

Mie Andersen

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Danish citizen, born 10 December 1985.

Education and career:

- 2017 – : Group leader (*Habilitandin*), TU Munich, Germany.
Mentor: Prof. Karsten Reuter.
- 2014 – 2017: Alexander von Humboldt Fellow / postdoc, TU Munich, Germany.
Host: Prof. Karsten Reuter.
- 2014: PhD degree in nanoscience, Aarhus University, Denmark.
Supervisor: Prof. Bjørk Hammer.
PhD project: *Adsorption phenomena on aromatic carbon*.
- 2013: Research stay (6 months), CEMES-CNRS, Toulouse, France.
Host: Dr. Xavier Bouju.
Project: *Simulation of STM images using the ESQC code*.
- 2012: Master's degree in nanoscience, Aarhus University, Denmark.
Specialization in physics and materials science.
- 2009: Study and research stay (4 months), University of Wisconsin-Madison, USA.
- 2009: Bachelor's degree in nanoscience, Aarhus University, Denmark.

Fellowships, grants and awards:

- 2019: Computing grant on Jülich's JUWELS with Prof. Karsten Reuter.
Volume: 10 mil. core hours.
- 2018: Gerhard Ertl Young Investigator Award for excellence of research in surface science.
- 2017: MPG fellowship for distinguished visiting scientists.
Host: Prof. Matthias Scheffler.
Research visits to the Theory Department of the Fritz Haber Institute, Berlin, Germany.
- 2016: Computing grant on Jülich's JURECA with Prof. Karsten Reuter.
Volume: 4 mil. core hours.
- 2015 – 2017: Alexander von Humboldt postdoctoral fellowship.
- 2013: Various grants for financing stay at CEMES-CNRS, Toulouse, France.
Volume: Dkk 30.000,- (total from 3 grants).
- 2009: Various grants for financing stay at University of Wisconsin-Madison, USA.
Volume: Dkk 28.500,- (total from 5 grants).

Scientific publications:

27 articles published in international peer-reviewed journals.

Total number of citations (Google Scholar): 1922

H-index (Google Scholar): 15

Selected invited talks (from a total of 16 invited talks):

- 2019: *Scaling relations and beyond for kinetic Monte Carlo models in heterogeneous catalysis.*
DPG Spring Meeting, Regensburg, Germany.
- 2019: *Liquid metal catalysis: role of liquid copper in high-quality graphene synthesis.*
Open Science Seminar, Aarhus University, Denmark.
- 2018: *Scaling-relation-based kinetic Monte Carlo modelling of syngas reactions on stepped metals.*
ECOSS34, Aarhus, Denmark.
- 2018: *Multi-scale simulation methods.*
Hands-On DFT and Beyond Workshop, Peking University, Beijing, China
- 2016: *First-principles microkinetic modeling of bifunctional catalysts.*
European Physical Society: Condensed Matter Division, Groningen, The Netherlands.
- 2016: *Analyzing the Case for Bifunctional Catalysis.*
American Chemical Society National Meeting, San Diego, USA.
- 2015: *Graphene on metal surfaces and its efficiency as a coating material.*
BASF, Ludwigshafen, Germany.

Teaching activities:

- 2018: Design and teaching of new course: “Advanced Laboratory Methods: Physical Chemistry” (Bachelor level), TU Munich, Germany.
- 2017 – 2018: Lectures: “Advanced electronic structure” (Master level), TU Munich, Germany.
- 2017: Hands-on sessions in “European Summer School on Multiscale Modelling in Chemical Reaction Engineering”, Porto Carras, Halkidiki, Greece.
- 2017: Lectures and hands-on sessions in “Topical Summer School on Theoretical and Computation Chemistry: Kinetic Monte Carlo Modelling”, Academia Sinica, National Taiwan University of Science and Technology, Taipei, Taiwan.
- 2016: Hands-on sessions in “College on Multiscale Computational Modeling of Materials for Energy Applications”, ICTP, Trieste, Italy.
- 2015 – 2019: Lectures: “Molecular catalysis and kinetics” (Master level), TU Munich, Germany.
- 2014 – 2015: Tutoring: “Quantum Chemistry: Electronic structure”, “Measurement, analysis & simulation” (Master level), TU Munich, Germany.
- 2010 – 2014: Tutoring: Undergraduate courses in physics, Aarhus University, Denmark.

Supervision of students:

- Currently: 1 postdoc, 3 PhD students, 1 Master's student.
- Previously: 1 visiting PhD student, 1 Master's student, 3 visiting Master's students, 1 Bachelor's student, 3 project (*Forschungspraktikum*) students.

Languages:

Danish: Mother tongue

English: Fluent

French: High level

German: Advanced (CEFR level B2 certificate from Goethe Institute, 2015)