

# Curriculum vitae with track record

## Personal information

First name, Surname:	Nicole, Dopffel (born Klüglein)		
Date of birth:	20.09.1985	Sex:	female
Nationality:	German		
Website:	<a href="https://www.norceresearch.no/personer/nicole-dopffel">https://www.norceresearch.no/personer/nicole-dopffel</a>		

## Education

Year	Faculty/department - University/institution - Country
25.03.2014	Ph.D. in the group of Prof. Andreas Kappler - Faculty of Geosciences, University of Tübingen, Germany Title: "Bacterial Fe(III) Reduction and Fe(II) oxidation – relevance for magnetite formation in the environment and the mechanism of nitrate-dependent Fe(II) oxidation" Grade: "Magna cum laude"
2010	Diploma in the group of Prof. Hans-Peter Fiedler - Faculty of Biology, University of Tübingen, Germany Title: "Characterization of marine Actinomycetes originating from the Mariana Trench and isolation of produced secondary metabolites" Grade: 1.0 (Scale: 1.0 very good – 5.0 not sufficient)
2005-2010	Studies of Biology, University of Tübingen, Germany Major subjects: Microbiology, Virology, Immunology Grade: 1.0 (Scale: 1.0 very good – 5.0 not sufficient)

## Positions - current and previous

Year	Job title – Employer - Country
2019-	Senior Researcher, Energy Department, NORCE – Norwegian Research Center, Norway
2014-2019	Research Scientist, Department of White Biotechnology R&D, BASF SE, Germany

## Project management experience

Year	Project owner - Project - Role - Funder
2018-2019	Project: Inhibition of anaerobic biofilms - Project manager; internal funding of BASF SE
2014-2019	Project: Microbial enhanced oil recovery MEOR – Work package leader of microbiology; funding from Wintershall GmbH

## Supervision of students

Master's students	Ph.D. students	University/institution - Country
	1	Supervised at BASF; official dissertation at Faculty of Physics, Technische Universität Berlin, Germany
1		Supervised at BASF; Institute for Applied Biotechnology, Hochschule Biberach, Germany
1 Bachelor		Faculty of Biology, University of Tübingen, Germany

## Other relevant professional experiences

(E.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees, major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Committees and Memberships
2020	Founder and organizer of “Norce Energy Hydrogen Network” and member of EnergiomstellingVEST initiative
2019	Scientific committee of ISMOS (International Symposium on Applied Microbiology and Molecular Biology in Oil Systems) conference; evaluation of abstracts, contacting & inviting speakers & session chair; ~180 participants
	Member, VAAM – Vereinigung für Allgemeine und Angewandte Mikrobiologie
	Member, EAG – European Association of Geochemistry
2018	Session chair for MIC session at NACE conference & expo/ ~200 participants/Italy
	<b>Major collaborations</b>
2018-2019	“Metagenomic sequencing of oil fields” with Prof. Dirk Schulze-Makuch, University of Duisburg-Essen, Faculty of Chemistry
2015-2019	“MicroFluidics for MEOR” with Prof. Leonhard Ganzer, University of Clausthal, Institute of Petroleum Engineering
2014	“Abiotic side effects of nitrate-dependent Fe(II)-oxidizing bacteria” with Prof. Flynn Picardal, University of Indiana and Prof. Christian Zwiener, University of Tübingen
	<b>Field work</b>
2014-2019	Organization of 4 field sampling campaigns at oil fields in Germany; organization of 2-year field microbial monitoring program
2011	Member of a 2-day field sampling trip in the Czech Republic
	<b>Workshops</b>

2014-2018	Co-organized 4 internal 1-day workshops on project results and further plans (MEOR) (~25 participants)
	<b>Reviewed Paper</b>
22015-019	1 paper for PLOS-ONE, 2 papers for Petroleum Science and Engineering
	<b>Additional training</b>
11.05.2016	Training course SPE international: "Corrosion management and microbially influenced corrosion"
06-07.03.2015	2-day training course BASF: "Competent leadership of yourself and others"
12.02.2015	Training course BASF: "Communication and Teamwork"
27.11.2014	Training course BASF: "Giving good feedback as a leader"
	<b>Additional supervision</b>
2014-2019	Supervision of all fluorescent microscope within BASF, Biotechnology, Ludwigshafen; practical and theoretical training of personnel on the topic of microbiology
10.2008-02.2009	Supervision of student practical course "Basic Microbiology"
04.-07.2008	Supervision of student practical course "Botany"

## Early achievements track record

### 1) Overall publications:

Total number of publications: 22

Since the start of my publication record in 2012, I have published 22 publications (11 peer-reviewed publications and 11 industry, non-peer-reviewed, publications). From these, 10 are first-author publications and 3 second-author publications. My work has been cited 435 times according to research gate (status 21.08.2020).

