Contact info

Amelia-Elena Rotaru, PhD
Associate Professor
Department of Biology
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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. (Recipient), 9. May 2017

MARMIC teaching award
Rotaru, A.-E. (Recipient), 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 flippedlearning; 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 schoolBreathless 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); MPIMarine 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 ResearchSchool 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* CO_2.Co-supervision with Lars Ottosen/AU. AU/SDU, DK
2007:Dr. U. Jaekel – M.Sc. lab rotation in anaerobic hydrocarbon degradation; MPIBremen, 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.Markovaite 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; MPIBremen, DE

Publications

1. **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, In: Frontiers in Microbiology.
   Research output: Contribution to journal › Editorial › peer-review

2. **Electrical Current Disrupts the Electron Transfer in Defined Consortia**
   Yee, M. O., Ottosen, L. D. M. & Rotaru, A.-E., Jan 2024, In: Microbial Biotechnology. 17, 1, 12 p., e14373.
   Research output: Contribution to journal › Journal article › Research › peer-review

3. **Editorial: Electromicrobiology—from electrons to ecosystems, volume II**
   Risgaard-Petersen, N. & Rotaru, A.-E., 24. Jul 2023, In: Frontiers in Microbiology. 14, 4 p., 1253550.
   Research output: Contribution to journal › Editorial › 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, In: Frontiers in Microbiology. 13, 1055494.
   Research output: Contribution to journal › Editorial › peer-review

5. **An underappreciated DIET for anaerobic petroleum hydrocarbon-degrading microbial communities**
   Aulenta, F., Tucci, M., Cruz Viggi, C., Dolfing, J., Head, I. M. & Rotaru, A.-E., Jan 2021, In: Microbial Biotechnology. 14, 1, p. 2-7
   Research output: Contribution to journal › Journal article › Research › peer-review

6. **A Win–Loss Interaction on Fe^0 Between Methanogens and Acetogens From a Climate Lake**
   Palacios, P. A., Francis, W. R. & Rotaru, A. E., May 2021, In: Frontiers in Microbiology. 12, 19 p., 638282.
   Research output: Contribution to journal › Journal article › Research › peer-review

7. **Cultivating electroactive microbes - from field to bench**
   Yee, M. O., Joerg, D., Alfred, S. & Rotaru, A.-E., 24. Apr 2020, In: Nanotechnology. 31, 17, 18 p., 174003.
   Research output: Contribution to journal › Journal article › Research › peer-review

8. **Extracellular electron uptake in Methanosarcinales is independent of multiheme c-type cytochromes**
   Yee, M. O. & Rotaru, A.-E., 15. Jan 2020, In: Scientific Reports. 10, 1, 372.
   Research output: Contribution to journal › Journal article › Research › 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, In: The ISME Journal. 14, 3, p. 837–846
   Research output: Contribution to journal › Journal article › Research › 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, In: BioRxiv. 530386.
    Research output: Contribution to journal › Journal article › Research

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, In: The ISME Journal. 13, p. 3011-3023
    Research output: Contribution to journal › Journal article › Research › 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, In: Frontiers in Energy Research. 7, 10 p., 29.
    Research output: Contribution to journal › Journal article › Research › 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, In: Limnetica. 38, 1, p. 21-40 366542.
    Research output: Contribution to journal › Journal article › Research › 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 others, 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, In: Frontiers in Marine Science. 6, 25 p., 447.
    Research output: Contribution to journal › Journal article › Research › 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., May 2018, In: mBio. 9, 3, e00226-18.
Research output: Contribution to journal › Journal article › Research › 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, In: Frontiers in Microbiology. 9, p. 1-11 3109.
Research output: Contribution to journal › Journal article › Research › 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, In: BioRxiv. 29 p., 458091.
Research output: Contribution to journal › Journal article › Research

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, In: mBio. 9, 4, p. 1-10 e01273-18.
Research output: Contribution to journal › Journal article › Research › 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., Oct 2018, In: Microbial Ecology. 76, 3, p. 660–667
Research output: Contribution to journal › Journal article › Research › 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, In: BioRxiv.
Research output: Contribution to journal › Journal article › Research

