

Curriculum Vitae of Helmut Rechberger

Contact details, vital and bibliographic statistics

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Born February 21 1968 in Linz, Austria

ORCID: orcid.org/0000-0002-7723-0635
Scopus: 128 publication (SCI), h-index of 36
Google Scholar: h-index of 45
ResearchGate: Research Interest Score top 2% of all ResearchGate members

Academic milestones and relevant positions

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| III. 2020 – | Director of the Institute for Water Quality and Resource Management at <i>Technische Universität Wien</i> (Vienna University of Technology) |
| X. 2015 – VI. 2022 | Member of the Senat of <i>Technische Universität Wien</i> and Vice Director of the Institute for Water Quality and Resource Management |
| III. 2010 – | Head of Research Group Waste and Resource Management at <i>Technische Universität Wien</i> |
| I. 2008 – XII. 20015 | Vice Dean of Studying Affairs, Faculty of Civil Engineering, <i>Technische Universität Wien</i> |
| X. 2003 – | Full Professor for Resource Management, <i>Technische Universität Wien</i> |
| X. 2001 – VII. 2003 | Senior lecturer at ETH Zurich, Chair of Resource and Waste Management (Prof. Peter Baccini) |
| X. 2000 – IX. 2001 | Visiting Researcher in Industrial Ecology (Post-Doc.), Yale University, School of Forestry & Environmental Studies, Center for Industrial Ecology (Prof. Tom Graedel), Scholarship of the Max Kade Foundation, Inc. New York |
| 1999 | PhD in Anthropogenic Metabolism and Waste Technology, <i>Technische Universität Wien</i> |
| 1994 | Master in Process Engineering, <i>Technische Universität Wien</i> |

Main areas of research and short statement of the most important research results achieved to date

The main areas of my research are: further development of evaluation methods and concepts in waste and resource management including statistical entropy; introduction of mathematical-statistical tools to Material Flow Analysis to consider data uncertainty; resource accounting; recovery of valuable substances from ashes and slag; waste characterization; investigation on morphological and chemical composition of urban stocks including dynamics. Under my lead the softwares BIOMA (efficient greenhouse gas accounting from waste incineration; <http://iwr.tuwien.ac.at/ressourcen/downloads/bioma.html>) and STAN (world-wide used for MFA studies; www.stan2web.net) have been developed. My research team consists of 20 to 30 people, it is interdisciplinary (chemistry, process, civil and environmental engineers, material science) and we are well connected internationally. Among other things, we currently deal with (1) the further development of methods for the analysis of the anthropogenic material balance (e.g. the combination of GIS and BIM for urban mining), (2) modeling (STAN and handling of data uncertainty in MFA), (3) the further development of statistical entropy analysis for the evaluation of systems, processes and products, (4) the development of analytical methods for heterogeneous mixtures of materials and (5), more recently, with the application of economic equilibrium models to circular economy issues.

Most important research achievements apart from academic publications

- Honorary doctorate from the University of Antwerp (2022)
- Spiritus rector behind STAN, a freeware world-wide used for MFA studies (www.stan2web.net)
- Several international patents on the determination of (micro-)plastics in mixed waste and environmental samples
- Faculty member of FWF doctoral colleg on water resource systems (www.waterresources.at)
- Scientific Chair of the International Solid Waste Association World Congress 2013 in Vienna and Chair of Organizing Committee of the 5th International Conference on Final Sinks 2019 in Vienna (www.icfs2019.org)
- Member of the Editorial Boards of the Journal of Industrial Ecology, Resources Conservation and Recycling, Journal of Cleaner Production, Recycling, Circular Economy

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