Publications:

**Environmentally friendly treatment of highly potent pharmaceuticals in hospital wastewater- Mermiss**
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**Applicability of disulfide-polymer particles surface embedded on alginate beads for cadmium removal from airport derived stormwater**
Publication: Research - peer-review › Journal article – Annual report year: 2018

**Application of forward osmosis technology in crude glycerol fermentation biorefinery-potential and challenges**
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**Application of the NDHA model to describe N₂O dynamics in activated sludge mixed culture biomass**
Domingo-Felez, C. & Smets, B. F. 2018
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**Comammox Nitrospira are abundant ammonia oxidizers in diverse groundwater-fed rapid sand filter communities**
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**Comparative genomics sheds light on niche differentiation and the evolutionary history of comammox Nitrospira**
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**Concentrating molasses distillery wastewater using biomimetic forward osmosis (FO) membranes**
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Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Protocol for settling velocity model calibration using an innovative batch settling test– focus on identifiability analysis of the hindered-transient-compression model
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Removal of Antibiotics in Biological Wastewater Treatment Systems—A Critical Assessment Using the Activated Sludge Modeling Framework for Xenobiotics (ASM-X)
Publication: Research - peer-review › Journal article – Annual report year: 2016

Removal of primary and secondary trace organic substrates in aerobic and anaerobic sewer biofilm
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Sammenhæng mellem aktivitet af metanoksiderende bakterier, opforment fra sandfiltre på danske vandværker, og nedbrydningen af pesticidet bentazon
Publication: Research › Sound/Visual production (digital) – Annual report year: 2016

Secondary settling sensor setup development – testing prototypes and compression models via practical model parameter identifiability assessment
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016
Selective heavy metal capture from contaminated water
Publication: Research - peer-review › Poster – Annual report year: 2016

Separation of Peptides and Interaction with Forward Osmosis Biomimetic Membranes: A Solution Diffusion Model
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2016

Separation of Peptides with Forward Osmosis Biomimetic Membranes
Publication: Research - peer-review › Journal article – Annual report year: 2016

Short-sludge age EBPR process – Microbial and biochemical process characterisation during reactor start-up and operation
Publication: Research - peer-review › Journal article – Annual report year: 2016

Sources and propagation of uncertainty in N2O model predictions
Publication: Research - peer-review › Poster – Annual report year: 2016

Spatial distribution of microbial community and N₂O depth profiles in counter- and co- diffusion biofilms functioning simultaneous nitrification and denitrification
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Stable isotope probing and dynamic loading experiments provide insight into the ecophysiology of novel ammonia oxidizers in rapid gravity sand filters
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Structural and functional robustness of an environmental bacterial community degrading diesel fuel
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

Suppression of nitrite-oxidizing bacteria in intermittently aerated biofilm reactors: a model-based explanation
Ma, Y., Domingo Felez, C., Plósz, B. G. & Smets, B. F. 2016 Microbial ecology and water engineering & biofilms specialist groups (MEWE2016). Copenhagen, Denmark : IWA, p. 158-159
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Suppression of nitrite-oxidizing bacteria in intermittently aerated biofilms: a model-based explanation
Ma, Y., Domingo Felez, C., Plósz, B. G. & Smets, B. F. 2016
Publication: Research - peer-review › Poster – Annual report year: 2016

Systematic design of an optimal control system for the SHARON-Anammox process
Publication: Research - peer-review › Journal article – Annual report year: 2016

Systematic design of optimal control systems for WWTPs: case study of the SHARON-Anammox process
Publication: Research - peer-review › Poster – Annual report year: 2016
The effects of physicochemical wastewater treatment operations on forward osmosis
Publication: Research - peer-review › Journal article – Annual report year: 2016

The formation dynamics of microbial aggregates
Publication: Research - peer-review › Poster – Annual report year: 2016

The impact of backwashing on nitrification in biological rapid sand filters under different ammonium loading conditions
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

The influence of reactor staging on microbial structure and functions in pre-denitrifying MBBRs
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