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, In: BioRxiv.
Research output: Contribution to journal › Journal article › Research

22. **Editorial: Wired for life**
Rotaru, A.-E. & Shrestha, P., 21. Apr 2016, In: Frontiers in Microbiology.
Research output: Contribution to journal › Editorial › 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, In: Frontiers in Microbiology. 6, JUL, p. 1-8 744.
Research output: Contribution to journal › Journal article › Research › peer-review

24. **Magnetite Compensates for the Lack of a Pilin-Associated c-Type Cytochrome in Extracellular Electron Exchange**
Liu, F., Rotaru, A.-E., Shrestha, P., Malvankar, N., Nevin, K. & Lovley, D., Mar 2015, In: Environmental Microbiology. 17, 3, p. 648-655
Research output: Contribution to journal › Journal article › Research › peer-review

25. **Carbon cloth stimulates direct interspecies electron transfer in syntrophic co-cultures**
Chen, S., Rotaru, A.-E., Liu, F., Philips, J., Woodard, T., Nevin, K. & Lovley, D., Dec 2014, In: Bioresource Technology. 173, p. 82-86
Research output: Contribution to journal › Journal article › Research › 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, In: PLOS Computational Biology. 10, 4, p. e1003575 e1003575.
Research output: Contribution to journal › Journal article › Research › 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, In: Bioresource Technology. 174, p. 306-310
Research output: Contribution to journal › Journal article › Research › 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, In: Applied and Environmental Microbiology. 80, 15, p. 4599-4605
Research output: Contribution to journal › Journal article › Research › peer-review

29. **Plugging in or Going Wireless: Strategies for Interspecies Electron Transfer**
Shrestha, P. & Rotaru, A.-E., 16. May 2014, In: Frontiers in Microbiology. 5, 237.
Research output: Contribution to journal › Journal article › Research › 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. May 2014, In: Scientific Reports. 4, 5019.
Research output: Contribution to journal › Journal article › Research › 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, In: Energy & Environmental Science. 7, 1, p. 408-415
Research output: Contribution to journal › Journal article › Research › 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, In: Nature Communications. 4, 2809.
Research output: Contribution to journal › Journal article › Research › 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, In: Applied and Environmental Microbiology. 78, 21, p. 7645-7651
Research output: Contribution to journal › Journal article › Research › peer-review

34. **Microbially supported synthesis of catalytically active bimetallic Pd-Au nanoparticles**
Hosseinkhani, B., Søbjerg, L. S., Rotaru, A.-E., Emtiazi, G., Skrydstrup, T. & Meyer, R. L., 2012, In: Biotechnology and Bioengineering. 109, 1, p. 45-52
Research output: Contribution to journal › Journal article › Research › 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, In: Biotechnology and Bioengineering. 109, 8, p. 1889-1897
Research output: Contribution to journal › Journal article › Research › 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, In: Energy & Environmental Science. 2012, 5, p. 8982–8989
Research output: Contribution to journal › Journal article › Research › 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, In: Environmental Microbiology Reports. 5, 6, p. 904-910
Research output: Contribution to journal › Journal article › Research › 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, In: Applied and Environmental Microbiology. 79, 7, p. 2397-2404
Research output: Contribution to journal › Journal article › Research › peer-review

39. **Visualization of candidate division OP3 cocci in limonene-degrading methanogenic cultures**
Rotaru, A.-E., Schauer, R., Probian, C., Mussmann, M. & Harder, J., 2012, In: Journal of Microbiology and Biotechnology. 22, 4, p. 457-461
Research output: Contribution to journal › Journal article › Research › 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, In: mBio. 2, 4, p. e00159-11
Research output: Contribution to journal › Journal article › Research › peer-review

41. Formation of palladium(0) nanoparticles at microbial surfaces
Bunge, M., Søbjerg, L. S., Rotaru, A.-E., Gauthier, D., Lindhardt, A. T., Hause, G., Finster, K., Kingshott, P., Skrydstrup, T. & Meyer, R. L., 1. Oct 2010, In: Biotechnology and Bioengineering. 107, 2, p. 206-215
Research output: Contribution to journal › Journal article › Research › peer-review

