

Curriculum Vitae Amelia-Elena Rotaru

Current position/institution **Professor**, University of Southern Denmark (SDU)
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Links [RotaruLab](#), [Nordcee](#), [Department](#), [ORCID](#)

Academic Experience

2023 – now **Full professor of Microbial Physiology & Biochemistry**, Dept. Biology, SDU, DK
2018 – 2022 Associate Professor, Dept. Biology, SDU, DK
2017 (6 mo.) Visiting Assist. Professor, Dept. Microbiology, Uni. Massachusetts Amherst, USA
2015 – 2018 Assistant Professor, Dept. Biology, SDU, DK
2013 – 2015 FNU Postdoc Fellow. Dept. Biology, SDU, DK
2010 – 2013 Postdoc. Dept. Microbiology, Uni. Massachusetts Amherst, USA
2009 – 2010 Postdoc. Interdisciplinary Nanoscience Center, AU, DK

Education

2005 – 2009 **PhD Marine Microbiology**, Max Planck Institute Bremen & Uni. Bremen, DE
2003 – 2005 MSc Marine Microbiology, Max Planck Institute Bremen & Uni. Bremen, DE
1998 – 2002 BSc Biochemistry, University of Bucharest, RO

Other work experience

2022 – now Editor, American Society of Microbiology, Microbiology Spectrum
2022 – now Associate Editor, Frontiers in Microbiology, Microbial Physiology
2022 (4 mo.) Researcher, Biochemistry Institute of the Romanian Academy of Science, RO

Grants & awards

Since 2013, I have attracted €15 million (108.3 million DKK) via competitive external funding

2026 – 2030 PI, Strategic Initiative grant (50 million DKK) Novo Nordisk Foundation
2026 – 2030 PI, Semper Ardens Accomplish grant (13 million DKK), Carlsberg Foundation
2024 **EliteForsk Prize**, national award for extraordinary contributions to science (1.2 million DKK), Ministry of Higher Education and Science Denmark
2022 – 2027 PI, **ERC Consolidator grant** (15 million DKK), European Research Council
2021 – 2026 PI, Ascending Investigator grant (10 million DKK), Novo Nordisk Foundation
2021 – 2025 PI, Research project 2 grant (6.2 million DKK), Danish Research Council
2015 – 2020 PI, Sapere Aude Leadership grant (7 million DKK), Danish Research Council
2014 – 2019 Co-I, WP lead (~1.6 million DKK at SDU of 20 million DKK), Innovations Fond
2015 – 2018 PI, postdoc fellowship (2.5 million DKK) by the Novo Nordisk Foundation
2016 Fyens Stiftidsende Research Prize (25000 DKK)
2013 – 2015 PI, postdoc fellowship FNU MOBILEX (2 million DKK) Danish Research Council
2013 – 2016 PI, postdoc fellowship Dale T. Mortensen, AIAS, AU (2.4 million DKK, *declined*)
2006 Teaching award, International Max Planck Research School, DE
2003 – 2005 MSc fellowship, International Research School, Max Planck Society, DE
1998 – 2002 Excellence fellowship, 3rd of ~1000 best admission exam, Uni. Bucharest, RO

Research area: Environmental microbiology and microbial ecophysiology of methane-cycling communities, with an emphasis on microbe–mineral/metal interactions and electromicrobiology enabling biological energy storage and conversion.