The perks of agent-based modelling with iDynoMICS 2
Cockx, B., Clegg, R. J., Lang, S., Smets, B. F. & Kreft, J. U. 2016
Publication: Research - peer-review › Poster – Annual report year: 2016

Towards a consensus-based biokinetic model for green microalgae – The ASM-A
Publication: Research - peer-review › Journal article – Annual report year: 2016

Towards an optimal experimental design for N2O model calibration during biological nitrogen removal
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Transformation and sorption of illicit drug biomarkers in sewer systems: understanding the role of suspended solids in raw wastewater
Publication: Research - peer-review › Journal article – Annual report year: 2016

Treatment of Swimming Pool Water with UV Followed by Ozone
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Underestimation of ammonia-oxidizing bacteria abundance by amplification bias in amoA-targeted qPCR
Publication: Research - peer-review › Journal article – Annual report year: 2016
**Used water resource recovery using green microalgae**
Publication: Research › Ph.D. thesis – Annual report year: 2016

**Using mechanisms of hydrolysis and sorption to reduce siloxanes occurrence in biogas of anaerobic sludge digesters**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Videnskabelig udredning af international viden om skifergas relateret til en dansk kontekst: DTU, GEUS, DCE**
Publication: Commissioned › Report – Annual report year: 2016

**Wastewater treatment in Kangerlussuaq, Greenland by chemical coagulation and UV disinfection**
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

**A comprehensive 454 survey provides insights into microbial diversity and community structure in rapid sand filters**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

**Biodegradation of pharmaceuticals in hospital wastewater by staged Moving Bed Biofilm Reactors (MBBR)**
Publication: Research - peer-review › Journal article – Annual report year: 2015

**Characterising the Removal of Trace Organic Chemicals in Wastewater - Are we using the Right Tools?**
Ploßz, B. G. & Polesel, F. 2015
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

**Computational Design of Biomimetic Phosphate Scavengers**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Effects of sewage sludge stabilization on fertilizer value and greenhouse gas emissions after soil application**
Publication: Research - peer-review › Journal article – Annual report year: 2015

**High yield purification of full-length functional hERG K+ channels produced in Saccharomyces cerevisiae**
Publication: Research - peer-review › Journal article – Annual report year: 2015

**Modelling the Fate of Ionizable Trace Organic Chemicals from Consumption to Food Crops**
Polesel, F., Ploßz, B. G. & Trapp, S. 2015
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016
Single-sludge denitrification in recirculating aquaculture systems: effects of pre-fermentation and pH
Publication: Research - peer-review › Journal article – Annual report year: 2016

Novel assay to measure the plasmid mobilizing potential of mixed microbial communities
Publication: Research - peer-review › Journal article – Annual report year: 2014

Projects:

Karacterisering og kvantificering af producerede nanobobler i vand
Nielsen, K., Andersen, H. R., Kaarsholm, K. M. S. & Droumpali, A.
01/07/2017 → 30/04/2018
Project

Fuldautomatisk decentral rensning af partikler i regnbetingede udledninger
Nielsen, K., Mikkelsen, P. S., Andersen, H. R., Vezzaro, L., Borup, M. & Chhetri, R. K.
01/11/2016 → 31/10/2018
Project

Activities:

Unge Forskere (External organisation)
Andersen, H. R. (Chairman)
19 Mar 2018
Activity: Membership › Membership of commitees, commissions, boards, councils, associations, organisations, or similar

DTU Sustain 2017
Jensen, M. M. (Organizer)
6 Dec 2017
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Li, L. (Participant)
30 Nov 2017 → 3 Dec 2017
Activity: Attending an event › Participating in or organising a conference

Tracking and understanding AMR dynamics across European urban water systems
Smets, B. F. (Guest lecturer), Dechesne, A. (Other), Li, L. (Other), Jonas Stenløkke Madsen (Other), Joseph Nesme (Other), Søren J. Sørensen (Other), Marcos Quintela-Baluja (Other), David Graham (Other)
30 Nov 2017 → 3 Dec 2017
Activity: Talks and presentations › Conference presentations

Controls of N2O production pathways in nitritation-anammox biomass
Jensen, M. M. (Invited speaker)
13 Nov 2017
Activity: Talks and presentations › Conference presentations

