

## Curriculum vitae

### Univ.-Prof. habil. Gerald Steiner

Professor of Organizational Communication and Innovation

[Dean of Faculty of Business and Globalization](#)

[Chair of Department for Knowledge and Communication Management](#)

Danube University Krems, Austria



Scientific Co-Lead/Founder of Transdisciplinarity Laboratories

(1) [Biodiversity-Hub Austria](#)

(2) Sustainable Mineral Resources ([SMR-Td Lab](#))

(3) Sustainable Digital Environments ([SDE-Td Lab](#))

[Associate Faculty CSH \(Complexity Science Hub Vienna, Austria\)](#)

Leading Board Member of the [GovLab Austria](#)

Office: Dr.-Karl-Dorrek-Straße 30, 3500 Krems, Austria

Work E-Mail: [gerald.steiner@donau-uni.ac.at](mailto:gerald.steiner@donau-uni.ac.at)

Work Phone: (Austria) +43 2732 893 2331

Place of Birth: Obach (Styria) Austria (born 03/04/1967)

ORCID <https://orcid.org/0000-0003-3340-3941>

Google Scholar [Link](#)

## Main areas of research and statement of the most important research results achieved

Gerald Steiner is a *systems scientist* whose research focuses on the sustainable transition of coupled *human-ecology-technology-systems* and *multilevel innovation systems* (MULIS) with a strong *transdisciplinary orientation*. His current research interest is to *better understand* (1) major societal challenges, such as sustainable resource management, food security, environmental crises, One Health, and planetary health; (2) the sustainable transition of complex coupled systems; (3) collaboration-based innovation and entrepreneurial activities as potential system interventions (with a specific focus on vulnerabilities and unintended side-effects); (4) competences for complex problem solving; (5) transdisciplinarity (for cross-boundary communication, collaboration, discourse, mutual learning, and knowledge integration). Most recently and inspired by Josiah Ober, he also focuses on knowledge integration across different periods of time (i.e. integrating lessons learned from the past incl. ancient societies).

Gerald's earlier work related to organizational and regional societal/innovation systems. Later, at Harvard University, he began to focus on international affairs and crises-related innovation and collaborative problem solving processes within this context (e.g., economic crises, global food security, energy systems, sustainable resource management). Currently, at Danube University with its strong transdisciplinary orientation, he connects organizational and global perspectives. He (co)founded three transdisciplinary labs: (1) Austrian Biodiversity Hub; (2) Transdisciplinary Laboratory for Sustainable Mineral Resources (SMR TdLab); (3) Transdisciplinarity Laboratory Sustainable Digital Environments (SDE TdLab). Furthermore, he is the organizer and chair of the US Expert Roundtable and a co-initiator of the Asian and European Expert Roundtables on 'Sustainable Digital Environments'. He also serves as Co-Director of the PhD Program in Migration Studies at Danube University in Austria.

## List of academic milestones and selected relevant positions

### Education:

2009	Venja Legendi (Habilitation)	Systemic and Sustainability Management	University of Graz, Austria
2004	PhD	Management Studies and Social Sciences	University of Graz, Austria
1996	MBA	Business Administration Management Studies	University of Graz, Austria

## Academic Appointments:

2015 -	Dean of the Faculty of Business and Globalization, Professor and Chair of Organizational Communication and Innovation	Danube University Krems (Krems, Austria)
2012-2015	Visiting Scholar	Weatherhead Center for International Affairs, Harvard University, Boston, MA
2011 –2012	J.A. Schumpeter Professor (fellowship)	Weatherhead Center for International Affairs, Harvard University, Boston, MA
2009-2011	Associate Professor of Systemic and Sustainability Management(with tenure)	University of Graz, Austria