Professional Training

- 2020 (6 mo.) Leadership Training with personal coach, SDU
- 2019 Ph.D. supervision course, SDU
- 2016 – 2017 University Lecturer Training Program, SDU
- 2014 Career development workshop, SDU

Research expeditions

- 2022 Baltic Sea transect, Bornholm Basin, Denmark (9 days)
- 2022 – 2023 Day-long expeditions coastal Denmark (Aarhus Bay, Gyldesteen, Rømø)
- 2014 Baltic Sea transect, Bothnian Bay, Sweden (2 weeks)
- 2014 Lago La Cruz, Spain (2 weeks)

Academic Service

At SDU

- 2024 – now Research leader, **Departmental Leadership Board**/Ledelsesgruppen (Department of Biology)
- 2021 – now Chair/member, *ad hoc* committees for hiring, promotion, and tenure (Department of Biology; *also*, Danish Institute for Advanced Studies)
- 2020 – now Chair, 4 PhD defense committees (Department of Biology)
- Since 2020 Member, Sustainability Committee (Natural Science Faculty)
- 2020 Member, Curriculum Design Committee (Department of Biology)
- 2019 – 2025 Organizer, Departmental Lecture Series (Department of Biology)
- 2019 – 2021 Lead, Nordcee-website redesign and digital profile (Nordcee section)
- 2018 – 2022 Member, *ad hoc* member of the Teaching Committee (for Prof. Bo Thamdrup)
- 2018 – now Member, **Research Section leadership group** (Nordcee)

External

- 2026 – 2030 Appointed Member, National Examiner Corps for Biology (Censorkorps)
- 2025 Jury Member, Austrian Science Fund (FWF), Vienna, AU
- Since 2023 **International Advisory Board Member**, Wageningen Institute for Environment & Climate Research, NL
- 2023 Host/Coordinator, PhD delegation visit by the graduate school for environmental engineering from Wageningen University, NL
- 2022 – 2030 Appointed Member, National Examiner Corps for Geology (Censorkorps)
- 2021 External Tenure Evaluator, Aarhus University, DK
- 2020 External Advisory Committee Member, Linda Vu, University of Cincinnati, USA
- 2017 – now **Reviewer, International Funding Agencies:** European Research Council (ERC), Dutch Research Council (NOW, NL), Helmholtz (DE), National Science Foundations in USA, CA, DE, AU.
- 2025 Advisory Ph.D. Committee Member (DK, DE)
- 2017 – now External Examiner, Ph.D. defense committees (DK, AUS, FI & NL)
- Since 2016 Conference Committee Member, EU-ISMET in IT (2016) & NL (2023) and Electromicrobiology DK (2022)
- 2012 – 2021 Guest Editor, Frontiers in Microbiology, Microbial Physiology & Geomicrobiology
- Since 2012 Reviewer, 24+ journals including Science, Nature Communications, PNAS, ISME Journal, mBio

Mentorship

Primary supervisor of 6 PhD students & 8 postdoctoral researchers.

Current group composition

Postdoc: Anusha Ray, Marie Curie Cofound/Gaia-fellow (September 2025 - now)
Postdoc: Lorena Selak (February 2024 - now)
Postdoc: Rhitu Kotoky (July 2022 - present)
Postdoc: Konstantinos Anestis (September 2022 - now)
Staff scientist: Satoshi Kawaichi (September 2022 - now)
Lab tech.: Lasse Ørum Smidt (2016 - now)
PhD student: Karina Hernandez (November 2022 - now) **EliteForsk Travel award*
PhD student: Sebastian Bjørnskov (September 2024 - now)
MSc student: Chiara Di Mattia (March 2025 - now)
MSc student: Camilla Maja Lehmann Hansen (February 2026 - now)
MSc student: Mia Nielsen (February 2026 - now)
MSc student: Joachim Godsk (February 2026 - now)
BSc student: Julie Elisabeth Jahn (February 2026 - now)

Lab Alumni

PhD students

Danijel Jovicic (2021-2025) PhD awarded Sept 2025
Abdalluh Jabaley (2021-2025) PhD awarded July 2025
Malene Arreborg (discontinued) (2022-2024)
Mon Oo Yee (2015-2019) PhD awarded Dec 2019
Paola Andrea Palacios (2016-2019) PhD awarded May 2019

Visiting PhD students

Yanan Wang (guest PhD student as CAS fellow) (2023–2024)
Ning Hall (guest PhD student Monash University) (2024)
Roman Seitshiro, (guest Manchester Uni.) (3 months 2023)
Alisa Socolov (visiting PhD student from Uni Vienna) 1 week (2021)

