Research outputs:

Abiotic Nitrous Oxide (N₂O) Production Is Strongly pH Dependent, but Contributes Little to Overall N₂O Emissions in Biological Nitrogen Removal Systems
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Regulation of key N₂O production mechanisms during biological water treatment
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

The effect of pH on N₂O production in intermittently-fed nitritation reactors
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Application of the NDHA model to describe N₂O dynamics in activated sludge mixed culture biomass
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Diagnostics, Monitoring and Mitigation of N₂O Emissions from Wastewater Treatment Operations – Outcomes of the LAGAS project
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

HEPWAT - Higher Environmental Performance in Wastewater Systems
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

Model-based optimization biofilm based systems performing autotrophic nitrogen removal using the comprehensive NDHA model
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

The pH dependency of N-converting enzymatic processes, pathways and microbes: effect on net N₂O production
Research output: Contribution to journal › Review – Annual report year: 2018 › Research › peer-review

Calibration of the comprehensive NDHA-N₂O dynamics model for nitrifier-enriched biomass using targeted respirometric assays
Calibration of the NDHA N2O model via respirometric assays
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2017 › Research › peer-review

Establishment and calibration of consensus process model for nitrous oxide dynamics in water quality engineering

Heterotrophs are key contributors to nitrous oxide production in mixed liquor under low C-to-N ratios during nitrification - batch experiments and modelling
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2017 › Research › peer-review

Intermittent Aeration Suppresses Nitrite-Oxidizing Bacteria in Membrane-Aerated Biofilms: A Model-Based Explanation
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Low nitrous oxide production through nitrifier-denitrification in intermittent-feed high-rate nitrification reactors
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Monitoring and Mitigation of N2O Emissions: An Example from a Wastewater Treatment Facility
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

N2O and NO dynamics in AOB-enriched and mixed-culture biomass: experimental observations and model calibration
Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

N2O and NO dynamics in AOB-enriched and mixed-culture biomass: Experimental Observations and Model Calibration
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2017 › Research › peer-review

Nitrous oxide Production in Membrane-aerated Nitrifying Biofilms: Experimentation and Modelling
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2017 › Research › peer-review

N2O emissions from a single-stage partial nitritation/anammox granule-based reactor – a model based assessment
Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

A consilience model to describe N2O production during biological N removal
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Nitrous Oxide and Nitric Oxide Emissions From Single-Stage Nitritation/Anammox Reactors Under Varying Aeration Regimes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

In-situ microbial activity in membrane-aerated biofilms for autotrophic nitrogen conversion
Research output: Contribution to conference › Poster – Annual report year: 2012 › Research › peer-review

Projects:

Establishment and calibration of consensus process models of N2O dynamics
Domingo-Felez, C., Smets, B. F., Plósz, B. G., Sin, G., Gernaey, K. V., Plaza, E. & Sperandio, M.
Samfinansieret - Andet
15/12/2013 → 30/08/2017
Project: PhD

Activities:

DTU Sustain
Carlos Domingo-Felez (Participant)
29 Nov 2018 → 30 Nov 2018
Activity: Attending an event › Participating in or organising a conference

Carlos Domingo-Felez (Participant)
10 Mar 2018 → 14 Mar 2018
Activity: Attending an event › Participating in or organising a conference

DTU Sustain 2017
Carlos Domingo-Felez (Participant), Marlene Mark Jensen (Participant)
6 Dec 2017
Activity: Attending an event › Participating in or organising a conference

ICoN5: 5th International Conference on Nitrification
Carlos Domingo-Felez (Participant)
23 Jul 2017 → 27 Jul 2017
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Frontiers International Conference on Wastewater Treatment (FICWTM2017)
Carlos Domingo-Felez (Participant)
21 May 2017 → 24 May 2017
Activity: Attending an event › Participating in or organising a conference

N2O Expert Meeting and Workshop
Carlos Domingo Felez (Participant)
21 Sep 2016 → 22 Sep 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.