42. Highly enriched Betaproteobacteria growing anaerobically with p-xylene and nitrate
Rotaru, A.-E., Probian, C., Wilkes, H. & Harder, J., Mar 2010, In: FEMS Microbiology Ecology. 71, 3, p. 460-468
Research output: Contribution to journal › Journal article › Research › peer-review

Speaking engagements

1. **Life of Geobacter as a syntroph in artificial and environmental consortia with methanogens (Invited talk, BES28)**
   Rotaru, A.-E. (Speaker)
   20. May 2024
   Activity: Talks and presentations › Conference presentations
2. **The Electrifying Lives of Methane-Producing Archaea (Royal Academy, EliteForsk awardee public talk)**
   Rotaru, A.-E. (Speaker)
   12. Mar 2024
   Activity: Talks and presentations › Conference presentations
3. **Electron cross-feeding between bacteria and archaea (Invited talk, DANEMO)**
   Rotaru, A.-E. (Speaker)
   26. Jan 2024
   Activity: Talks and presentations › Conference presentations
4. **Electric microbial partnerships (Keynote, eBiotech and InterZell)**
   Rotaru, A.-E. (Keynote speaker)
   6. Nov 2023 → 7. Nov 2023
   Activity: Talks and presentations › Conference presentations
5. **Direct conversion of power to fuel: Electromethanogenesis (Keynote, ISMET-8)**
   Rotaru, A.-E. (Keynote speaker)
   22. Sept 2022
   Activity: Talks and presentations › Conference presentations
6. **Interspecies electron transfer by conducting minerals (Invited talk, Microenergy Workshop)**
   Rotaru, A.-E. (Speaker)
   5. Sept 2022 → 9. Sept 2022
   Activity: Talks and presentations › Conference presentations
7. **Electromethanogenesis (Keynote, ICBM-5)**
   Rotaru, A.-E. (Keynote speaker)
   10. May 2022
   Activity: Talks and presentations › Conference presentations
8. **Geoconductors forging partnerships between species involved in seabed methane emissions (Invited talk, KNVM & NVMM Scientific Spring Meeting)**
   Rotaru, A.-E. (Speaker)
   4. Apr 2022 → 6. Apr 2022
   Activity: Talks and presentations › Conference presentations
9. **Geoconductors forging partnerships between species involved in methane emissions (Invited talk, New Topics in Mineralogy)**
   Rotaru, A.-E. (Speaker)
   3. Dec 2021
   Activity: Talks and presentations › Conference presentations
10. **Geoconductors forging partnerships between species involved in seabed methane emissions (Invited talk, Electromicrobiology 2)**
    Rotaru, A.-E. (Speaker)
    3. Nov 2021 → 5. Nov 2021
    Activity: Talks and presentations › Conference presentations
11. **Electroactive methanogens in aquatic environments (Keynote, SAME16, Potsdam, DE)**
    Rotaru, A.-E. (Keynote speaker)
    1. Sept 2019 → 6. Sept 2019
    Activity: Talks and presentations › Conference presentations
12. **Cultivation of electrophiles (Guest lecturer, EMBO Ph.D. summer school in anaerobic microbiology)**
    Rotaru, A.-E. (Lecturer)
    1. Jul 2019 → 5. Jul 2019
    Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities
13. **Electroactive methanogens (Invited talk, 16th IWA World Conference on Anaerobic Digestion)**
    Rotaru, A.-E. (Speaker)
    23. Jun 2019 → 27. Jun 2019
    Activity: Talks and presentations › Conference presentations
14. **Conductive particles hot-wire syntrophic consortia (Invited Talk, 1st Electromicrobiology conference, Aarhus)**
    Rotaru, A.-E. (Speaker)
    21. Mar 2019 → 22. Mar 2019
    Activity: Talks and presentations › Conference presentations

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. Oct 2018 → 12. Oct 2018
Activity: Talks and presentations › Conference presentations

16. **Feasting on Electrons: A Day in the Life of a Methanogen (Invited Talk, Gordon C1-metabolism conference, Maine, USA)**
Rotaru, A.-E. (Speaker)
29. Jul 2018 → 3. Aug 2018
Activity: Talks and presentations › Conference presentations

