

Contact info

Employment

2018 - now Associate Professor Microbial Physiology, University of Southern Denmark, DK
2017 Guest Assistant Professor, University of Massachusetts, Amherst, USA
2015- 2018 Assistant Professor, University of Southern Denmark
2013-2015 Postdoc Fellow DFF, University of Southern Denmark
2010-2013 Postdoc, University of Massachusetts, Amherst, USA
2009-2010 Postdoc, University of Aarhus

Education

2005-2009 PhD, Max Planck Institute for Marine Microbiology, Germany
2003-2005 MSc, Max Planck Institute for Marine Microbiology, Germany
1998-2002 BSc in Biochemistry, University of Bucharest, Romania

Grants

2015- : **Sapere Aude DFF FNU Research Leader** (principle investigator)
2015- : **Novo Nordisk Foundation** (principle investigator)
2015- : **Innovationsfonden grant** (work package leader)
2013-2015 : **Danish Research Council independent research grant** (principle investigator)
2014-2017 : **Dale T. Mortensen fellowship** (principle investigator) - *declined*.

Prizes/Honors

Fyens Stiftstidendes Forskerpris
Rotaru, A.-E. (Modtager), 9. maj 2017

MARMIC teaching award
Rotaru, A.-E. (Modtager), 2006

Scientific services and committees

Grant assessor: European Research Council / REA-FET Open; NSF (USA); DFG (DE); NWO – The Dutch Research Council (NL)
PhD thesis referee: 2 DK; 1 AUT; 1 FI and 1 NL
part A Ph.D. thesis referee: 1 AU (DK)
Reviewer for: Science, PNAS, ISME J, mBio, Water Res, Sci Rep, AEM, ES&T, Front Microbiol etc.
Editor (guest): 5 different Frontiers Journals (see Publons reviewer account)

Teaching and supervision

FORMAL EDUCATION TRAINING

2020: Leadership training with personal coach; SDU, DK
2019: Ph.D. Supervisor course; SDU, DK
2016-2017: Lecturer training program; SDU, DK
2016: Active learning and teaching using flipped learning; SDU, DK
2016: Interactive lecturing; SDU, DK
2017: Questioning: how it can support learning, teaching and assessment

ADMINISTRATIVE TASKS RELATED TO EDUCATION

2018 – now: planning of courses BB537; FF503
2018: teaching committee (*ad-hoc* replacing Prof. Bo Thamdrup)

TEACHING EXPERIENCE

2019: EMBO European PhD summer school Breathless microbes (invited lecture on the cultivation of electrophiles); NL
2018 – now: BB540 Microbial ecology & biogeochemical cycles (lectures on extracellular electron transfer); (2 x 2h lectures; ECTS 10); SDU, DK
2016 – now: BB537 Biology from molecules to ecosystems (20 x 1h lectures and preparation of 7x3h tutorial materials for biochemistry and evolution; ECTS 10); SDU, DK

2016 – now: BB536 Sustainable future(1h guest lecture on bioelectrochemical technologies for sustainability; ECTS 5); SDU, DK
2015: BB515 Biomonitoring pollution in freshwater systems (3 x 1h lectures toxic algae blooms; ECTS 5); SDU, DK
2006 – 2008: Biology of Prokaryotes(3 x 1h guest lectures on syntrophy); MPI Marine Microbiology, Bremen, DE

LAB INSTRUCTOR, LAB ASSISTANCE, TUTORING

2018– now: BB540 Microbial ecology & biogeochemical cycles (2 x 6h labs extracellular electron transfer); SDU, DK
2015:BB515 Biomonitoring of pollution in freshwater systems (1 week as an instructor for labs on the impact of toxic algae on food webs); SDU, DK
2014:BB523 Pharmaceutical toxicology (lab assistant HPLC identification of toxic compounds)
2007:Thermodynamics tutorials/Biology of the prokaryotes (tutoring MSc student in thermodynamics); MPI for Marine Microbiology, Bremen, DE
2005-2007: Biology of the prokaryotes (lab assistant); MPI for Marine Microbiology, Bremen, DE

DISTINCTIONS AND AWARDS IN TEACHING

2006: Teaching Award; International Max Planck Research School for Marine Microbiology; Bremen (DE)

EXAMINATION COMMITTEES

PhD thesis referee: 2 DK; 1 AUT; 1 FI and 1 NL
part A; Ph.D. thesis referee (scheduled): 1 AU (DK)
MSc thesis referee: 2 at KU (DK)