### 2) Selected five major publications:

1. **Dopffel**, N., Kögler, F., H. Hartmann, P.-I. Costea, Herold, A., Alkan, H.; International Biodeterioration & Biodegradation, 135, 71-79, (2018): Microbial induced mineral precipitations during nitrate amendment for souring control in reservoirs
2. Krüger, M., **Dopffel**, N., Sitte, J., Mahler, E., Mukherjee, S., Herold, A., Alkan, H.; Journal of Petroleum Science and Engineering pp. 1192-1201 (2016): "Sampling for MEOR: Comparison of Surface and Subsurface Sampling and Its Impact on Field Applications"
3. Byrne, J. & **Klueglein** N., Pearce, C., Rosso, K., Appel, E & Kappler, A.; Science, 347/6229 (2015): Redox cycling of Fe (II) and Fe (III) in magnetite by Fe-metabolizing bacteria.
4. **Klueglein**, N., Loesekann-Behrens, T., Obst, M. Behrens, S., Appel, E.& Kappler, A.; Geomicrobiology Journal, 30 (2013): Magnetite formation by a novel Fe(III)-reducing *Geothrix fermentans* strain HradG1 isolated from an hydrocarbon-contaminated sediment with increased magnetic susceptibility.

5. **Klueglein, N. & Kappler, A.**; *Geobiology*,11(2), (2013): Abiotic oxidation of Fe(II) by reactive nitrogen species in cultures of nitrate-reducing Fe(II)-oxidizers – questioning the existence of enzymatic Fe(II) oxidation.

### **3) Selected examples for industry conference papers (this always includes publication of a non-reviewed paper + presentation at the conference):**

1. SPE Oilfield Corrosion Conference Aberdeen 2018: “Water Survey for Effective Souring and Corrosion Management in a German Onshore Production/Injection Plant” SPE-190889-MS Nicole **Dopffel**, Sabrina Reimann, Wolfgang Jelinek, Torben Sander, Alexander Steigerwald, Hakan Alkan
2. EAGE Symposium EOR Stavanger 2017: “Dynamic Screening for *Microbial Enhanced Oil Recovery* (MEOR)” Felix Kögler, Nicole **Dopffel**, Eva Mahler, Hakan Alkan
3. SPE Improved Oil Recovery Conference Tulsa 2016: “Understanding selective plugging and biofilm formation of a halophilic bacterial community for MEOR application” SPE-179620-MS Nicole **Klüglein**, Eva Mahler, Felix Kögler, Andrea Herold, Justus Scholz, Irini J. Adaktylou, Marina Wüstner, Hakan Alkan
4. SPE Oilfield Corrosion Conference Aberdeen 2016: “Testing of two H<sub>2</sub>S inhibitors for application in a MEOR field pilot in Germany” SPE-179931-MS Nicole **Dopffel**, Hakan Alkan, Eva Mahler, Andrea Herold, Roger Sonwa, Stephan Hatscher

### **4) Patent applications:**

- INV0078889 2015 (EP15199292) “Composition and method for inhibition of SRB in MEOR” Nicole **Klüglein**, Eva Mahler, Hakan Alkan, Andrea Herold
- 182060EP01/19177585.7-1116 “Biofilm inhibitor” Nicole **Dopffel**, Frank Bachmann, Sonia Meyer, Bernd Leonhardt, Andrea Herold

### **5) Invited presentations (Invitation was given by session host to contribute to the specific session)**

- ISMOS (International Symposium on Applied Microbiology and Molecular Biology in Oil Systems) conference San Diego 2017: “MEOR- Molecular and microbiological methods for field trial analysis”
- PEA EOR Forum Aberdeen 2016: “MEOR Reloaded: from lab to the field”
- Goldschmidt conference Florence 2013: “Abiotic reactions of nitrite during microbial Fe(II) oxidation and their influence on cell-encrustation of nitrate-reducers”

### **6) Experiences from major research communication, dissemination or outreach activities:**

- 2018 Organization and 2<sup>nd</sup> place in BASF internal microcopy & photo contest
- 2018 Planning and design of building foyer for visitors or the Biotechnology building, BASF Ludwigshafen
- BASF GB Newsletter 06.2016: „Microbial enhanced oil recovery (MEOR) – BASF and Wintershall collaborate to innovate”
- Wintershall internal Newsletter 09.2014: “Kleine Helfer mit großen Effekten”
- Wintershall Newsletter 09.2014: „How microbes can help to recover more oil: „MEOR Studies“– a Wintershall/BASF project
- Cover picture of the month - Applied Environmental Microbiology Journal February 2014