Social metabolism and criticality of resources: impacts and alternatives

Event: WU Research Seminar Ecological Economics

Date: September 22, 2015, 2:30 p.m. until 5:30 p.m.

Location: EA.6.032

Please register by email with gillian.joanne.foster@s.wu.ac.at or online

http://www.wu.ac.at/ecolecon/news/events/ to confirm participation and receive papers in advance

Program

14:30 – 15:40 The Anthropocene: Humans' lock-in with fossil fuels, and their lock-out. (Univ. Prof. Dr. Marina Fischer-Kowalski)

(introduction, presentation, questions and discussion)

15:40 – 16:00 Break

16:00 – 17:00 *Criticality of resources*

(Prof. Dr. Armin Reller)

(introduction, presentation, questions and discussion)

17:00 – 17:30 Optional **concluding discussion**

Lecturers

Marina Fischer-Kowalski: Marina Fischer-Kowalski founded the Institute of Social Ecology in Vienna,



where she teaches as professor of the Alpen Adria University. Her background is in sociology. She has taught at Griffith (Australia), Roskilde (Denmark), Yale University (USA) and the Universidad Federal de Rio de Janeiro (Brazil). She was President of the International Society of Industrial Ecology, and currently she is President of the International Society for Ecological Economics. As an expert member of UNEP's International Resource Panel, she became the lead author to its publication, "Decoupling resource use and environmental impacts from economic growth" (2011). She is interested in social metabolism across history, on global, national and local

scales, and investigates how it relates to social dynamics (quality of life, equity, division and quality of labour, time use) and to environmental change. www.uni-klu.ac.at/socec/eng/inhalt/876.htm

Armin Reller: Armin Reller, former professor for Solid State Chemistry at the Institute of Physics,



University of Augsburg, currently professor for resource strategy at the same institution, Chairman of the Environmental Science Center (ESC) and member of the board of the AMU (Application Center for Materials and Science) also chairman of the Graduate School "Resource Strategy Concepts for Sustainable Energy Systems" at the University of Augsburg, Germany. His research focuses on the synthesis and properties of functional materials relevant for energy and environment technologies. Specific attention is paid to ecological and socio-economic impacts of exploring and applying strategic resources. He is Editor-in-Chief of the international journal Progress in Solid

State Chemistry (Elsevier). He has been a full professor for resource strategy at the University of

Augsburg since 2009 and since 2011 he has served as Chairman of resource strategy of the Fraunhofer Project Group IWKS (Alzenau and Hanau, Germany), which he co-founded. Recently he was appointed as Expert of the Swiss Academy of Technical Sciences as well as member of the raw materials council of the Umweltbundesamt, UBA (Berlin, Germany). www.ressourcenforschung.de

Relevant Papers

Fischer-Kowalski, M., F.Krausmann, I.Pallua (2014). A sociometabolic reading of the Anthropocene: Modes of subsistence, population size and human impact on Earth. *The Anthropocene Review vol 1, 7-33,* doi:10.1177/2053019613518033/anr.sagepub.com

S. Krohns, P. Lunkenheimer, S. Meissner, A. Reller, B. Gleich, A. Rathgeber, T. Gaugler, H.U. Buhl, D.C. Sinclair and A. Loidl (2011). Route to resource-efficient novel materials. Nature Materials 10, 899–901, doi:10.1038/nmat3180