

# Resource Efficiency in Interorganizational Networks

## Newsletter



Newsletter #4 - 11.02.2016

### Overview

---

[News from the RTG](#)

---

[Upcoming Events](#)

---

[Publications](#)

---

Dear Readers,

In this newsletter, we would like to inform you of the latest research publications and other activities of our Research Training Group. We are glad that the Special Volume "[Improved resource efficiency and cascading utilisation of renewable materials](#)" of the Journal of Cleaner Production has just been published. The Special Volume adopts an interdisciplinary perspective and presents 16 articles, which can be divided into four subjects: Innovative materials based on renewable resources and their impact on sustainability and resource efficiency, quantitative models for the integrated optimisation of production and distribution in networks for renewable resources, information technology-based collaboration in value generating networks for renewable resources, and consumer behaviour towards eco-friendly products. The interdisciplinary perspective allows a comprehensive overview of current research on resource efficiency, which is supplemented with 15 book reviews showing the extent to which textbooks of selected disciplines already refer to resource efficiency. If you would like us to announce an event (call for papers, publications, conferences, lectures, awards, etc.) of relevance for resource efficiency in interorganizational networks, please feel free to send us your content.

*Greetings,*

*Jutta Geldermann* (editor-in-chief)

Editorial team: Tim Koddenberg, Corinna Krüger, Meike Schmehl

### News from the RTG

#### New RTG-Member

In January 2016 a new member joined our RTG:

- [Muhammad Raheel](#)  
*Topical Group C.5: Relationship Management*

#### Completed Dissertations

- On the 7th of October 2015, Mohammad Sadegh Taskhiri defended his Ph.D. thesis "Modeling of a logistics network for wood flow from by-products and cascade utilization". He was a collegiate from 05/12 to 05/15 and worked on Topic B.1: Modeling of selected logistic networks for renewable resources from by-products and cascade utilization, taking uncertainties and risk management into consideration.
- On the 12th of October 2015, Ingo Karschin successfully defended his Ph.D. thesis "Entwicklung eines Netzwerk-Standort-Modells für die ökonomische Optimierung lokaler Nahwärmesysteme". He was an associated collegiate from 04/12 to 11/15 and worked on Topic B.1: Modeling of selected logistic networks for renewable resources from by-products and cascade utilization,

taking uncertainties and risk management into consideration.

- On the 17th of December 2015, Shanna Appelhanz successfully defended her Ph.D. thesis "Tracking & Tracing-Systeme in Wertschöpfungsnetzwerken für die industrielle stoffliche Nutzung nachwachsender Rohstoffe". She was a collegiate from 04/12 to 04/15 and worked on Topic B.5: Tracking & tracing systems in value-generating networks for the industrial material utilization of renewable resources.
- On the 18th of December 2015, Sebastian Ludorf successfully defended his Ph.D. thesis "Besonderheiten von Produkten aus nachwachsenden Rohstoffen und deren Auswirkungen auf die Wahl effizienter Koordinationsformen in B2B-Geschäftsbeziehungen". He was a collegiate from 04/12 to 04/15 in Topic C.3: B2B business relations.

#### Guest Researchers

During the last months we were happy to welcome the following guest researchers:

- From the 30th of November until the 17th of December 2015, Professor Mundorf from the University of Rhode Island, USA, was invited by the researchers of topical group C.
- From the 14th of December 2015 until the 14th of February 2016, Dr. Marrone from Macquarie University in Sydney, Australia, visited the researchers of topical group C.
- From the 18th of January 2016 until the 22nd of January 2016, Dr. Irle from École Supérieur du Bois, Nancy, France, visited the researchers of topical group A.

#### Workshop on the Global Cleaner Production Conference

The research training group organized a workshop on the topic "Improved Resource Efficiency and Cascading Utilization of Renewable Materials - Focus on Lignocellulosic Biomass" at the "Global Cleaner Production and Sustainable Consumption Conference" in Sitges, Spain, on November 4th 2015. Besides the talks of our Ph.D. students, external speakers presented their research. We are glad of this opportunity to share the work of our research training group with an international audience.

