

Directed Evolution of Materials

Initiative: "Experiment!" (beendet)

Ausschreibung: Explorative Phase

Bewilligung: 01.03.2021

Laufzeit: 1 Jahre 6 Monate

Projekt-Website: <https://www.leibniz-inm.de/en/research/research-groups/materials-synthetic-biology/>

Nature has created materials featuring fantastic properties such as high load-bearing structures in plants down to nanometer-sized functional and adaptive materials conferring properties essential for life. A priori, nature did not have a synthesis protocol to create all those materials - but it used a very effective strategy to develop such a protocol, it used natural evolution. This project will try to evolve materials towards desired properties. Based on the multi-parallel synthesis of variants of a material (mutagenesis), we will evaluate methods for the rapid identification of materials with desired features (selection). We expect this approach to yield desired materials as well as synthesis protocols for their production.

Projektbeteiligte

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