SUPERVISION

Ph.D.students (2)

2015– now; M.O. Yee (4+4 Ph.D. program); Thesis: “*Extracellular electron transfer in methanogenic Archaea*”; SDU, DK
2016 - 2019: P.A. Palacios (5+3 Ph.D.program); Thesis: “*Microbial induced corrosion by methanogens and other associated microbial groups*”; SDU, DK

Co-supervision of visiting Ph.D. students (3)

2017: J. Zhang, University of Massachusetts Amherst, MA, USA
2011-2012: S. Chen, University of Massachusetts Amherst, MA, USA
2009-2010: B. Hosseinkhani, AU, DK

Postdocs(3)

2019: visiting researcher K. Lowe Rogers from KU. Activities at SDU, DK.
2019– now: P.A. Palacios, SDU, DK
2018:intern X. Yang, SDU, DK
2016 – 2018: O. Snoeyenbos-West, SDU, DK
2015– 2017: S. Kawaichi, SDU, DK

M.Sc.students (1)

2018:D. Jensen; M.Eng. Thesis: *Producing PHBs from renewable sources: Using excess electricity to produce bioplastics from CO₂*; Co-supervision with Lars Ottosen/AU. AU/SDU, DK
2007:Dr. U. Jaekel – M.Sc. lab rotation in anaerobic hydrocarbon degradation; MPI Bremen, DE
2006:Dr. P. Gomez Pereira – M. Sc. Lab rotation on fluorescence *in situ* hybridization of syntrophic communities; MPI Bremen, DE

B.Sc.students (10)

2020 (2 Bachelor project students): M. Arreborg and C. Krogh Pedersen, SDU, DK.
2019 (2 ISA students): M. Arreborg and C. Krogh Pedersen: IABB505 independent study activity on electroactive degradation of plastic polymers. SDU, DK.
2017 (1 thesis student): J. Bang Rønning; B.Sc. thesis: *Green production of plastics: poly hydroxybutyrate*. SDU, DK
2017 (1 ISA student): V. Hundtofte Mebus; IABB505 independent study on electromethanogenesis. SDU, DK
2016 (1 ISA student): R. Pors; IABB505 independent study on electroacetogenesis. SDU, DK
2012 (1 thesis student): S. Sod; *honors* thesis Chem. Eng. on syntrophic interactions for anaerobic digestion. University of Massachusetts Amherst, MA, USA
2011-2012 (1 ISA student): B.Markovaito on syntrophic interactions; University of Massachusetts Amherst, MA, USA
2011-2012 (2 student helpers): D.C.Flores and M. Murnane; University of Massachusetts Amherst, MA, USA
2006 (1 summer research project): B.Adam, fluorescence *in situ* hybridization of syntrophic communities; MPI Bremen, DE

Publications

- Editorial: Cross-boundary significance of methanogens -the methane moment and beyond**
Liu, Z., Rotaru, A.-E., Pimentel, M., Zhang, C. J., Rittmann, S. K. M. R. & Ferry, J., jun. 2024, I: *Frontiers in Microbiology*.
Publikation: Bidrag til tidsskrift > Leder > peer review
- Electrical Current Disrupts the Electron Transfer in Defined Consortia**
Yee, M. O., Ottosen, L. D. M. & Rotaru, A.-E., jan. 2024, I: *Microbial Biotechnology*. 17, 1, 12 s., e14373.
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review

