

## Claus Hélix-Nielsen

Department of Environmental Engineering, Technical University of Denmark  
DK2800 Kgs. Lyngby, Denmark

Tel (office): +45 45 25 22 28

E-mail: [clhe@env.dtu.dk](mailto:clhe@env.dtu.dk)

Tel (direct): +45 42 550 750

<http://www.env.dtu.dk/english>

Fax: +45 45 93 16 69

<http://www.env.dtu.dk/english/research/wt>



<https://www.linkedin.com/in/claus-h%C3%A9lix-nielsen-337b028/>



<https://orcid.org/0000-0002-9392-7133>



### Personal:

1964

Born July 25 in Lemvig, Denmark, Danish citizen

Home address: Dr. Priemes Vej 16, 1.tv., DK1854 Frederiksberg, Denmark

### Academic qualifications:

2014

Diploma: Leading the Virtual Company, Harvard Business School, USA

2001

Diploma in education, Faculty of Science, University of Copenhagen, Denmark

1993

Ph.D., Department of Physics, Technical University of Denmark

1990

M. Sc. Eng., Department of Physics, Technical University of Denmark

1983

General Certificate, Lemvig High School, Lemvig, Denmark

### Academic positions held:

2019-

Professor and Head Department, Department of Environmental Engineering, Technical University of Denmark

2014-

Head of Laboratory for Water Biophysics and Membrane Processes, Faculty of Chemistry and Chemical Engineering (FKKT), University of Maribor, Slovenia

2018-2019

Professor and Head of Section in Water Technology and Innovation, Department of Environmental Engineering, Technical University of Denmark

2015-2019

Head of Industrial Innovation, Department of Environmental Engineering, Technical University of Denmark

2014-2018

Associate professor, Department of Environmental Engineering, Technical University of Denmark

2007-2014

Associate research professor, Department of Physics, Technical University of Denmark

2003-2007

Associate research professor, Quantum Protein Centre, Technical University of Denmark

2000-2003

Assistant research professor, August Krogh Institute, University of Copenhagen, Denmark

1995-2000

Postdoctoral fellow, Weill Medical College, Cornell University, New York, USA

1994-1995

Postdoctoral fellow, August Krogh Institute, University of Copenhagen, Denmark

1993-1994

Research assistant, Royal Veterinary and Agricultural University, Copenhagen, Denmark

### Industrial, Managerial and Consulting Experience:

2020-

Member of *Miljøpolitisk Netværk - Samuelsen*

2020-

Board Member, INNITI ApS, cvr 38802380

2019-

Advisory Board Member, The Danish Water Cluster -Den Danske Vandklynge

2019-

Member of *Lederskab – reflekterende ledelsespraktikere* ([www.lederskab.dk](http://www.lederskab.dk))

2019-

Program Committee Member, International Food Contest Water 2020 Congress

2019-

Board member in the Danish Eco-Innovation Program MUDP, appointed by the former Danish Minister for Higher Education and Science Tommy Ahlers

2018-

Advisory board Member, Aquaporin Group

2019-2020

Advisory Board Member, Inno-MT, appointed by Inno-MT Chairman Anders Eldrup

2018-2020

Advisory Board Member, INNITI, Copenhagen, Denmark

2017-2018

Chief Executive Officer (CEO), Aquaporin Asia Pte. Ltd., Singapore

2016-2018

Co-founder and co-owner of Golgi Membrane Proteins ApS, Kgs. Lyngby, Denmark

2016-2018

Chief Technology Officer (CTO) Aquaporin A/S, Kgs. Lyngby, Denmark

2014-2016

Vice President, Public Private Partnerships/Intl. Dev., Aquaporin A/S Denmark

2013-2014

Vice President, Research, Aquaporin A/S, Copenhagen, Denmark

2011-2019

Member of Board Institute at the Institute of Corporate Governance, Denmark

2006-2013

Chief Scientific Officer (CSO), Aquaporin, A/S, Copenhagen, Denmark

2005-2006

Scientific consultant for AQUaporin ApS, Kgs. Lyngby, Denmark

### Awards:

2019

*The Biofos Resource Prize* (on behalf of the Department of Environmental Engineering)

2015

*Colding Award* for teaching in course 12121 Water Supply (best course 2015 selected by the students at Department of Environmental Engineering, Technical University of Denmark)

2014

*European Inventor award 2014* in the category: small and medium-sized enterprises (SMEs) for patent WO 2006/122566 from the European Patent Office

2013

*Industrial Prize 2013* from the Danish Natural Science Academy

2009

Elected Fellow of the Danish Natural Science Academy (DNA)