DNA and RNA SIP reveal ammonium and nitrite oxidizers in groundwater fed biofilters
Gülay, A. (Speaker), Smets, B. F. (Other), Fowler, J. (Other), Albrechtsen, H. (Other), Tatari, K. (Other)
13 Nov 2017 → 15 Nov 2017
Activity: Talks and presentations › Conference presentations
DNA and RNA SIP reveal nitrifiers in groundwater fed biofilters
Gülay, A. (Other), Fowler, J. (Other), Smets, B. F. (Other), Albrechtsen, H. (Other)
13 Nov 2017
Activity: Talks and presentations › Conference presentations

Permissiveness of Microbial Community from Wastewater Treatment Plant towards IncP-1 Plasmid
Li, L. (Other), Dechesne, A. (Other), Smets, B. F. (Other), Jonas Stenløkke Madsen (Other), Søren J. Sørensen (Other)
13 Nov 2017
Activity: Talks and presentations › Conference presentations

The microbiome of potable water producing biofilters: taxonomic insights and anomalies, metabolic potentials, biotechnological opportunities?
Smets, B. F. (Keynote speaker)
7 Sep 2017 → 8 Sep 2017
Activity: Talks and presentations › Conference presentations

International workshop on marine geomicrobiology - A matter of energy
Jensen, M. M. (Participant)
28 Aug 2017 → 1 Sep 2017
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Plasmid Host Range (Permissiveness) In Microbial Communities across Urban Water Systems
Smets, B. F. (Invited speaker), Dechesne, A. (Other), Li, L. (Other), Søren Sørensen (Other), Jonas S. Madsen (Other)
13 Aug 2017 → 17 Aug 2017
Activity: Talks and presentations › Conference presentations

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

N2O dynamics of N-transforming microbial communities: from mechanistic insights to full-scale process control
Smets, B. F. (Invited speaker)
23 Jul 2017 → 27 Jul 2017
Activity: Talks and presentations › Conference presentations

Diversity, structure, and novel physiologies in microbial communities in rapid sand filters
Smets, B. F. (Invited speaker), Gülay, A. (Other), Palomo, A. (Other), Fowler, J. (Other), Sicheritz-Pontén, T. (Other)
9 Jul 2017 → 13 Jul 2017
Activity: Talks and presentations › Conference presentations

The industrial dynamics of water innovation: A comparison of China and Europe
Moro, M. A. (Speaker)
26 Jun 2017
Activity: Talks and presentations › Conference presentations

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

Low nitrous oxide production in intermittent-feed high performance nitritating reactors
Su, Q. (Keynote speaker)
21 May 2017 → 24 May 2017
Activity: Talks and presentations › Conference presentations
Intermittent aeration regimes are effective tools to manage size of bio-granules and microbial communities in PN/A SBRs.
Blum, J. (Speaker)
10 May 2017
Activity: Talks and presentations › Conference presentations

Differential adhesion and the spatial positioning effect on early stage microbial aggregation
Cockx, B. (Other), Jan-Ulrich Kreft (Other), Smets, B. F. (Other)
9 May 2017 → 12 May 2017
Activity: Talks and presentations › Conference presentations

7th International Conference
Kaarsholm, K. M. S. (Participant), Andersen, H. R. (Chairman), Traek Manasfi (Participant), Jean-Luc Boudenne (Participant)
2 May 2017 → 5 May 2017
Activity: Attending an event › Participating in or organising a conference

Destruction of DBPs and their precursors in swimming pool water by combined UV-treatment and ozonation
Cheema, W. A. (Speaker)
2 May 2017 → 5 May 2017
Activity: Talks and presentations › Conference presentations

Effect of UV treatment on DBPs formation in chlorinated seawater swimming pools- a laboratory study
Cheema, W. A. (Speaker)
2 May 2017 → 5 May 2017
Activity: Talks and presentations › Conference presentations

2017 IUVA Americas Conference
Cheema, W. A. (Speaker)
5 Feb 2017 → 8 Feb 2017
Activity: Talks and presentations › Conference presentations