Postdocs

Ghazaleh Gharib (2022-2025)
Tetyana Gilevska, MSCA secondment at SDU (2022-2025)
Satoshi Kawaichi (2016-2018)
Oona Snoeyenboos West (2016-2018)
Xiaochen Wang (2 months, 2018)

Visiting Postdocs

Kelsey Rogers, Guest PD from KU (2019-2020)

MSc thesis, projects, interns

Sarah Sabro Damgård (2024–2025)
Adrien Groza (2024) (Erasmus MSc from Nijmegen Uni.) **KNVM MSc award for her thesis*
Pamela Ciacia (2023, 3 mo., ERASMUS intern)
Valentina Palushi (2023, 3 mo., ERASMUS intern)
Casper Krog Pedersen (2021-2022)
Malene Arreborg (2021-2022) (co-supervision with SDU Engineering)
Danijel Jensen (2017-2018) (co-supervised with AU Engineering)

BSc thesis, projects, internships

Sebastian Rotenberg, ISA project (2024-2025)
Sarah Sabro Damgård, ISA & BSc thesis (2022-2023)
Ask Våtvik Balsløv, BSc thesis (2022-2023)
Anne Salgårt Anderson, BSc thesis (2022-2023)
Sebastian Bak Bjørnskov, ISA & BSc thesis (2022-2023)
Malene Arreborg, ISA & BSc thesis (2020-2021)
Casper Krog Pedersen ISAs & BSc thesis (2020-2021)
Hans Frederik Hansen ISA project (2018)
Jakob Bang Rønning ISAs & BSc thesis (2017-2018)
Viktor Hundtofte Mebus ISA project (2017)
Rie Pors ISA project (2016)

Others at SDU

Marius Florescu Lab tech trainee (2015)

Co-supervision prior to appointment at SDU:

Postdocs	1 at Uni. Massachusetts Amherst, USA (2011)
Ph.D.	1 at Aarhus Uni. DK (2009), 2 at Uni. Massachusetts, USA (2012, 2017)
MSc	2 at MPI for Marine Microbiology, Bremen, DE (2006, 2007)
BEng	1 at Uni. Massachusetts Amherst, USA (2012)
BSc	3 at Uni. Massachusetts Amherst, USA (2011-2013) 1 at MPI for Marine Microbiology, Bremen, DE (2006)

Teaching

Formal pedagogical training

2019 Ph.D. Supervisor course; SDU, DK
2016 – 2017: Lecturer training program; SDU, DK

Current teaching at SDU

2024 – now	Co-lecturer, Microbial Ecology & Biogeochemical Cycles (BB540), 10-ECTS, 15-20 biology master students (lectures, seminars & laboratory exercises in electromicrobiology)
2021 – now	Course coordinator & Lecturer , Biology from Molecules to Ecosystems (BB537), 10-ECTS, 60-80 biology undergraduates (lectures & seminars in biochemistry & evolution)
2021 – now	Co-lecturer, Pharmaceutical Biology (FA508), 10-ECTS, 100-110 pharmacy undergraduates (lectures & seminars in cell biology & biochemistry)

Past teaching at SDU

2015 - 2021	Co-lecturer, Biology from Molecules to Ecosystems (BB537), 10-ECTS, 60-80 biology undergraduates 60-80 biology undergraduates (lectures and seminars in biochemistry, cell biology & evolution)
2021 - 2022	Basic ecology and biogeochemistry (BB905), Co-lecturer, 2.5-ECTS, 5-10 climate adaptation master students (lectures in sustainable microbial biotechnology)

