

# Stanford

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## Nils Aversch

Postdoctoral Research Fellow, Civil and Environmental Engineering

### Bio

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#### BIO

Nils is a Postdoc in the Criddle Group, funded by the Stanford Natural Gas Initiative. As member of the Center for the Utilization of Biological Engineering in Space (CUBES) he focuses on engineering gas-fermenting microbes towards production of aromatic polyesters. Before joining Stanford, Nils was task lead of Synthetic Biology with Universities Space Research Association as an Associate Scientist at NASA Ames Research Center.

Nils received his PhD in 2016 from the University of Queensland in Brisbane, Australia, in Metabolic Engineering working at the Advanced Water Management Centre. He holds an engineer's degree (Dipl. Ing.) in Biochemical Engineering, from the Technical University of Dortmund, Germany, having graduated in 2012.

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University Of Queensland (2016)
- Diplom, Technische Universitat Dortmund (2012)

#### LINKS

- Center for the Utilization of Biological Engineering in Space: <http://cubes.space/>

### Research & Scholarship

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#### PROJECTS

- Production of high-strength bio-polymers from next-generation C1-feedstocks - Stanford University / CUBES (December 17, 2018)

#### LAB AFFILIATIONS

- Craig Criddle (12/17/2018)

### Publications

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#### PUBLICATIONS

- **Metabolic engineering of *Bacillus subtilis* for production of para-aminobenzoic acid - unexpected importance of carbon source is an advantage for space application** *MICROBIAL BIOTECHNOLOGY*  
Aversch, N. H., Rothschild, L. J.  
2019; 12 (4): 703–14
- **Metabolic Network Analysis of Microbial Methane Utilization for Biomass Formation and Upgrading to Bio-Fuels** *FRONTIERS IN ENERGY RESEARCH*  
Aversch, N. H., Kracke, F.  
2018; 6