## Selected research achievements

### Selected honors and prizes

2016	Best Paper Award 2015 (Sustainability Science Journal)	Best Paper Award as Outstanding Paper for ‘The real type and ideal type of transdisciplinary processes: part II—what constraints and obstacles do we meet in practice?’ in: Sustainability Science 10(4)
2008	Sustainability Award (Austrian Government)	Award for the Institute of Systems Sciences, Innovation and Sustainability Research (ISIS) in the track Research
2006	Best Paper Award (Western Decision Sciences Institute, Waikoloa, Hawaii)	Best Published Paper in Management and Organizational Behavior for ‘collaborative creativity’
2005	Daimler Chrysler Alpen-Adria Research Award	Award for Outstanding Research in innovation and creativity

### Selected keynote lectures of the last three years

2018	<i>Most recent developments in Phosphate Rock Mining: A global perspective on efficiency, circular economy, and innovation</i> (U.S. Geological Survey (USGS), Washington D.C., U.S., December 7)
2019	<i>Striving towards a Circular Economy for Phosphorus: The role of Phosphate Rock Mining &amp; Supply Security for Import-dependent Countries.</i> (The United Nations Economic Commission for Europe (UNECE), Expert Group on Resource Management (EGRM), Geneva/Switzerland)
2019	<i>Competences for Dealing Innovatively with Complex Societal Challenges: Why in Future there will be an extended need for transdisciplinary Universities!</i> (Danube Rectors’ Conference 2019, ‘Consolidating the Role of Universities in Innovation Ecosystems: Challenges & Future Developments’, Bucharest/Romania)

### Selected funded projects of the last three years

2017-2019	Collective Mind (SC16-030) (Co-Investigator) – Austrian Research Promotion Agency (FFG) Focus: deeper understanding of the collective intelligence and mental models within collaborative problem solving processes.
2017-	Biodiversity Hub & Database (Lower) Austria (PI) – Section Science and Research of the Government of Lower Austria Focus: developing an overarching database and hub in the field of biodiversity and ecosystems services as part of a comprehensive sustainability strategy for Austria.
2019-2020	A framework of organizational improvisation (Impro) (Co-Investigator) - Bridge Program of the Austrian Research Promotion Agency (FFG) Focus: develop a framework for organizational improvisation - multidimensional competences of people to improvise in complex organizational situations.

## Selected publications of the last five years

Provasnek, A./Schmid, E./Steiner, G. (2016): Stakeholder engagement: Keeping business legitimate in Austria’s natural mineral-water bottling industry. *Journal of Business Ethics*. DOI:10.1007/s10551-016-3121-y. (Best Paper Award BOKU, Vienna 2016)

Provasnek, A./Geissler, B./Schmid, E./Steiner, G. (2016): Sustainable Corporate Entrepreneurship: Performance and Strategies toward Innovation. *Business Strategy and the Environment*, 26(4): pp. 521-535. DOI: 10.1002/bse.1934.