- 2016 - 2023 Microbial Ecology & Biogeochemical Cycles ([BB540](#)), Co-lecturer, 10-ECTS, 15-20 biology **undergraduates** (lectures, seminars & laboratory exercises in electromicrobiology)
- 2016 - 2023 Sustainable future ([BB549](#)), Co-lecturer, 5-ECTS, 50-60 biology **undergraduates** (lectures in sustainable microbial biotechnology)
- 2019-2022 **Course coordinator**, First year project ([FF501](#)), 10-ECTS, ~300 natural science undergraduates (introduction)
- 2018-2020 Co-lecturer, Chemistry, Biology and Molecular Biology – the Empiric Experimental Science ([FF503](#)), 20-ECTS, ~300 natural science **undergraduates** (lectures on evolution)
- 2015 Co-lecturer and lab instructor, Biomonitoring pollution in freshwater systems ([BB515](#)), 5-ECTS, 15-20 biology **undergraduates** (lectures and laboratory exercises in toxic algal blooms and impact of toxic algae on food webs)
- 2014 Lab instructor, Pharmaceutical Toxicology (BB523), 5-ECTS, 60-70 pharmacy **undergraduates** (laboratory exercises using an HPLC to identify toxins)

Teaching outside SDU

- 2026 Lecturer, European **Ph.D. summer school** [Breathless Microbes](#), EMBO, Nijmegen University, NL
- 2025 Lecturer, **Ph.D. course** "Frontiers in Microbial Ecology: The Role of Microbiomes in a Sustainable Future for our Planet", Netherland Institute of Ecology, NL.
- 2019 Lecturer, European **Ph.D. summer school** [Breathless Microbes](#) by EMBO, Wageningen University/ NL
- 2006 – 2008 Lecturer and lab-instructor, Biology of the prokaryotes, 10-20 marine microbiology master students Max Plank Institute for Marine Microbiology/ DE (lab exercises in general microbiology, tutorials on thermodynamics and lectures on interspecies interactions),

Publications

I have published **50+ peer-reviewed papers** over **16 years**, with sustained publication in top-tier journals including Nature Communications, Nature Geoscience, Science, Energy & Environmental Science, The ISME Journal, and mBio.

Citations: 9,925+; h-index: 32 (Google Scholar, 02/2026).

1. Kotoky R, Ajunwa OM, Kawaichi S, Meyer RL, **Rotaru A-E***. Extracellular RNA drives electromethanogenesis in a methanogenic archaeon. bioRxiv 2025.07.06.663362. **To submit.**
2. Henkel JV, Røy H, Jørgensen BB, **Rotaru A-E**, Jovicic D, Marshal IP, Jiang C, Nielsen PH, Singleton CM, Arz HW, Plewe S, Kjeldsen KU. *Desulfatiglans* related bacteria associate with conductive mineral particles in marine subsurface sediments. **In review.**
3. Gilevska T, **Rotaru A-E**, Anestis K, Fonseca A, Kuemmel S, Krauss M, Inostroza PA, Bonaglia S. Wastewater-impacted Skagerrak Sea microbiomes anaerobically demethylate micropollutants. bioRxiv. 2026:2026-01. **In review.**
4. Jovicic D, Anestis K, Fiutowski J, Jørgensen BB, Kjeldsen KU, **Rotaru AE***. Genome-centric metagenomics reveals novel electroactive syntrophs in a conductive particle-dependent consortium from coastal sediments. **Accepted, Nature Communications.**

