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Submission of a protocol to Journal of Visualized Experiments

'A toolkit to enable hydrocarbon conversion in aqueous environments'

by Eva K. Brinkman, Kira Schipper, Nadine Bongaerts, Mathias J. Voges, Alessandro Abate,
S. Aljoscha Wahl

Dear Mrs. Meghan Berryman,

Pollution of the environment from alkanes present in e.g. oil sand tailing is a dangerous environmental risk. In our publication we describe a first step towards a biotechnological approach for alkane degradation using synthetic biology.

Several plasmids (BioBricks) have been constructed and characterized. The relevant protocols arising from our research are:

- Resting cell assay (alkane uptake and oxidation);
- Enzyme activity measurements;
- Promoter activity assay.

Additionally, we used modelling for the evaluation of the promoter activity measurements.

We think that our approaches and findings are relevant for the readers of the Journal of Visualized Experiments.

With kind regards from Delft,

Aljoscha Wahl