3. **Editorial: Electromicrobiology—from electrons to ecosystems, volume II**
Risgaard-Petersen, N. & Rotaru, A.-E., 24. jul. 2023, I: *Frontiers in Microbiology*. 14, 4 s., 1253550.
Publikation: Bidrag til tidsskrift › Leder › peer review
4. **Editorial: The methane moment - Cross-boundary significance of methanogens: Preface**
Lyu, Z., Rotaru, A. E., Pimentel, M., Zhang, C. J. & Rittmann, S. K. M. R., 14. nov. 2022, I: *Frontiers in Microbiology*. 13, 1055494.
Publikation: Bidrag til tidsskrift › Leder › peer review
5. **An underappreciated DIET for anaerobic petroleum hydrocarbon-degrading microbial communities**
Aulenta, F., Tucci, M., Cruz Viggi, C., Dolfig, J., Head, I. M. & Rotaru, A.-E., jan. 2021, I: *Microbial Biotechnology*. 14, 1, s. 2-7
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
6. **A Win-Loss Interaction on Fe⁰ Between Methanogens and Acetogens From a Climate Lake**
Palacios, P. A., Francis, W. R. & Rotaru, A. E., maj 2021, I: *Frontiers in Microbiology*. 12, 19 s., 638282.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
7. **Cultivating electroactive microbes - from field to bench**
Yee, M. O., Joerg, D., Alfred, S. & Rotaru, A.-E., 24. apr. 2020, I: *Nanotechnology*. 31, 17, 18 s., 174003.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
8. **Extracellular electron uptake in Methanosarcinales is independent of multiheme c-type cytochromes**
Yee, M. O. & Rotaru, A.-E., 15. jan. 2020, I: *Scientific Reports*. 10, 1, 372.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
9. **Syntrophus conductive pili demonstrate that common hydrogen-donating syntrophs can have a direct electron transfer option**
Walker, D., Nevin, K., Holmes, D. E., Rotaru, A.-E., Ward, J., Woodard, T., Zhu, J., Ueki, T., Nonnenmann, S., McInerney, M. & Lovley, D. R., mar. 2020, I: *The ISME Journal*. 14, 3, s. 837–846
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
10. **Baltic Methanosarcina and Clostridium compete for electrons from metallic iron**
Palacios Jaramillo, P. A., Snoeyenbos-West, O., Löscher, C., Thamdrup, B. & Rotaru, A.-E., 25. jan. 2019, I: *BioRxiv*. 530386.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning
11. **Baltic Sea methanogens compete with acetogens for electrons from metallic iron**
Palacios Jaramillo, P. A., Snoeyenbos-West, O., Löscher, C., Thamdrup, B. & Rotaru, A.-E., dec. 2019, I: *The ISME Journal*. 13, s. 3011-3023
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
12. **Extracellular electron uptake by two Methanosarcina species**
Yee, M. O., Snoeyenbos-West, O. L., Thamdrup, B., Ottosen, L. D. M. & Rotaru, A. E., 2. apr. 2019, I: *Frontiers in Energy Research*. 7, 10 s., 29.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
13. **Interspecies interactions mediated by conductive minerals in the sediments of the iron rich meromictic Lake La Cruz, Spain**
Rotaru, A.-E., Posth, N., Löscher, C., Miracle, M. R., Vincence, E., Cox, R. P., Thompson, J., Poulton, S. W. & Thamdrup, B., 2019, I: *Limnetica*. 38, 1, s. 21-40 366542.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
14. **Towards the integrated marine debris observing system**
Maximenko, N., Corradi, P., Law, K. L., Sebille, E. V., Garaba, S. P., Lampitt, R. S., Galgani, F., Martinez-Vicente, V., Goddijn-Murphy, L., Veiga, J. M., Thompson, R. C., Maes, C., Moller, D., Löscher, C. R., Addamo, A. M., Lamson, M., Centurioni, L. R., Posth, N., Lumpkin, R. & Vinci, M. & 40 flere, Martins, A. M., Pieper, C. D., Isobe, A., Hanke, G., Edwards, M., Chubarenko, I. P., Rodriguez, E., Aliani, S., Arias, M., Asner, G. P., Brosich, A., Carlton, J. T., Chao, Y., Cook, A. M., Cundy, A., Galloway, T. S., Giorgetti, A., Goni, G. J., Guichoux, Y., Hardesty, B. D., Holdsworth, N., Lebreton, L., Leslie, H. A., Macadam-Somer, I., Mace, T., Manuel, M., Marsh, R., Martinez, E., Mayor, D., Le Moigne, M., Jack, M. E. M., Mowlem, M. C., Obbard, R. W., Pabortsava, K., Robberson, B., Rotaru, A. E., Spedicato, M. T., Thiel, M., Turra, A. & Wilcox, C., 28. aug. 2019, I: *Frontiers in Marine Science*. 6, 25 s., 447.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
15. **Conductive particles enable syntrophic acetate oxidation between *Geobacter* and *Methanosarcina* from coastal sediments**
Rotaru, A.-E., Calabrese, F., Stryhanyuk, H., Musat, F., Shrestha, P. M., Weber, H. S., Snoeyenbos-West, O., Hall, P. O. J., Richnow, H., Musat, N. & Thamdrup, B., maj 2018, I: *mBio*. 9, 3, e00226-18.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
16. **Electron and Proton Flux for Carbon Dioxide Reduction in *Methanosarcina barkeri* During Direct Interspecies Electron Transfer**
Holmes, D. E., Rotaru, A.-E., Ueki, T., Shrestha, P. M., Ferry, J. & Lovley, D. R., 13. dec. 2018, I: *Frontiers in Microbiology*. 9, s. 1-11 3109.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review