5. Schröder U, Harnisch F, Heidrich E, Ieropoulos IA, Logan BE, Nath D, Pant D, Patil SA, Puig S, Ren J, Rossi R, **Rotaru A-E**, ter Heijne A. Waste to value: microbial electrochemical technologies for sustainable water, material and energy cycles. **Accepted, *Frontiers in Science***.
6. Hall N, Wong WW, Lappan R, Ricci F, Jeppe KJ, Glud RN, Kawaichi S, **Rotaru A-E**, Greening C, Cook PL. Coastal methane emissions driven by aerotolerant methanogens using seaweed and seagrass metabolites. **Nature Geoscience**. 2025 Sep;18(9):854-61.
7. **Rotaru A-E***, Gharib G, Jabaley A, Anestis K[#] and Kotoky R[#]. (2025) Cell surface differences within the genus *Methanosarcina* shape interactions with the extracellular environment. **Journal of Bacteriology** e00112-25.
8. Kawaichi S*, Kotoky R, Fiutowski J & **Rotaru A. E.*** (2024). Adaptation of a methanogen to Fe⁰ corrosion via direct contact. **NPJ Biofilms and Microbiomes**, 10(1), 100.
9. Lyu Z, **Rotaru A-E**, Pimentel M, Zhang CJ, Rittmann SKM, & Ferry JG (2024). Cross-boundary significance of methanogens-the methane moment and beyond. **Editorial. Frontiers in Microbiology**, 15, 1434586.
10. Musat F, Kjeldsen KU, **Rotaru A-E**, Chen SC & Musat N. (2024). Archaea oxidizing alkanes through alkyl-coenzyme M reductases. **Current Opinion in Microbiology**, 79, 102486.
11. Yee MO, Ottosen LDM, **Rotaru AE***. (2024) Electrical current disrupts the electron transfer in defined consortia. **Microbial Biotechnology**, 00, 1–12.
12. Risgaard-Petersen N & **Rotaru A-E***. (2023) Electromicrobiology - from electrons to ecosystems, Volume II. **Editorial. Frontiers in Microbiology** 14:1253550.
13. Lyu Z, **Rotaru A-E**, Pimentel M, Zhang CJ, Rittmann SK. (2022) The methane moment-Cross-boundary significance of methanogens: **Preface. Frontiers in Microbiology**. 13:1055494.
14. Paquette CM, Rosenbaum MA, Bañeras L, **Rotaru A-E**, Puig S. (2022) Let's chat: communication between electroactive microorganisms. **Bioresource Technology**. 19:126705.
15. Palacios PA, Francis WR and **Rotaru A-E***. (2021) A Win–Loss Interaction on Fe⁰ between methanogens and acetogens from a climate lake. **Frontiers in Microbiology** 12:638282.
16. **Rotaru A-E***, Yee MO, Musat F. (2021) Microbes trading electricity in consortia of environmental and biotechnological significance. **Current Opinion in Biotechnology**. 67:119-29.
17. Aulenta F, Tucci M, Cruz Viggì C, Dolfing J, Head IM, **Rotaru A-E**. (2021) An underappreciated DIET for anaerobic petroleum hydrocarbon-degrading microbial communities. **Microbial Biotechnology**. 14(1):2-7.
18. Yee MO and **Rotaru AE***. (2020) Extracellular electron uptake in *Methanosarcinales* is independent of multiheme c-type cytochromes. **Scientific Reports**. 10(1):372.
19. Walker DJ, Nevin KP, Holmes DE, **Rotaru A-E**, Ward JE, Woodard TL, Zhu J, Ueki T, Nonnenmann SS, McInerney MJ, Lovley DR. (2020) *Syntrophus* conductive pili demonstrate that common hydrogen-donating syntrophs can have a direct electron transfer option. **The ISME Journal** 14, 837–846.
20. Yee MO, Deutzmann JS, Spormann A, **Rotaru A-E***. (2020) Cultivating electroactive microbes-from field to bench. **Nanotechnology** 31: 174003.

