

Invited Oral Presentations on Conferences, Workshops, and Seminars

1. **Daims H.** Stickstoff-Eliminierung in der Abwasserreinigung: Überraschungen aus der Mikrobiologie (Nitrogen elimination in wastewater treatment: surprises from microbiology). 40. AssistentInnen treffen der deutschsprachigen Siedlungswasserwirtschaftlichen Institute, TU+BOKU Vienna, Austria (4.-7. September 2019).
2. **Daims H.** Metabolic versatility, complete ammonia oxidizers, and more: A new perspective on the nitrifying microorganisms. 8th Congress of European Microbiologists (FEMS 2019), Glasgow, UK (7.-11. July 2019)
3. **Daims H.** A new picture of major players in the nitrogen cycle: Genome resolved metagenomics as the key to surprising discoveries. Annual Conference 2019 of the Association for General and Applied Microbiology, Mainz, Germany (17.-20. March 2019).
4. **Daims H.** Metabolic versatility, complete ammonia oxidizers, and more: A new perspective on the nitrifying microorganisms. Seminar at the Dept. of Microbiology, University of Constance, Germany (5. November 2018).
5. **Daims H.** Stickstoffkreisläufe in der Abwasserreinigung – neue und bewährte Wege (Nitrogen cycles in sewage treatment – new and established paths). Seminar Aktuelle biologische Methoden und Verfahren in der Wassergütwirtschaft, TU Vienna, Austria (27.-28. February 2018).
6. **Daims H.** Sleep, stress and the Black Queen: Microbial hidden activities and cooperation. Fifth How Dead is Dead? Conference, Vienna, Austria (6.-8. September 2017).
7. **Daims H.** Complete nitrification by one organism: The discovery and characterization of comammox. IWA World Water Congress, Brisbane, Australia (9.-14. October 2016).
8. **Daims H.** Microcolony mini-metagenomics of active nitrifiers. Seminar at the Australian Centre for Ecogenomics, University of Queensland, Brisbane, Australia (11. October 2016).
9. **Daims H.** Complete nitrification by one organism: The discovery and characterization of comammox. **Session convener.** 16th International Symposium on Microbial Ecology (ISME-16), Montreal, Canada (21.-26. August 2016).
10. **Daims H.** Roundtable lecturer on the topic “Ecology-based engineering of natural microbial communities: Nitrification as an example”. 16th International Symposium on Microbial Ecology (ISME-16), Montreal, Canada (21.-26. August 2016).
11. **Daims H.** Complete nitrification by one organism: The discovery and characterization of comammox. **Distinguished Track Lecturer, Ecological and Evolutionary Science Track (Keynote lecture).** ASM Microbe 2016, Boston, USA (16.-20. June 2016).
12. **Daims H.** Repainting our picture of nitrite-oxidizing bacteria. Seminar at the Dept. of Chemistry and Bioscience, Aalborg University. Aalborg, Denmark (14. January 2016).
13. **Daims H.** Flexible friends or foes: Recent insights add fresh paint to our picture of nitrite-oxidizing bacteria. **Plenary lecture and session convener.** 4th International Conference on Nitrification (ICoN4), Edmonton, Canada (28. June-1. July 2015).
14. **Daims H.** Raman-based sorting of microbes with defined functional properties for single-cell genomics. 3rd Microbial Single Cell Genomics Workshop, Boothbay Harbor, USA (14.-18. June 2015).
15. **Daims H.** Tales of partnership and crime: Interactions of autotrophic and heterotrophic microorganisms. **Session convener.** 15th International Symposium on Microbial Ecology (ISME-15), Seoul, South Korea (24.-29. August 2014).
16. **Daims H.** Surprising versatility and multiple roots: News on the ecophysiology and evolution of nitrite-oxidizing bacteria. 114th ASM General Meeting, Boston, USA (17-20. May 2014).
17. **Daims H.** Surprising versatility and multiple roots: News on the ecophysiology and evolution of nitrite-oxidizing bacteria. Seminar at the Dept. of Microbiology, University of Hamburg, Germany (11. April 2014).
18. **Daims H.** Diversity, ecophysiology, and evolution of nitrite-oxidizing bacteria: A glimpse into a bag of surprises. **Plenary lecture.** 3rd International Conference on Nitrification (ICoN3), Tokyo, Japan (2.-5. September 2013).