17. **Extracellular electron uptake by two *Methanosarcina* species**
Yee, M. O., Snoeyenbos-West, O., Thamdrup, B., Ottosen, L. D. M. & Rotaru, A.-E., nov. 2018, I: *BioRxiv*. 29 s., 458091.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning
18. ***Geobacter* strains expressing poorly conductive pili reveal constraints on direct interspecies electron transfer mechanisms**
Ueki, T., Nevin, K. P., Rotaru, A.-E., Wang, L. Y., Ward, J., Woodard, T. & Lovley, D. R., 2018, I: *mBio*. 9, 4, s. 1-10 e01273-18.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
19. **Potential for *Methanosarcina* to contribute to uranium reduction during acetate-promoted groundwater bioremediation**
Holmes, D. E., Orellana, R., Giloteaux, L., Wang, L. Y., Shrestha, P. M., Williams, K., Lovley, D. R. & Rotaru, A.-E., okt. 2018, I: *Microbial Ecology*. 76, 3, s. 660–667
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
20. **Conductive particles enable syntrophic acetate oxidation between *Geobacter* and *Methanosarcina* from coastal sediments**
Rotaru, A.-E., Calabrese, F., Stryhanyuk, H., Musat, F., Shrestha, P. M., Weber, H. S., Snoeyenbos-West, O., Hall, P. O. J., Richnow, H., Musat, N. & Thamdrup, B., nov. 2017, I: *BioRxiv*.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning
21. **Potential for *Methanosarcina* to contribute to uranium reduction during acetate-promoted groundwater bioremediation**
Holmes, D. E., Orellana, R., Giloteaux, L., Wang, L. Y., Shrestha, P. M., Williams, K., Lovley, D. & Rotaru, A.-E., 2017, I: *BioRxiv*.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning
22. **Editorial: Wired for life**
Rotaru, A.-E. & Shrestha, P., 21. apr. 2016, I: *Frontiers in Microbiology*.
Publikation: Bidrag til tidsskrift › Leder › peer review
23. **Link between capacity for current production and syntrophic growth in *Geobacter* species**
Rotaru, A.-E., Woodard, T., Nevin, K. & Lovley, D., 21. jul. 2015, I: *Frontiers in Microbiology*. 6, JUL, s. 1-8 744.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
24. **Magnetite Compensates for the Lack of a Piliin-Associated c-Type Cytochrome in Extracellular Electron Exchange**
Liu, F., Rotaru, A.-E., Shrestha, P., Malvankar, N., Nevin, K. & Lovley, D., mar. 2015, I: *Environmental Microbiology*. 17, 3, s. 648-655
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
25. **Carbon cloth stimulates direct interspecies electron transfer in syntrophic co-cultures**
Chen, S., Rotaru, A.-E., Liu, F., Phillips, J., Woodard, T., Nevin, K. & Lovley, D., dec. 2014, I: *Bioresource Technology*. 173, s. 82-86
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
26. **Constraint-based modeling of carbon fixation and the energetics of electron transfer in *Geobacter metallireducens***
Feist, A., Nagarajan, H., Rotaru, A.-E., Tremblay, P.-L., Zhang, T., Nevin, K., Lovley, D. & Zengler, K., 24. apr. 2014, I: *PLoS Computational Biology*. 10, 4, s. e1003575 e1003575.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
27. **Correlation between microbial community and granule conductivity in anaerobic bioreactors for brewery wastewater treatment**
Shrestha, P., Malvankar, N. S., Werner, J., Franks, A., Rotaru, A.-E., Shrestha, M., Liu, F., Nevin, K., Angenent, L. & Lovley, D., dec. 2014, I: *Bioresource Technology*. 174, s. 306-310
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
28. **Direct interspecies electron transfer between *Geobacter metallireducens* and *Methanosarcina barkeri***
Rotaru, A.-E., Shrestha, P. M., Liu, F., Markovaite, B., Chen, S., Nevin, K. N. & Lovley, D. R., aug. 2014, I: *Applied and Environmental Microbiology*. 80, 15, s. 4599-4605
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
29. **Plugging in or Going Wireless: Strategies for Interspecies Electron Transfer**
Shrestha, P. & Rotaru, A.-E., 16. maj 2014, I: *Frontiers in Microbiology*. 5, 237.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review
30. **Promoting interspecies electron transfer with biochar**
Chen, S., Rotaru, A.-E., Shrestha, P. M., Malvankar, N. S., Liu, F., Fan, W., Nevin, K. P. & Lovley, D. R., 21. maj 2014, I: *Scientific Reports*. 4, 5019.
Publikation: Bidrag til tidsskrift › Tidsskriftartikel › Forskning › peer review