21. Palacios PA, Snoeyenbos-West O, Loescher C, Thamdrup B, & **Rotaru A-E***. (2019) Baltic Sea methanogens compete with acetogens for electrons from metallic iron. *The ISME Journal* 13(12), p.3011
22. Yee MO, Snoeyenbos-West OL, Thamdrup B, Ottosen LDM, & **Rotaru A-E***. (2019) Extracellular electron uptake by two *Methanosarcina* species. *Frontiers in Energy Research*. 7, 29.
23. Maximenko N, Corradi P, Law KL, Van Seville E, Garaba SP, Lampitt RS ... **Rotaru A-E...** & Thompson RC. (2019) Towards the integrated marine debris observing system. *Frontiers in Marine Science*, 6, 447.
24. **Rotaru A-E***, Posth NR, Löscher CR, Miracle MR, Vicente E, Cox RP, ... & Thamdrup B. (2019) Interspecies interactions mediated by conductive minerals in the sediments of the Iron rich Meromictic Lake La Cruz, Spain. *Limnetica*. 38(1), 21-40.
25. Holmes DE, **Rotaru A-E**, Ueki T, Shrestha PM, Ferry JG, & Lovley DR. (2018) Electron and proton flux for carbon dioxide reduction in *Methanosarcina barkeri* during direct interspecies electron transfer. *Frontiers in Microbiology*, 9, 3109.
26. Ueki T, Nevin KP, **Rotaru A-E**, Wang LY, Ward JE, Woodard TL & Lovley DR. (2018). *Geobacter* strains expressing poorly conductive pili reveal constraints on direct interspecies electron transfer mechanisms. *mBio*, 9(4), e01273-18.
27. **Rotaru A-E***, Calabrese F, Stryhanyuk H, Musat F, Shrestha PM, Weber HS...& Thamdrup B. (2018) Conductive particles enable syntrophic acetate oxidation between *Geobacter* and *Methanosarcina* from coastal sediments. *mBio*, 9(3), e00226-18.
28. Holmes DE, Orelana R, Giloteaux L, Wang LY, Shrestha P, Williams K, ... & **Rotaru A-E***. (2018) Potential for *Methanosarcina* to contribute to uranium reduction during acetate-promoted groundwater bioremediation. *Microbial Ecology*, 76(3), 660-667.
29. **Rotaru A-E*** & Thamdrup B. (2016) Perspective. A new diet for methane oxidizers. *Science*, 351 (6274), 658-658.
30. **Rotaru A-E***, & Shrestha PM. (2016) Wired for life. *Frontiers in Microbiology*, 7, 662.
31. **Rotaru A-E***, Woodard TL, Nevin KP & Lovley DR. (2015) Link between capacity for current production and syntrophic growth in *Geobacter* species. *Frontiers in microbiology*, 6, 744.
32. Liu F, **Rotaru A-E**, Shrestha PM, Malvankar NS, Nevin KP & Lovley DR. (2015) Magnetite compensates for the lack of a pilin-associated c-type cytochrome in extracellular electron exchange. *Environmental Microbiology*, 17(3), 648-655.
33. Shrestha PM, Malvankar NS, Werner JJ, Franks AE, **Rotaru A-E**, Shrestha M... & Lovley DR. (2014) Correlation between microbial community and granule conductivity in anaerobic bioreactors for brewery wastewater treatment. *Bioresource Technology*, 174, 306-310.
34. Shrestha PM & **Rotaru A-E**. (2014) Plugging in or going wireless: strategies for interspecies electron transfer. *Frontiers in Microbiology*, 5, 237.
35. Chen S, **Rotaru A-E***, Liu F, Philips J, Woodard TL, Nevin KP & Lovley DR. (2014) Carbon cloth stimulates direct interspecies electron transfer in syntrophic co-cultures. *Bioresource Technology*, 173, 82-86.

