Hapke, MH)
2. Synthesis of cyanotriynes and their utilization in [2+2+2] cycloaddition reactions (MH)
3. Preparation of diastereomeric atropisomers by transition metal-catalyzed [2+2+2] cyclization reactions (MH)
4. Evaluation of novel CpCo(I)-complexes for [2+2+2] cycloaddition reactions (MH)
5. Ind\*Ir(COD) in C-H functionalization reactions (MH)
6. Synthesis of novel N-heterocyclic carbenes (NHC) ligands for catalytic applications (MH)
7. Synthesis of BIAN ligands (Christoph Topf, CT)
8. Reduction of BIAN ligands and their application for novel ligand synthesis (CT)
9. Preparation of manganese (Mn)-based hydrogenation catalysts (CT)
10. Mo-BIAN complexes: synthesis and catalysis (CT)
11. Synthesis of heterogeneous N-doped Mn catalysts (CT)
12. Application of the pyrolytically activated Mn-corroles (CT)
13. Aerobic oxidation of primary alcohols (CT)