

Patrick Schühle leads an independent junior research group at the Institute for Chemical Reaction Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany.

Patrick studied **Biotechnology** and **Chemical Engineering** and completed his PhD on the development of heterogeneous catalysts and chemical reactors for the synthesis of **green methanol**.

In 2021, he became head of the research group *“Catalytic Systems for Chemical Energy Storage,”* where he broadened his focus to the **sustainable production of C1 molecules and derivatives**, as well as their application as **hydrogen and energy carriers**.

Within his **BMFTR junior research group project FAIR-H2** (funded by the German Ministry of Research, Technology and Space), Patrick is developing a **new route for synthesizing methanol, hydrogen, and synthesis gas from biomass residues under mild process conditions**. In addition, he is investigating **dimethyl ether (DME)** and **polyoxymethylene ethers (POMEs)** as hydrogen transport vectors and is working on the development of **advanced catalysts** for the synthesis and reforming of these compounds.