31. **A new model for electron flow during anaerobic digestion: direct interspecies electron transfer to Methanosaeta for the reduction of carbon dioxide to methane**
Rotaru, A.-E., Shrestha, P. M., Liu, F., Shrestha, M., Shrestha, D., Embree, M., Zengler, K., Wardman, C., Nevin, K. P. & Lovley, D. R., 2013, I: *Energy & Environmental Science*. 7, 1, s. 408-415
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
32. **Characterization and modelling of interspecies electron transfer mechanisms and microbial community dynamics of a syntrophic association**
Nagarajan, H., Embree, M., Rotaru, A.-E., Shrestha, P. M., Feist, A., Palsson, B. Ø., Lovley, D. R. & Zengler, K., 2013, I: *Nature Communications*. 4, 2809.
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
33. **Interspecies electron transfer via hydrogen and formate rather than direct electrical connections in cocultures of Pelobacter carbinolicus and Geobacter sulfurreducens**
Rotaru, A.-E., Shrestha, P. M., Liu, F., Ueki, T., Nevin, K., Summers, Z. M. & Lovley, D. R., 2012, I: *Applied and Environmental Microbiology*. 78, 21, s. 7645-7651
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
34. **Microbially supported synthesis of catalytically active bimetallic Pd-Au nanoparticles**
Hosseinkhani, B., Søbberg, L. S., Rotaru, A.-E., Emtiazi, G., Skrydstrup, T. & Meyer, R. L., 2012, I: *Biotechnology and Bioengineering*. 109, 1, s. 45-52
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
35. **Non-enzymatic palladium recovery on microbial and synthetic surfaces**
Rotaru, A.-E., Jiang, W., Finster, K., Skrydstrup, T. & Meyer, R. L., 2012, I: *Biotechnology and Bioengineering*. 109, 8, s. 1889-1897
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
36. **Promoting direct interspecies electron transfer with activated carbon**
Liu, F., Rotaru, A.-E., Shrestha, P. M., Malvankar, N. S., Nevin, K. P. & Lovley, D. R., 2012, I: *Energy & Environmental Science*. 2012, 5, s. 8982-8989
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
37. **Syntrophic growth with direct interspecies electron transfer as the primary mechanism for energy exchange**
Shrestha, P. M., Rotaru, A.-E., Aklujkar, M., Liu, F., Shrestha, M., Summers, Z. M., Malvankar, N., Flores, D. C. & Lovley, D. R., 2013, I: *Environmental Microbiology Reports*. 5, 6, s. 904-910
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
38. **Transcriptomic and genetic analysis of direct interspecies electron transfer**
Shrestha, P. M., Rotaru, A.-E., Summers, Z. M., Shrestha, M., Liu, F. & Lovley, D. R., 2013, I: *Applied and Environmental Microbiology*. 79, 7, s. 2397-2404
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
39. **Visualization of candidate division OP3 cocci in limonene-degrading methanogenic cultures**
Rotaru, A.-E., Schauer, R., Probian, C., Musmann, M. & Harder, J., 2012, I: *Journal of Microbiology and Biotechnology*. 22, 4, s. 457-461
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
40. **Potential for direct interspecies electron transfer in methanogenic wastewater digester aggregates**
Morita, M., Malvankar, N. S., Franks, A. E., Summers, Z. M., Giloteaux, L., Rotaru, A. E., Rotaru, A.-E., Rotaru, C. & Lovley, D. R., 2011, I: *mBio*. 2, 4, s. e00159-11
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
41. **Formation of palladium(0) nanoparticles at microbial surfaces**
Bunge, M., Søbberg, L. S., Rotaru, A.-E., Gauthier, D., Lindhardt, A. T., Hause, G., Finster, K., Kingshott, P., Skrydstrup, T. & Meyer, R. L., 1. okt. 2010, I: *Biotechnology and Bioengineering*. 107, 2, s. 206-215
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review
42. **Highly enriched Betaproteobacteria growing anaerobically with p-xylene and nitrate**
Rotaru, A.-E., Probian, C., Wilkes, H. & Harder, J., mar. 2010, I: *FEMS Microbiology Ecology*. 71, 3, s. 460-468
Publikation: Bidrag til tidsskrift > Tidsskriftartikel > Forskning > peer review