19. **Daims H.** Ecophysiology and evolution of nitrite-oxidizing bacteria: News on the 'Big Unknown' of the nitrogen cycle. Seminar at the 'Microbial Ecology Group', University of Michigan, Ann Arbor, USA (11. July 2013).

20. **Daims H.** Surprising diversity and unexpected functions: Features of nitrite-oxidizing bacteria revealed by "Omics" and in situ tools. **Keynote lecture.** 5th International Conference on Microbial Ecology and Water Engineering, Ann Arbor, USA (7.-10. July 2013).
21. **Daims H.** Ecophysiology and evolution of nitrite-oxidizing bacteria: News on the 'Big Unknown' of the nitrogen cycle. Seminar at the Dept. of Microbiology, University of Constance, Germany (17. June 2013).
22. **Daims H.** Molecular biology and interactions of nitrite-oxidizing bacteria: A glance on the second step of nitrification. 2nd Symposium on Biological Nitrogen Removal Mechanisms and Process Analysis, Hsinchu, Taiwan (14.-15. January 2013).
23. **Daims, H.** Nitrification: Ammonia- and Nitrite-Oxidizing Bacteria. Ph.D. course on Microbial Ecology in Wastewater Treatment, Aalborg, Denmark (23.-26. October 2012).
24. **Daims H.** Microbial molecular ecology of nitrification. Advanced Course on Environmental Biotechnology, TU Delft, The Netherlands (20. June 2012).
25. **Daims H.** Ecophysiology and evolution of nitrite-oxidizing bacteria: News on the *Big Unknown* of the N-cycle. SGM Spring Conference, Dublin, Ireland (26-29. March 2012).
26. **Daims H.** Digital image analysis of microorganisms: From counting to stereology. First Bremen FISH Camp, Bremen, Germany (14-24. June 2011).
27. **Daims H.** Ecophysiology and genomics of key nitrite-oxidizing bacteria. Annual Meeting of the Dutch Society for Microbiology, Arnhem, The Netherlands (18.-20. April 2011).
28. **Daims H.** Novel insights into the ecophysiology and evolution of nitrite-oxidizing bacteria. Seminar at the Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz (Eawag), Zürich, Switzerland (November 2010).
29. **Daims H.** Metagenomics illuminate the ecophysiology and evolution of nitrite-oxidizing bacteria. Seminar at the Department of Biological Sciences, Microbiology, University of Aarhus, Denmark (November 2010).
30. **Daims H.** Nitrification: Physiology, niche differentiation, and interactions of key players. Workshop "Microbial Ecology in Wastewater Treatment", Dept. of Biotechnology, Chemistry and Environmental Engineering, Aalborg University, Denmark (October 2010).
31. **Daims H.** Quantitative FISH and new variations of (F)ISH. 13th International Symposium on Microbial Ecology (ISME-13), Seattle, USA (August 2010).
32. **Daims H.** Genomics and functional analyses of nitrite-oxidizing bacteria. Seminar at the Max-Planck-Institute for Marine Microbiology, Bremen, Germany (26. May 2010).
33. **Daims H.** How to apply genomic info to predict the ecological role of nitrifiers. The Water Research Conference, Lisbon, Portugal (April 2010).
34. **Daims H.** Ecophysiology and genomics of nitrifying microbes in natural and engineered systems. Seminar at the Dept. of Environmental Geosciences, University of Vienna, Austria (8. March 2010).
35. **Daims H.** Wastewater Treatment: A Useful Model System for Microbial Ecology. European Science Foundation Workshop "EuroMicrobe", Hilversum, The Netherlands (December 2009).
36. **Daims H.** Single cell tools to investigate microbial physiology. Biofilms 2009 Meeting of the American Society for Microbiology, Cancun, Mexico (November 2009).
37. **Daims H.** Ecology and evolution of nitrite oxidizers: Insights from *in situ* tools and environmental genomics. Autumn Meeting of the Society for General Microbiology, Edinburgh, United Kingdom (September 2009).
38. **Daims H.** *In situ* diversity and niche adaptations of nitrite-oxidizing bacteria. 1st International Conference on Nitrification (ICoN1), Louisville, Kentucky, USA (July 2009).
39. **Daims H.** Environmental genomics and in situ physiology of key nitrifying bacteria in engineered systems and hot springs. Seminar at the Department of Microbiology, University Zürich, Switzerland (March 2009).
40. **Daims H.** Ecophysiology and genomics of *Nitrospira*, the key nitrite oxidizers in natural and engineered ecosystems. **Plenary lecture.** 4th Congress of the Slovenian Microbiological Society with International Participation, Portoroz, Slovenia (November 2008).
