

GRK 2516 Soft Matter Seminar

Nov. 25, 2021 at 10:15 a.m.
Newton room

Research seminar of the DFG Research Training Group GRK 2516 (<https://grk2516.uni-mainz.de>).

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Statistics-based optimization strategies for anodic C,C cross-coupling

The optimization of electro-organic reactions poses a challenge due to the various parameters involved. Quite often those parameters are not independent from each other, leading the experimental scientist using linear approaches into an optimization loophole. I report a strategy for the optimization of the anodic oxidative dehydrogenative C,C cross-coupling reactions for the synthesis of biphenols and biaryles based on Design of Experiments (DoE), which overcomes the drawbacks of linear optimization approaches. These strategies are demonstrated on the optimization of electrochemical flow, as well as batch processes, but are universally applicable to (multi)-target optimization.