### Upcoming Events

#### Call for Abstracts

- "Agricultural & forest biomass and biomaterials, bioenergy, food: Bioeconomy as the pathway to cleaner production and more sustainable consumption for the accelerated transition to equitable post fossil-carbon societies" in the [Special Volume of the Journal of Cleaner Production](#):  
Abstract submission: 20 March, 2016  
Manuscript submission: 08 July, 2016
- 28th European Conference on Operational Research ([EURO2016](#)), July 03–06, 2016, Poznan (Poland). Jutta Geldermann is chair of the Session "OR for Energy and Resource Efficiency" (Code: acbabfd8).  
Abstract submission: 01 March, 2016
- International Conference on Operations Research – Analytical Decision Making ([OR2016](#)), August 30–September 02, 2016, Hamburg (Germany)  
Abstract submission: 30 April, 2016

**Conferences** At the following conferences, topics of the RTG will be considered and members of the RTG will present their results:

- [6th Conference on Industrial Computed Tomography \(iCT 2016\)](#): February 9–12, 2016, Wels (Austria)

## Publications as of September 2015

- Bender, M.; Thielen, C.; Westphal, S. (2015): *Packing items into several bins facilitates approximating the separable assignment problem*. Information Processing Letters 115 (6–8), pp. 570–575. DOI: [10.1016/j.ipl.2015.02.001](#).
- Bender, M.; Tiedemann, M.; Teuber, L. (2016): *Online and Stochastic Optimization for the Harvesting of Short Rotation Coppice*. Journal of Cleaner Production 110, pp. 78–84. DOI: [10.1016/j.jclepro.2015.08.120](#).
- Bin Bahari, Shahril A. (2016): *Wood-Polymer Composites: A Book Review*. Journal of Cleaner Production 110, p. 194. DOI: [10.1016/j.jclepro.2015.06.146](#).
- Bin Bahari, Shahril A.; Krause, A. (2016): *Utilizing Malaysian bamboo for use in thermoplastic composites*. Journal of Cleaner Production 110, pp.16–24. DOI: [10.1016/j.jclepro.2015.03.052](#).
- Castellani F.; Esposito A.; Stanzione V.; Altieri R. (2015): *Analysis of emissions from lab-scale composting equipment: Data for a sustainability challenge*. In: Proceedings of the 14th International Conference on Environmental Science and Technology (CEST) 2015, September 3-5, Rhodes, Greece, pp. 1–5. ([link](#))
- Eichfelder, G.; Krüger, C.; Schöbel, A. (2015): *Multi-Objective Regularization Robustness*. In: Preprint Series of the Institute for Numerical and Applied Mathematics, Georg-August-Universität Göttingen, Göttingen. ([link](#))
- Geldermann, J.; Kolbe, L. M.; Krause, A.; Mai, C.; Militz, H.; Osburg, V.-S.; Schöbel, A.; Schumann, M.; Toporowski, W.; Westphal, S. (2016): *Improved Resource Efficiency and Cascading Utilisation of Renewable Materials. Editorial*. Journal of Cleaner Production (110), pp. 1–8. DOI: [10.1016/j.jclepro.2015.09.092](#).
- Goerigk, M.; Gupta, M.; Ide, J.; Schöbel, A.; Sen, S. (2015): *The robust knapsack problem with queries*. Computers and Operations Research 55, pp. 12–22. DOI: [10.1016/j.cor.2014.09.010](#).
- Haiduk, F. K. (2016): *Book review: Fischer K., Heinze T. (Eds.), Hemicelluloses (Macromolecular Symposia)*. Journal of Cleaner Production 110, p. 192. DOI: [10.1016/j.jclepro.2015.09.032](#).
- Ide, Jonas; Schöbel, Anita (2015): *Robustness for uncertain multi-objective optimization: A survey and analysis of different concepts*. OR Spectrum, first online. DOI: [10.1007/s00291-015-0418-7](#).
- Karschin, I. (2015): *Entwicklung eines Netzwerk-Standort-Modells für die ökonomische Optimierung lokaler Nahwärmesysteme*. Dissertation at the DFG Research Training Group 1703 "Resource Efficiency in Interorganizational Networks". Cuvillier, Göttingen. ([link](#))
- Koddenberg, T. (2016): *Book review. Handbook of Wood Chemistry and Wood Composites, Roger M. Rowell (Ed.). CRC Press, Florida, USA (second ed., 2012), 703 pp., ISBN 978-1-4398-5380-1, hardcover*. Journal of Cleaner Production 110, p. 193. DOI: [10.1016/j.jclepro.2015.07.070](#).
- Krüger, C. (2016): *Robust Optimization - a book review*. Journal of Cleaner Production 110, 201–202. DOI: [10.1016/j.jclepro.2015.05.142](#).
- Ludorf, S. (2016): *Besonderheiten von Produkten aus nachwachsenden Rohstoffen und deren Auswirkungen auf die Wahl effizienter Koordinationsformen in B2B-Geschäftsbeziehungen*. Dissertation at the DFG Research Training Group 1703 "Resource Efficiency in Interorganizational Networks". Universität Göttingen. ([link](#))
- Nastjuk, I.; Trang, S. T.-N.; Kolbe, L. M. (2015): *The Influence of Sociodemographic and*