Speaking engagements

1. **Life of Geobacter as a syntroph in artificial and environmental consortia with methanogens (Invited talk, BES28)**
Rotaru, A.-E. (Oplægsholder)
20. maj 2024
Aktivitet: Foredrag og mundtlige bidrag > Konferenceoplæg
2. **The Electrifying Lives of Methane-Producing Archaea (Royal Academy, EliteForsk awardee public talk)**
Rotaru, A.-E. (Oplægsholder)
12. mar. 2024
Aktivitet: Foredrag og mundtlige bidrag > Konferenceoplæg

3. **Electron cross-feeding between bacteria and archaea (Invited talk, DANEMO)**
Rotaru, A.-E. (Oplægsholder)
26. jan. 2024
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
4. **Electric microbial partnerships (Keynote, eBiotech and InterZell)**
Rotaru, A.-E. (Keynote speaker)
6. nov. 2023 → 7. nov. 2023
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
5. **Direct conversion of power to fuel: Electromethanogenesis (Keynote, ISMET-8)**
Rotaru, A.-E. (Keynote speaker)
22. sep. 2022
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
6. **Interspecies electron transfer by conducting minerals (Invited talk, Microenergy Workshop)**
Rotaru, A.-E. (Oplægsholder)
5. sep. 2022 → 9. sep. 2022
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
7. **Electromethanogenesis (Keynote, ICBM-5)**
Rotaru, A.-E. (Keynote speaker)
10. maj 2022
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
8. **Geoconductors forging partnerships between species involved in seabed methane emissions (Invited talk, KNVM & NVMM Scientific Spring Meeting)**
Rotaru, A.-E. (Oplægsholder)
4. apr. 2022 → 6. apr. 2022
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
9. **Geoconductors forging partnerships between species involved in methane emissions (Invited talk, New Topics in Mineralogy)**
Rotaru, A.-E. (Oplægsholder)
3. dec. 2021
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
10. **Geoconductors forging partnerships between species involved in seabed methane emissions (Invited talk, Electromicrobiology 2)**
Rotaru, A.-E. (Oplægsholder)
3. nov. 2021 → 5. nov. 2021
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
11. **Electroactive methanogens in aquatic environments (Keynote, SAME16, Potsdam, DE)**
Rotaru, A.-E. (Keynote speaker)
1. sep. 2019 → 6. sep. 2019
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
12. **Cultivation of electrophiles (Guest lecturer, EMBO Ph.D. summer school in anaerobic microbiology)**
Rotaru, A.-E. (Foredragsholder)
1. jul. 2019 → 5. jul. 2019
Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
13. **Electroactive methanogens (Invited talk, 16th IWA World Conference on Anaerobic Digestion)**
Rotaru, A.-E. (Oplægsholder)
23. jun. 2019 → 27. jun. 2019
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
14. **Conductive particles hot-wire syntrophic consortia (Invited Talk, 1st Electromicrobiology conference, Aarhus)**
Rotaru, A.-E. (Oplægsholder)
21. mar. 2019 → 22. mar. 2019
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
15. **Time warp: mineral syntrophy as a proxy of the earliest earthly intercellular associations (Keynote, ISMET-NA conference, St. Poul, Minnesota, USA)**
Rotaru, A.-E. (Keynote speaker)
10. okt. 2018 → 12. okt. 2018
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
16. **Feasting on Electrons: A Day in the Life of a Methanogen (Invited Talk, Gordon C1-metabolism conference, Maine, USA)**
Rotaru, A.-E. (Oplægsholder)
29. jul. 2018 → 3. aug. 2018
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg

