

# Christina Kaiser - Curriculum vitae

## University of Vienna

Department of Microbiology and Ecosystem Science  
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## IIASA - International Institute for Applied Systems Analysis

Evolution and Ecology Program  
 Schlossplatz 1, A-2361 Laxenburg, Austria  
<http://www.iiasa.ac.at>

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## Education

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| 2010 | <b>Dr.rer.nat.</b> University of Vienna, Dept. of Chemical Ecology and Ecosystem Research. Thesis "Resource limitation of microbial decomposition of soil organic matter" |
| 2003 | <b>Master (Mag.)</b> in Ecology at the University of Vienna   |
| 1994 | Graduation Technical Highschool for Informatics and Organisation, Vienna (includes professional training for software-engineering)  |

## Current Position

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| 02/2014 - | <b>Group leader</b> (Univ.Ass.) at the Department for Microbiology and Ecosystem Science, University of Vienna |
| 09/2014 - | <b>Guest researcher</b> at the International Institute for Applied System Analysis (IIASA), Laxenburg, Austria |

## Previous Positions and Fellowships

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| 12/2011 – 01/2014 | <b>Post-doc fellowship</b> International Institute for Applied System Analysis (IIASA), Evolution and Ecology Program, Laxenburg, Austria          |
| 2011              | <b>Post-doctoral position</b> University of Western Australia (UWA), School of Earth and Environment Australia                                     |
| 06/2010 - 12/2010 | <b>Post-doc position</b> , University of Vienna, Dept. of Chemical Ecology and Ecosystem Research  |
| 2009-2014         | <b>Co-PI</b> within the project CryoCARB (Long-term carbon storage in cryoturbated arctic soils, European Science Foundation, PI: Andreas Richter) |
| 2006-2010         | <b>PhD candidate</b> at the University of Vienna   |

- 2003–2005      **Research assistant** at the Department of Chemical Ecology and Ecosystem Research, University of Vienna, for various research projects
- 1994-2000      **Software engineer** (Fortran, C , C++, Visual Basic, Java) in various companies

### Teaching and student supervision

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- 02/2014-      Supervisor of three PhD and five Master students at the Department of Microbiology and Ecosystem Science.  
Teaching (practical courses, lecture, seminar) within the Bachelor program 'Biology' and the Master programs 'Ecology and Ecosystems' at the *University of Vienna*.
- 06/2012-      Supervision of two PhD students for their summer projects within the Young Scientists Summer Program (YSSP) of the International Institute of Applied Systems Analysis (IIASA).
- 2008-2010      Associated lecturer in the course „Interactions of terrestrial and aquatic ecosystems“ (Bachelor program Ecology, University of Vienna)

### Organisation of scientific meetings

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- 2017      Convener of the session 'Integrating Soil Systems Ecology into biogeochemical models' at the European Geosciences Union (EGU) General Assembly 2017 23-28 April, Vienna, Austria
- 2017      Convener of the session 'Mycorrhizal microbiomes' at the 9<sup>th</sup> International Conference on Mycorrhiza, 30<sup>th</sup> July - 4<sup>th</sup> August Prague, Czech Republic

### Peer review activities/Editorships

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- Since 01/2013      Subject Editor for Soil Biology and Biochemistry
- 2017-2019      Research topic Editor for Frontiers in Microbiology
- Ad-hoc* Reviewer: Ecology Letters, Nature Communications, Functional Ecology, Plos ONE, Soil Biology and Biochemistry, Applied Soil Ecology, Forest Ecology and Management

### Awards

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- 2018      ERC Consolidator Grant
- 2011      Postdoctoral Scholarship Award of the International Institute of Applied Systems Analysis (IIASA)

### Project funding (as PI)

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- 2019-2024      SomSOM – Self-organisation of microbial soil organic matter turnover (ERC Consolidator grant) 1,896,129 €, PI Christina Kaiser
- 2018-2020      SPACE – The spatial aspect of rhizosphere priming. Austrian Science Fund (FWF Einzelprojekt) 393,422 €, PI Christina Kaiser
- 2017-2018      Competition or Cooperation: contrasting effects of arbuscular mycorrhiza and ectomycorrhiza on decomposition of organic matter in soil. OEAD (WTZ) Austria – Czech Republik, 6,600 € PI Christina Kaiser

### Project funding (as Co-PI)

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2020-2024	FutureArctic – Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN-2018) Total grant volume 3,965,109 € for 15 Early stage researchers (ESR) across Europe. 264,207 € for the project part (one ESR) jointly supervised by Co-PIs Christina Kaiser and Andreas Richter at the University of Vienna
2015-2017	COUP – Constraining uncertainties in the permafrost-climate feedback (Austrian project part). European Research Area, Joint Programming Initiative (JPI climate) 154,000 €, Co-PI Christina Kaiser, Project coordinator Gustav Hugelius, University of Stockholm
2010-2015	CryoCARB – Long-term carbon storage in cryoturbated arctic soils (Austrian project part) ESF- PolarCLIMATE, 285,700 €, Co-PI Christina Kaiser, PI: Andreas Richter

### Invited Talks (selected)

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- Exploring emergent behaviour of microbial decomposer communities using spatially explicit individual-based modelling. **Summer school on microbial community modelling**, 16-18.9.2019, **KU Leuven**, Belgium
- Self-organisation and emergent phenomena of the soil microbial decomposer system: do we need to account for it in soil organic matter turnover models? **European Geosciences Union (EGU) General Assembly** 7-12.4. 2019, Vienna
- Carbon and Nitrogen trading in the tripartite symbiosis of beech, ectomycorrhizal fungi and soil bacteria, Soil Science Seminar, 5.11.2018, **Institute of Terrestrial Ecosystems, ETH Zürich** (Host: Prof Emanuel Frossard)
- Reciprocal trade of Carbon and Nitrogen at the root-fungus interface in ectomycorrhizal beech plants, **Bodenkunde Kolloquium at the University of Hohenheim** 11.12.2017 (Host: Prof. Dr. Ellen Kandeler).
- Using NanoSIMS and stable isotope tracing to explore Carbon and Nitrogen exchange in the tripartite symbiosis of beech, ectomycorrhizal fungi and soil bacteria, **Biodiversity Kolloquium at the Georg August University of Göttingen**, 13.11.2017 (Host: Dr. Rodica Pena and Prof.Dr. Andrea Polle)
- Linking microbial physiology and biogeochemical dynamics through individual-based modelling. **Ecological Society of America (ESA) Annual Meeting**, 6-11 August 2017, Portland, Oregon, USA
- Can self-organisation among microbial decomposer communities affect biogeochemical cycles in soil? **University of Nottingham**, 8.3. 2017 (Host: Prof.Dr. Karl Ritz)
- Understanding emergent phenomena of soil microbial communities using individual-based modelling. **Gordon Research Conference "Unifying Ecology Across Scales"**, 24-29 July 2016, University of New England, Maine, USA
- Exploring the transfer of recent plant photosynthates to soil microbes via the mycorrhizal pathway. **8<sup>th</sup> International Conference on Mycorrhiza**, August 3-7, 2015, Northern Arizona University, USA (Invited Plenary Symposium Speaker)

### Publications

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Total 27 peer-reviewed Publications, 1195 citations, h-index = 18 (Web of Science, March 2019)