36. Rotaru A-E*, Shrestha PM, Liu F, Markovaite B, Chen S, Nevin KP & Lovley DR. (2014) Direct interspecies electron transfer between *Geobacter metallireducens* and *Methanosarcina barkeri*. **Applied and Environmental Microbiology**, 80(15), 4599-4605.
37. Chen S, Rotaru A-E*, Shrestha PM, Malvankar NS, Liu F, Fan W ... & Lovley DR. (2014) Promoting interspecies electron transfer with biochar. **Scientific Reports**, 4, 5019.
38. Feist AM, Nagarajan H, Rotaru A-E, Tremblay PL, Zhang T, Nevin KP ... & Zengler K. (2014) Constraint-based modeling of carbon fixation and the energetics of electron transfer in *Geobacter metallireducens*. **PLoS Computational Biology**, 10(4), e1003575.
39. Rotaru A-E*, Shrestha PM*, Liu F, Shrestha M, Shrestha D, Embree M ... & Lovley DR. (2014) A new model for electron flow during anaerobic digestion: direct interspecies electron transfer to *Methanosaeta* for the reduction of carbon dioxide to methane. **Energy & Environmental Science**, 7(1), 408-415.
40. Shrestha PM, Rotaru A-E, Aklujkar M, Liu F, Shrestha M, Summers ZM ... & Lovley DR. (2013) Syntrophic growth with direct interspecies electron transfer as the primary mechanism for energy exchange. **Environmental Microbiology Reports**, 5(6), 904-910.
41. Nagarajan H, Embree M, Rotaru A-E, Shrestha PM, Feist AM, Palsson BØ ... & Zengler K. (2013) Characterization and modelling of interspecies electron transfer mechanisms and microbial community dynamics of a syntrophic association. **Nature Communications**, 4, 2809.
42. Shrestha PM, Rotaru A-E, Summers ZM, Shrestha M, Liu F & Lovley DR. (2013) Transcriptomic and genetic analysis of direct interspecies electron transfer. **Applied and Environmental Microbiology** 79(7), 2397-2404.
43. Rotaru A-E*, Shrestha PM, Liu F, Ueki T, Nevin K, Summers ZM & Lovley DR. (2012) Interspecies electron transfer via hydrogen and formate rather than direct electrical connections in cocultures of *Pelobacter carbinolicus* and *Geobacter sulfurreducens*. **Applied & Environmental Microbiology**, 78(21), 7645-7651.
44. Liu F, Rotaru A-E, Shrestha PM, Malvankar NS, Nevin KP & Lovley DR. (2012) Promoting direct interspecies electron transfer with activated carbon. **Energy & Environmental Science**, 5(10), 8982-8989.
45. Rotaru A-E, Jiang W, Finster K, Skrydstrup T & Meyer RL. (2012) Non-enzymatic palladium recovery on microbial and synthetic surfaces. **Biotechnology & Bioengineering**, 109(8), 1889-1897.
46. Rotaru A-E, Schauer R, Probian C, Musmann M & Harder J. (2012) Visualization of candidate division OP3 cocci in limonene-degrading methanogenic cultures. **Journal of Microbiology & Biotechnology**, 22(4), 457-61.
47. Hosseinkhani B, Søjberg LS, Rotaru A-E, Emtiazi G, Skrydstrup T, & Meyer RL. (2012) Microbially supported synthesis of catalytically active bimetallic Pd-Au nanoparticles. **Biotechnology & Bioengineering**, 109(1), 45-52.
48. Morita M, Malvankar NS, Franks A-E, Summers ZM, Giloteaux L, Rotaru A-E ... & Lovley DR. (2011) Potential for direct interspecies electron transfer in methanogenic wastewater digester aggregates. **mBio**, 2(4), e00159-11.
49. Lovley DR, Ueki T, Zhang T, Malvankar NS, Shrestha PM, Flanagan KA, Aklujkar M, Butler JE, Giloteaux L, Rotaru A-E, Holmes DE, Franks AE, Orellana R, Risso

- C and Nevin KM. (2011) Geobacter: the microbe electric's physiology, ecology, and practical applications. In **Advances in Microbial Physiology** (Vol. 59, pp. 1-100). Academic Press.
50. Bunge M, Søjberg LS, **Rotaru A-E**, Gauthier D, Lindhardt AT, Hause G ... & Meyer RL. (2010) Formation of palladium (0) nanoparticles at microbial surfaces. **Biotechnology & Bioengineering**, 107(2), 206-215
51. **Rotaru A-E**, Probian C, Wilkes H & Harder J. (2010) Highly enriched Betaproteobacteria growing anaerobically with p-xylene and nitrate. **FEMS Microbiology Ecology**, 71(3), 460-468.