- Steiner, G.** (2018): From probabilistic functionalism to a mental simulation of innovation: By collaboration from vulnerabilities to resilient societal systems. *Environment Systems and Decisions*. DOI: 10.1007/s10669-018-9674-9.
- Steiner, G./Geissler, B./Schreder, G./Zenk, L.** (2018): Living sustainability or pretending to? From explicit self-report measures to implicit cognition. *Sustainability Science*, 13(4): 1001-1015. DOI: 10.1007/s11625-018-0561-6.
- Mew, M./**Steiner, G./Geissler, B.** (2018): Phosphorus Supply Chain—Scientific, Technical, and Economic Foundations: A Transdisciplinary Orientation. *Sustainability*, 10(4): 1087; DOI:10.3390/su10041087.
- Geissler, B./**Steiner, G./Mew, M.** (2018): Clearing the fog on phosphate rock data - Uncertainties, fuzziness, and misunderstandings. *Science of the Total Environment*, 11(642): 250-263. DOI: 10.1016/j.scitotenv.2018.05.381.
- Scholz, R.W./Bartelsman, E.J./Diefenbach, S./Franke, L./Grunwald, A./Helbing, D./Hill, R./Hilty, L./Höjer, M./Klauser, S./Montag, C./Parycek, P./Pereira, G.V./Prote, J.P./Renn, O./Reichel, A./Schuh, G./**Steiner, G.** (2018): Unintended Side Effects of the Digital Transition: European Scientists' Messages from a Proposition-Based Expert Round Table. *Sustainability*, 10(6): 2001. DOI: 10.3390/su10062001.
- Steiner, G./Geissler, B.** (2018): Sustainable Mineral Resource Management – Insights into the Case of Phosphorus. *Sustainability*, 10(8): 2732. DOI: 10.3390/su10082732.
- Geissler, B./Hermann, L./Mew, M./**Steiner, G.** (2018): Striving toward a phosphorus circular economy: The role of phosphate rock mining. *Minerals*, 8, 395; DOI: 10.3390/min8090395.
- Zenk, L./Hynek, N./Schreder, G./Zenk, A./Pausitz, A./Steiner, G.** (2018): Designing Innovation Courses in Higher Education using LEGO Serious Play. *International Journal of Management and Applied Research*, 5(4).
- Steiner, G./Geissler, B./Schernhammer, E.** (2019): Hunger and Obesity as Symptoms of Non-Sustainable Food Systems and Malnutrition. *Applied Sciences*, 9(6), 1062; DOI: 10.3390/app9061062 (Section *Environmental and Sustainable Science and Technology*).
- Geissler, B./Mew, M./**Steiner, G.** (2019). Phosphate supply security for importing countries: Developments and the current situation. *Science of the Total Environment*, 677: 511-523. DOI: 10.1016/j.scitotenv.2019.04.356.
- Steiner, G./Haneklaus, N./Geissler, B.** (2020): Making Uranium Recovery from Phosphates Great Again? *Environmental Science & Technology*, DOI: 10.1021/acs.est.9b07859.
- Geissler, B./Mew, M./Matschullat, J./**Steiner, G.** (2020): Innovation potential along the phosphorus supply chain: A micro and macro perspective on the mining. *Science of the Total Environment*, DOI: 10.1016/j.scitotenv.2020.136701.
- Satalkina, L./**Steiner, G.** (2020): Digital Entrepreneurship and its Role in Innovation Systems: A Systematic Literature Review as a Basis for Future Research Avenues for Sustainable Transitions. *Sustainability*, 12, 2764: DOI:10.3390/su12072764 (Section *Economic, Business and Management Aspects of Sustainability*).
- Satalkina, L./**Steiner, G.** (2020): Digital Entrepreneurship: a theory-based systematization of core performance indicators. *Sustainability*, 12, 4018: DOI:10.3390/su12104018 (Section *Economic, Business and Management Aspects of Sustainability*).
- Steiner, G./Zenk, L./Schernhammer, E.** (2020): Prepared for the next wave of COVID-19: Resilience in the face of pandemic spreads. *International Journal of Environmental Research and Public Health*, 17(11), 4098; DOI:10.3390/ijerph17114098.
- Risopoulos, F./**Steiner, G.** (2020): Competences for Solving Complex Problems: A Cross-Sectional Survey on Higher Education for transformative Learning and Transdisciplinarity. *Sustainability*, 12, 6016: DOI:10.3390/su12156016 (Section *Sustainable Education and Approaches*).
- Hörtl, A./**Steiner, G./Lumetsberger, T./Weinhäupl, H./Greilhuber, I./Wrbka, T./Vadrot, A./Essl, F./Tribtsch, A./Sturmbauer, C./Gratzer, G.** (2020): A network of biodiversity in Austria: Inter- and transdisciplinary network biodiversity & ecosystem services. *GAI*A, 29(2): 126-128.
- Zenk, L./**Steiner, G./Pina e Cunha, M./Laubichler, M.D./Bertau, M./Kainz, M.J./Jäger, C./Schernhammer, E.S.** (2020). Fast response to superspreading: Uncertainty and complexity in the context of COVID-19. *International Journal of Environmental Research and Public Health* (accepted).
- Abbes, N./Bilal, E./Hermann, L./**Steiner, G./Haneklaus, N.** (2020). Thermal beneficiation of Sra Ouertane (Tunisia) low-grade phosphate rock. *Minerals* (accepted).