17. **Feeding on electrons (Invited talk, and workshop; Evolution and Ecology Seminars, University of Wageningen, Netherlands)**
Rotaru, A.-E. (Speaker)
25. Apr 2018
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

18. **Syntrophic acetate oxidation facilitated by (semi)conductive materials in Baltic Sea sediments (Invited talk, Survival Artists Symposium, Marburg, Germany)**
Rotaru, A.-E. (Speaker), Calabrese, F. (Other), Stryhanyuk, H. (Other), Shrestha, P. M. (Other), Weber, H. S. (Other), Snoeyenbos-West, O. (Other), Hall, P. O. J. (Other), Richnow, H. (Other), Musat, N. (Other) & Thamdrup, B. (Other)
9. Oct 2017
Activity: Talks and presentations › Conference presentations

19. **Syntrophic acetate oxidation mediated by conductive particles in Baltic Sea sediments (Stanford University, Invited talk)**
Rotaru, A.-E. (Speaker)
2. Aug 2017
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

20. **Syntrophic acetate oxidation mediated by conductive particles in Baltic Sea sediments (USC Dana and Dornsife, Invited talk)**
Rotaru, A.-E. (Speaker)
1. Aug 2017
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

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. (Other), Stryhanyuk, H. (Other), Shrestha, P. M. (Other), Weber, H. S. (Other), Snoeyenbos-West, O. (Other), Hall, P. O. J. (Other), Richnow, H. (Other), Musat, N. (Other) & Thamdrup, B. (Other)
20. Jun 2017
Activity: Talks and presentations › Conference presentations

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. (Speaker)
20. Apr 2017 → 22. Apr 2017
Activity: Talks and presentations › Conference presentations

23. **Direct interspecies electron transfer in anaerobic microorganisms (Keynote, KNVM, Nijmegen, Netherlands)**
Rotaru, A.-E. (Keynote speaker)
4. Nov 2016
Activity: Talks and presentations › Conference presentations

24. **Direct interspecies electron transfer - future perspectives (Radboud University Invited talk)**
Rotaru, A.-E. (Speaker)
2. Nov 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

25. **Methanogens hungry for electrons (UFZ Leipzig Invited talk)**
Rotaru, A.-E. (Speaker)
Jul 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

26. **Direct interspecies electron transfer in anaerobic microorganisms (Invited Speaker, ASM conference, Boston, USA)**
Rotaru, A.-E. (Speaker)
Jun 2016
Activity: Talks and presentations › Conference presentations

27. **Electric interactions with methanogens (Invited Talk, University of Newcastle upon Tyne)**
Rotaru, A.-E. (Speaker)
31. Mar 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

28. **An electric DIET for methanogens (Invited talk, University of New South Wales, Sydney, Australia)**
Rotaru, A.-E. (Guest lecturer)
17. Mar 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

29. **An electric DIET for methanogens (JAMS conference, Sydney, Australia)**
Rotaru, A.-E. (Speaker)
16. Mar 2016
Activity: Talks and presentations › Conference presentations

30. **A new DIET for methanogens (Invited Talk, ICBM Oldenburg, Germany)**
Rotaru, A.-E. (Speaker)
26. Jan 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

31. **Electric Interspecies Interactions (Invited talk, Departmental Lecture Series, SDU)**
Rotaru, A.-E. (Speaker)
18. Dec 2015
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

32. **Direct interspecies electron transfer in microbial consortia (Keynote, DMS conference, Copenhagen)**
Rotaru, A.-E. (Keynote speaker)
9. Nov 2015
Activity: Talks and presentations › Conference presentations

33. **Wired for life (Invited talk, Seminar Series, University of Aarhus)**
Rotaru, A.-E. (Speaker)
28. Feb 2014
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

34. **Direct interspecies electron transfer (DIET) in methanogenic environments (ISME, Copenhagen)**
Rotaru, A.-E. (Speaker)
Aug 2012
Activity: Talks and presentations › Conference presentations

35. **p-Xylene degradation by denitrifiers (VAAM; Osnabruck)**
Rotaru, A.-E. (Speaker)
Apr 2007
Activity: Talks and presentations › Conference presentations