Talks

39 invited talks at conferences & universities, including **9 keynotes & 2 award lectures**

Invited/keynote talks at conferences:

- 2025 EuroMIC COST action, Horsens (DK) **Keynote Speaker**
- 2024 Bioenergetics Meeting, Madrid (ES), Invited talk
- 2024 Royal Danish Academy of Science and Letters (DK), **Elite Forsk Award Lecture**
- 2024 DANEMO EMBL Symposium, Copenhagen (DK), Invited Talk
- 2023 DFG Priority Program InterZell, Jena (DE) **Keynote Speaker**
- 2022 ISMET-global conference; Crete (GR) **Keynote speaker**
- 2022 New Topics in Mineralogy 2: The mineral–microbe interface; Invited speaker (online)
- 2022 Microenergy Workshop; Aarhus (DK) Invited speaker
- 2022 ICBM-4; Braga (PT) **Keynote speaker**
- 2022 KNVM Scientific Spring meeting; Arnhem (NL) Invited speaker
- 2021 Electromicrobiology-2; Aarhus (DK) Invited speaker
- 2019 IWA-16 Congress on Anaerobic Digestion; Delft (NL) Invited Speaker
- 2019 SAME-16 Symposium of Aquatic Microbial Ecology, Potsdam (DE) **Keynote speaker**
- 2019 Electromicrobiology-1; Aarhus (DK) Invited speaker
- 2018 ISMET-NA, St. Poul Minnesota (USA) Invited speaker
- 2018 GRC: molecular basis of C1-metabolism; Maine (USA) Invited speaker
- 2017 SFB987 Survival Artists Workshop; MPI Marburg (DE) Invited speaker
- 2017 Redox Active Minerals Meeting; Manchester (UK) **Keynote speaker**
- 2017 Geomicrobiology Network Meeting; Manchester (UK) Invited speaker
- 2016 Fyens Stiftidende, **Award Lecture**
- 2016 KNVM meeting; Nijmegen (NL) **Keynote speaker**
- 2016 ASM meeting; Boston (USA) Invited speaker
- 2016 JAMS; Sydney (AUT) Invited speaker
- 2015 DMS meeting; Copenhagen (DK) **Keynote speaker**

Invited talks at academic institutions (selected):

- 2023 Radboud University, Radboud (NL)
- 2022, 2023 Max Planck Institute for Marine Microbiology, Bremen (DE)
- 2021 Radboud University, (online) Radboud (NL)
- 2018 Wageningen Evolution & Ecology Seminars, University of Wageningen, Wageningen (NL)
- 2018 Microbiology Lecture Series; University of Southern Denmark, Odense (DK)
- 2017 Stanford University, Palo Alto (USA)

2017 Marburg spotlight on Microbiology (LOWE grad. school invited speaker), MPI Marburg (DE)

2017 University of California Dana and Dornsife, Los Angeles (USA)

2017 Danish Technological University, Lyngby (DK)

2016 University of Oldenburg, Oldenburg (DE)

2016 University of New Castle, New Castle (UK)

2016 University of New South Wales, Sydney (AU)

2016 Helmholtz Center for Environmental Research, Leipzig (DE)

2016 Radboud University, Radboud (NL)

2015 Departmental Lecture Series; Biology, University of Southern Denmark (DK)

2014 Aarhus University, Aarhus (DK)

Outreach

2023 Public lecture & demonstration, "*The sea is electric*". Electricity produced by microorganisms from marine sediments. Funded by Danish Research Council. SDU Marine Station, Fjord & Bælt, Kerteminde, DK.

2019 Author of a behind the paper blog [Microbes at war](#) for the Nature Research Community.

2013 – now Media interviews and featured in [The New Scientist](#) (2013), [Fyens Stiftstidende](#) (2016), [EurekaAlert!](#) (2018), [Phys.org](#) (2018), [Science News](#) (2018), [Zetland](#) (2022) to name a few.