9th International membrane science and technology conference (IMSTEC)
Zarebska, A. (Speaker)
5 Dec 2016 → 8 Dec 2016
Activity: Talks and presentations › Conference presentations

Kortlægning af den bakterielle lattergasproduktion i aktivt slam ved hjælp af stabile isotoper
Jensen, M. M. (Speaker)
9 Nov 2016
Activity: Talks and presentations › Conference presentations

C-accounting and the role of LCA in waste management
Christensen, T. H. (Keynote speaker)
Activity: Talks and presentations › Conference presentations

LCA – Life-Cycle-Assessment - modeling with an industrial waste example
Christensen, T. H. (Invited speaker)
27 Sep 2016 → 30 Sep 2016
Activity: Talks and presentations › Conference presentations
When is it produced, why is it produced and how to prevent nitrous oxide emissions? Main findings from a large nitrous oxide project in Denmark
Jensen, M. M. (Invited speaker)
27 Sep 2016
Activity: Talks and presentations › Conference presentations

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

MEWE and biofilms IWA specialist conference
Fowler, J. (Organizer)
4 Sep 2016 → 7 Sep 2016
Activity: Attending an event › Participating in or organising a conference

EuroTech Postdoc seminar
Zarebska, A. (Participant)
31 Aug 2016 → 2 Sep 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

IOA-PAG International Conference
Cheema, W. A. (Speaker)
27 Aug 2016 → 31 Aug 2016
Activity: Talks and presentations › Conference presentations

16th Nordic Filtration Symposium - Filtration for Circular Economy
Zarebska, A. (Speaker)
Activity: Talks and presentations › Conference presentations

Who are the water innovators?
Moro, M. A. (Speaker)
7 Jul 2016
Activity: Talks and presentations › Conference presentations

8th INTERNATIONAL WATER & HEALTH SEMINAR
Tang, K. (Participant)
27 Jun 2016 → 29 Jun 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Advanced Applications of Spectrophotometry and Surface Analysis
Zarebska, A. (Participant)
16 Jun 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Where to direct modelling efforts for a faster road towards resource recovery?
Valverde Pérez, B. (Invited speaker)
31 Mar 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

Advanced Materials Characterization
Zarebska, A. (Participant)
30 Mar 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.
2nd Young Water Professionals Denmark Conference and Workshop
Tang, K. (Participant)
10 Mar 2016
Activity: Attending an event › Participating in or organising a conference

2016 IUVA World Congress
Cheema, W. A. (Speaker)
31 Jan 2016 → 3 Feb 2016
Activity: Talks and presentations › Conference presentations

Prizes:

Best Presentation Award at 7th International Conference Swimming Pool & Spa
Waqas Akram Cheema (Recipient), 5 May 2017
Prize: Prizes, scholarships, distinctions

EliteForsk-rejsestipendierne 2017
Aikaterini Spiliotopoulou (Recipient), 23 Feb 2017
Prize: Prizes, scholarships, distinctions

Nanoscale zero-valent iron impregnation of covalent organic polymer grafted activated carbon for water treatment: 11th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials (ICEENN 2016)
Paul D. Mines (Recipient), 18 Aug 2016
Prize: Prizes, scholarships, distinctions

Trophees Performance Veolia Environment
Aikaterini Spiliotopoulou (Recipient), 2013
Prize: Prizes, scholarships, distinctions

Press clippings:

Sourcetreatment of pharmaceuticals in hospital wastewater
Henrik Rasmus Andersen
15/05/2018 → 16/05/2018
3 media contribution
Press / Media

Forurening af flod ved Carlsbergs bryggeri i Nepal
Henrik Rasmus Andersen
08/03/2018 → 08/03/2018
3 media contribution
Press / Media

Bornholm: Flera bassiner har problemer med vandkvalitet
Henrik Rasmus Andersen
24/07/2017
1 media contribution
Press / Media

Fire sandheder om vandet i poolen: Nej, det er hverken kløren der lugter eller svier i øjnene
Henrik Rasmus Andersen
19/07/2017
1 media contribution
Press / Media