2009

Biography included in *Marquis Who is Who in the World*

**Fellowships received:**

2000-2003	Carlsberg Foundation (assistant research professor fellowship, University of Copenhagen)
1999-2000	National Institute of Health (postdoctoral fellowship, Cornell University)
1997-1999	Norman and Rosita Winston Foundation (postdoctoral fellowship, Cornell University)
1996-1997	National Institute of Health (postdoctoral fellowship, Cornell University)
1994-1996	Danish Research Council (postdoctoral fellowship, University of Copenhagen)
1991-1991	Danish Research Academy (predoctoral fellowship, Technical University of Denmark)

**Scientific production (as of September 14, 2020):**

Publication list: <https://orcid.org/0000-0002-9392-7133> (177 entries)  
 Google Scholar: 4493 citations, h-index: 33, i10-index: 68.

**Major research grants (PI/co-PI roles indicated)**

2020-2022	Consortium: ITS-THIN: Water separation revolutionized by ultrathin carbon nanomembranes, FET-Open RIA, H2020 (grant# 899528), (co-PI, DTU Environment), 3.000.000€ total
2019-2021	Consortium: <i>New enzymes for water treatment and resource recovery</i> , Novo Nordisk Foundation – Interdisciplinary Synergy Programme (PI, DTU Environment) 2.000.000€ total
2018-2020	Consortium: <i>Green and circular innovation for Kenyan companies</i> (co-PI, Aquaporin A/S) 671.200 total, 30.000€ to Aquaporin A/S
2018-2018	<i>Energi- og kosteffektiv rensning for lægemidler via aquaporiner</i> , InnovationFund Denmark (co-PI, Aquaporin A/S) 63.000€ to Aquaporin A/S
2017-2020	Consortium: <i>CleanWater</i> from BONUS Baltic Sea project (co-PI, Aquaporin A/S) 60.000€ to Aquaporin A/S
2017-2019	<i>Two-dimensional carbon membranes for water purification</i> from DAAD-MIZS (PI, Slovenia) 3.000€ to University of Maribor Slovenia
2017-2019	AMBROSIA from EU H2020, (PI, Aquaporin A/S), 1.400.000€ to Aquaporin A/S
2015-2019	Consortium: <i>DIVINe - Vaccines purification by affinity chromatography</i> from EU H2020 (co-PI, Aquaporin A/S) 620.000€ to Aquaporin A/S
2015-2019	Consortium: <i>Water efficient industries</i> from InnovationsFonden (co-PI, Aquaporin A/S) 6.000.000€ to consortium
2015-2018	Consortium: <i>MEMENTO</i> from Innovation Foundation (PI, Technical University of Denmark) 2.100.000€ to consortium
2013-2017	Consortium: <i>IBISS</i> from Danish National Advanced Technology Foundation, (PI, Technical University of Denmark), 6.000.000€ to consortium
2012-2015	Industrial PhD project Joachim Habel, (PhD Advisor) 110.000€
2012-2015	Copenhagen Cleantech Cluster, partial PhD grant, (PhD Advisor) 53.000€
2011-2014	Consortium: <i>NIGE</i> Innovation Consortium, (co-PI, Technical University of Denmark) 1.800.000€ to consortium
2007-2010	Consortium: Danish National Advanced Technology Foundation Ultrapure water, (co-PI, Technical University of Denmark), 1.330.000€ to consortium

**University Service, Research and Program Administration:**

2020-	Appointed DTU member of Horizon Europe Reference Group for Food, Bioeconomy, Natural Resources, Agriculture and Environment under the Danish Agency for Science and Higher Education
2019	Panel judge at DTU OiX Impact Cities (April) and DTU Green Challenge 2019 (June).
2019-2020	Appointed member of the DTU Dean of Research's tenure-track taskforce
2019-2020	Appointed member of the DTU Dean of Research's globalization strategy taskforce
2019-	Appointed member of the DTU Provost steering committee for DTU Sustainability Profile
2019-2022	Appointed DTU Corporate Representative in the DTU Corporate Health and Safety Committee
2018-	Appointed DTU Representative of InnoBooster expert panel at InnovationFund Denmark
2018-	Member of the Danish Body of University Examiners in Engineering
2015	Member of DTU Environment delegation to Singapore
2014	Member of search committee for faculty position in Water Treatment, Department of environmental engineering, Technical University of Denmark
2014-	Member of the Danish Body of University Examiners in Biology
2010-	Member of the Danish Body of University Examiners in Chemistry
2006-	Danish representative in the National Committee for Biophysics (under IUPAB)
2004-2010	Member of the Danish Body of University Examiners in Physics
2001-2001	Member of the Nanotechnology committee, Faculty of Science, University of Copenhagen