17. **Feeding on electrons (Invited talk, and workshop; Evolution and Ecology Seminars, University of Wageningen, Netherlands)**
 Rotaru, A.-E. (Oplægsholder)
 25. apr. 2018
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
18. **Syntrophic acetate oxidation facilitated by (semi)conductive materials in Baltic Sea sediments (Invited talk, Survival Artists Symposium, Marburg, Germany)**
 Rotaru, A.-E. (Oplægsholder), Calabrese, F. (Andet), Stryhanyuk, H. (Andet), Shrestha, P. M. (Andet), Weber, H. S. (Andet), Snoeyenbos-West, O. (Andet), Hall, P. O. J. (Andet), Richnow, H. (Andet), Musat, N. (Andet) & Thamdrup, B. (Andet)
 9. okt. 2017
 Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
19. **Syntrophic acetate oxidation mediated by conductive particles in Baltic Sea sediments (Stanford University, Invited talk)**
 Rotaru, A.-E. (Oplægsholder)
 2. aug. 2017
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
20. **Syntrophic acetate oxidation mediated by conductive particles in Baltic Sea sediments (USC Dana and Dornsife, Invited talk)**
 Rotaru, A.-E. (Oplægsholder)
 1. aug. 2017
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
21. **Syntrophic acetate oxidation between Geobacter and Methanosarcina from the Bothnian Bay facilitated by conductive minerals (Keynote, Redox-Active Minerals in Natural Systems, Manchester, UK)**
 Rotaru, A.-E. (Keynote speaker), Calabrese, F. (Andet), Stryhanyuk, H. (Andet), Shrestha, P. M. (Andet), Weber, H. S. (Andet), Snoeyenbos-West, O. (Andet), Hall, P. O. J. (Andet), Richnow, H. (Andet), Musat, N. (Andet) & Thamdrup, B. (Andet)
 20. jun. 2017
 Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
22. **Syntrophic acetate oxidation between Geobacter and Methanosarcina from the Bothnian Bay facilitated by conductive minerals (Invited talk, Geomicrobiology Network meeting, Machester UK)**
 Rotaru, A.-E. (Oplægsholder)
 20. apr. 2017 → 22. apr. 2017
 Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
23. **Direct interspecies electron transfer in anaerobic microorganisms (Keynote, KNVM, Nijmegen, Netherlands)**
 Rotaru, A.-E. (Keynote speaker)
 4. nov. 2016
 Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
24. **Direct interspecies electron transfer - future perspectives (Radboud University Invited talk)**
 Rotaru, A.-E. (Oplægsholder)
 2. nov. 2016
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
25. **Methanogens hungry for electrons (UFZ Leipzig Invited talk)**
 Rotaru, A.-E. (Oplægsholder)
 jul. 2016
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
26. **Direct interspecies electron transfer in anaerobic microorganisms (Invited Speaker, ASM conference, Boston, USA)**
 Rotaru, A.-E. (Oplægsholder)
 jun. 2016
 Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
27. **Electric interactions with methanogens (Invited Talk, University of Newcastle upon Tyne)**
 Rotaru, A.-E. (Oplægsholder)
 31. mar. 2016
 Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter

28. **An electric DIET for methanogens (Invited talk, University of New South Wales, Sydney, Australia)**
Rotaru, A.-E. (Underviser)
17. mar. 2016
Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
29. **An electric DIET for methanogens (JAMS conference, Sydney, Australia)**
Rotaru, A.-E. (Oplægsholder)
16. mar. 2016
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
30. **A new DIET for methanogens (Invited Talk, ICBM Oldenburg, Germany)**
Rotaru, A.-E. (Oplægsholder)
26. jan. 2016
Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
31. **Electric Interspecies Interactions (Invited talk, Departmental Lecture Series, SDU)**
Rotaru, A.-E. (Oplægsholder)
18. dec. 2015
Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
32. **Direct interspecies electron transfer in microbial consortia (Keynote, DMS conference, Copenhagen)**
Rotaru, A.-E. (Keynote speaker)
9. nov. 2015
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
33. **Wired for life (Invited talk, Seminar Series, University of Aarhus)**
Rotaru, A.-E. (Oplægsholder)
28. feb. 2014
Aktivitet: Foredrag og mundtlige bidrag › Gæsteforelæsning, undervisning og kursusvirksomhed ved andre universiteter
34. **Direct interspecies electron transfer (DIET) in methanogenic environments (ISME, Copenhagen)**
Rotaru, A.-E. (Oplægsholder)
aug. 2012
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg
35. **p-Xylene degradation by denitrifiers (VAAM; Osnabruck)**
Rotaru, A.-E. (Oplægsholder)
apr. 2007
Aktivitet: Foredrag og mundtlige bidrag › Konferenceoplæg