

## Workshop on „Life-Inspired Functional Assembly”

The working groups of Prof. Xin Huang (Harbin Institute of Technology, China; [xinhuang@hit.edu.cn](mailto:xinhuang@hit.edu.cn)) and Dr. Dietmar Appelhans (Leibniz-Institut für Polymerforschung Dresden, Germany; [applhans@ipfdd.de](mailto:applhans@ipfdd.de)) organize a 2 days workshop for exchanging ideas, starting new collaborations, or to becoming inspired for new research fields (01.10.-02.10.2024) in Dresden.

The emerging field of life-inspired functionalized assembly is considered to be one of the great promises for future chemical biotechnology. This new technique towards biology is greatly inspired by the large success of synthetic chemistry to design and fabricate biomimetic systems with specific biological and medical functions. Thus, biology is the driving force to unify multiple disciplines under the scope of life science (not limited to biology, chemistry, physics, medicines etc.). With this, there are huge possibilities to validate the complex biohybrid systems in the research fields of synthetic biology, therapeutic organelles, disease treatment, systems biology, sensing, diagnostics, and tissue engineering. Moreover, there is a great interest in fabrication of complex multicompartamental architecture and their biological functions for the design of minimalist synthetic cells (with feedback-loops, limited autonomous reactions and energy conversion etc.), nanobots and other assembled systems.