41. **Daims H.** Environmental genomics illuminates the biology of key nitrite-oxidizing bacteria. **Conference opening lecture.** N-Cycle Meeting, Nijmegen, Netherlands (September 2008).
42. **Daims H.** Nitrification in biological wastewater treatment: Insights based on molecular

- approaches. 162nd Meeting of the Society for General Microbiology, Edinburgh, United Kingdom (March 31, 2008).
43. **Daims H.** Structure-function analysis of microbial biofilms. ESF workshop "Valuing biofilm services: The beauty and the beast", Lunz am See, Austria (September 2007).
 44. **Daims H.** Molecular biological tools for analyzing structure-function relationships in mixed microbial environments. ECOSERV workshop on state-of-the-art in wastewater treatment and environmental impact, University of Newcastle upon Tyne, UK (March 2007).
 45. **Daims H.** Enigmatic uncultured bacteria in nature and biotechnology. Seminar at Genoscope, Evry, France (January 2007).
 46. **Daims H.** Ecology and genomics of key nitrite oxidizers active in natural and engineered habitats. 11th International Symposium on Microbial Ecology (ISME-11), Vienna, Austria (August 2006).
 47. **Daims H.** Genomics, ecophysiology and interactions of yet uncultured nitrifying bacteria. Summer conference of the Society for Applied Microbiology, Edinburgh, United Kingdom (July 2006).
 48. **Daims H.** "Nitrification and Anammox" and "Environmental Genomics" (two talks). Dept. of Biotechnology, Chemistry and Environmental Engineering, Aalborg University, Denmark (May 2006).
 49. **Daims H.** "Who you are and what you do": FISH and related methods for characterizing complex microbial communities. Seminar at the Institute of Microbiology and Hygiene, Charité, Berlin, Germany (March 2006).
 50. **Daims H.** Biodiversity and ecophysiology of N-cycle bacteria. COST Action 856 (Ecological Aspects of Denitrification, with Emphasis on Agriculture) management committee meeting & workshop, Nijmegen, the Netherlands (March 2006).
 51. **Daims H.** and Wagner M. The Use of FISH, digital image analysis, and MAR techniques to analyze structure and physiology of biofilm communities. Philips Oral Healthcare biofilm symposium, Los Angeles, USA (October 2005).
 52. **Daims H.** Molekulare Methoden zur Analyse der Biodiversität und Funktion nicht kultivierter Mikroorganismen (Molecular methods for analysing biodiversity and function of uncultured microorganisms). Workshop "Perspektiven molekularer und isotopischer Methoden zum Nachweis des natürlichen Schadstoffabbaus in Böden" organized by the German Federal Ministry of Education and Research and DECHEMA, Braunschweig, Germany (September 2005).
 53. **Daims H.,** Le Paslier D, Spieck E, Wagner M. Ecophysiology and genomics of nitrite-oxidizing bacteria important for wastewater treatment. 12th European Congress on Biotechnology, Copenhagen, Denmark (August 2005).
 54. **Daims H.** From biodiversity to environmental genomics: Microbiology of nitrite-oxidizing *Nitrospira*-like bacteria. Seminar at the University of Natural Resources and Applied Life Sciences, Vienna, Austria (March 2005).
 55. **Daims H.** Biodiversity and ecophysiology of *Nitrospira*-like bacteria. Seminar at the Austrian Research Centers, Seibersdorf, Austria (January 2005).
 56. **Daims H.** From 16S rRNA to environmental genomics: microbiology of *Nitrospira*-like bacteria. Seminar at the Environmental Engineering group intramural meeting, University of Newcastle upon Tyne, UK (November 2004).
 57. **Daims H.** Ecology and genomics of uncultured autotrophic nitrite-oxidizers and anaerobic ammonium oxidizers. Gordon Research Conference on the Molecular Basis of Microbial One-Carbon Metabolism, Mt. Holyoke College, Massachusetts, USA (August 2004).
 58. **Daims H,** Wagner M. Microbial Structure and Community Structure of Flocs. Workshop on Flocculation in Natural and Engineered Systems, Burlington, Ontario, Canada (September 2003).
 59. **Daims H.** Population structure and functional analyses, by *in situ* techniques, of nitrifying bacteria in wastewater treatment plants. Seminar at the Advanced Wastewater Management Centre, University of Queensland, Brisbane, Australia (May 2002).