**Reviewing:**

2020	Proposal submitted to the Austrian Science Fund (FWF), Austria
2019	Proposal submitted to the French National Research Agency (ANR), France
2015	Proposal submitted to the National Research Foundation Singapore
2012	Proposal submitted to the Israeli Science Foundation, Israel
2010	Proposal submitted for the Dutch Technology Foundation SWT, The Netherlands

1998- Referee for 15+ journals including *Nature Protocols*, *Nature Materials*, *Langmuir*, *Desalination*, *J. Membr. Science*, *Sep. Purif. Technol.*, *Env. Sci. Technol.*, *Membranes*

#### National dissertation/tenure committee service:

2019 Member of the PhD committee, Liying Zhang, *Production and purification of integral membrane channels for structure-function studies*, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark

2018 Chairman for evaluation committee for Assistant Professor at Department of Environmental Sciences, Technical University of Denmark

2017 Chairman for PhD committee, Sofie Thage Morthensen, *Integration between enzyme technology and membrane separation in biorefinery processes*, Department of Chemical Engineering, Technical University of Denmark

2015 Member of PhD committee, Anders N. Albertsen, *Study of replication processes in minimal self-replicating systems*, University of Southern Denmark

2003 Member of PhD committee, Henrik Tang Vestergaard, *Differences in kinetics of structurally related competitive GABA<sub>A</sub> receptor antagonists*, Royal School of Pharmacy

#### International dissertation/tenure committee service:

2020 PhD dissertation committee member for Mehrdad Mohammadifakhr, *Development of Hollow Fiber Forward Osmosis Membranes*, University of Twente, The Netherlands.

2020 PhD dissertation committee member for Dennis M. Reurink, *Enhanced Polyelectrolyte Multilayers for Highly Selective Membranes*, University of Twente, The Netherlands.

2020 PhD dissertation committee member for Mattia Giagnorio, *Membrane-based technologies for the production of high-quality water from contaminated sources: from lab experiments to full-scale system design*, Politecnico di Torino, Italy

2016 PhD dissertation committee member for Janet To Yiu Ying, *Development of new methods in membrane protein science: tools in aquaporin-based research*, Nanyang Technological University, Singapore

2015 PhD dissertation committee member for Wenyan Ye, *Hybrid Membrane Technologies with CO<sub>2</sub> Mitigation and Resource Recovery*, Katholieke Universiteit Leuven, Belgium

2014 Tenure evaluation committee member for an Associate Professor position at School of Biological Science faculty, Nanyang Technological University Singapore

#### International organization/board service:

2014- Member of the technical committee International Forward Osmosis Association

2008- Appointed EUREKA'S Eurostars Technical Expert ([www.eurostars-eureka.eu](http://www.eurostars-eureka.eu))

#### Editorial activities:

2019- Editorial Board Member, *Membranes MDPI* (ISSN 2077-0375)

2019 Editor of *Membranes* special Issue *Biological and Biomimetic Membranes: New Materials and Emerging Processes* (ISSN 2077-0375)

2017 Editor of *Membranes* special issue *Biological, Biomimetic, and Biomedical Applications of Membranes* (ISSN 2077-0375)

2012 Editor of book *Biomimetic Membranes for Sensor and Separation Applications*, Springer Verlag 2012 (ISBN 978-94-007-2184-5)

#### Recent invited talks and presentations:

- *Status på grøn forskning – har vi den rigtige organisering, er finansieringen på plads og er indsatsen i forhold til erhvervslivet fokuseret nok?* at Klima- og Miljøpolitisk Topmøde, Dansk Miljøteknologi, Teknologisk Institut, Taastrup, Denmark, January 27, 2020
- *Biomimetic membranes* (opening plenary keynote) IMSTEC2020, Sydney, Australia, February 3, 2020
- *Hvordan skaber vi en DTU start-up scene inden for vand?* at Conference: Vand til Verden, Fællessalen, Danish Parliament, Christiansborg, Denmark, March 25, 2019
- *Biomimetic and Bioinspired membranes – challenges and future prospects* (plenary keynote) at Engineering with Membranes, Båstad, Sweden, April 11, 2019
- *Aquaporins - from fundamental research to technological applications* at Ion channel Symposium, Royal Danish Academy of Science and Letters, Copenhagen, Denmark, May 24, 2019
- *Biomimetic and Bioinspired Membranes*, Zhejiang University, Hangzhou, China, October 15, 2019
- *Biomimetic and Bioinspired Membranes*, South University of Science and Technology, Shenzhen, China, October 17, 2019