*Technology-Associated Factors on Stress from Human Interaction with Electric Vehicle Information Systems*. In: Proceedings of the 21st Americas Conference on Information Systems (AMCIS 2015). Association for Information Systems (AIS). San Juan, Puerto Rico, pp. 1–14. ([link](#))

- Rahman, M. A.; Jaumann, L.; Lerche, N.; Renatus, F.; Buchs, A. K.; Gade, R.; Geldermann, J.; Sauter, M. (2015): *Selection of the Best Inland Waterway Structure: A Multicriteria Decision Analysis Approach*. *Water Resources Management* 29 (8), pp. 2733–2749. DOI: [10.1007/s11269-015-0967-1](https://doi.org/10.1007/s11269-015-0967-1).
- Renatus, F.; Geldermann, J. (2016): *Multi-criteria decision support based on iterative comparisons with reference points*. *Journal of Cleaner Production* 110, pp. 99–108. DOI: [10.1016/j.jclepro.2015.07.125](https://doi.org/10.1016/j.jclepro.2015.07.125).
- Taskhiri, M. S.; Garbs, M.; Geldermann, J. (2016): *Sustainable Logistics Network for Wood Flow Considering Cascade Utilisation*. *Journal of Cleaner Production* 110, 25–39. DOI: [10.1016/j.jclepro.2015.09.098](https://doi.org/10.1016/j.jclepro.2015.09.098).
- Teuber, L.; Militz, H.; Krause, A. (2016): *Processing of wood plastic composites: The influence of feeding method and polymer melt flow rate on particle degradation*. *Journal of Applied Polymer Science*, DOI: [10.1002/APP.43231](https://doi.org/10.1002/APP.43231).
- Wimmer, R.; Steyrer, B.; Woess, J.; Koddenberg, T.; Mundigler, N. (2015): *3D Printing and Wood*. In: Conference Proceedings of the International Conference "Wood Science and Engineering in the Third Millenium" (ICWSE 2015). Brasov, Rumania, pp. 145–150. DOI: [10.13140/RG.2.1.2483.6563](https://doi.org/10.13140/RG.2.1.2483.6563).

#### Unsubscribe from Newsletter

In order to unsubscribe from the newsletter, please use the following link:

[Unsubscribe.](#)

#### Contact Details

RTG 1703  
Platz der Göttinger Sieben 3  
Oeconomicum 1.101  
37073 Göttingen  
[Homepage](#)