

## International Conference on Resource Efficiency in Interorganizational Networks

### Call for Papers

On 13<sup>th</sup> and 14<sup>th</sup> November 2013, the Georg-August-Universität Göttingen (Germany) will host the first International Conference on Resource Efficiency in Interorganizational Networks (ResEff).

Renewable raw materials are becoming increasingly important as an alternative resource base in industrial networks. Consequently, research for methods improving the efficient use of renewable resources in production processes with by-products is crucial. The aim is cascade utilization, thus the multiple utilization of a raw material before its conversion into energy. The ResEff brings together interdisciplinary researchers developing strategies and solution concepts for efficient resource utilization. It is therefore a forum for scientific exchange both between experts as well as interdisciplinary groups. The following facets of the challenging topic of resource efficiency in interorganizational networks are covered:

- Track A: Materials and Technologies
  - Characterization of Fibres and Particles
  - Supply Chain of Renewable Resources
  - Usage of Cell Wall Components, esp. Hemicelluloses
- Track B: Planning of Production and Value-Added Networks for Renewable Resources
  - IS and IM in Value-Generating Networks for Renewable Resources
  - Mathematical Optimization in the Presence of Uncertainties
  - Modeling of Production and Logistic Systems
- Track C: Governance, Coordination and Sales
  - Consumer Behavior towards Eco-Friendly Products
  - Distribution of Intermediate and End Products from Renewable Resources

The following invited speakers will contribute to the ResEff 2013:

Prof. Martin Faulstich  
*CUTEC Institute of Environmental  
Technology, Chair of the German  
Advisory Council on the Environment*

Prof. Barry Goodell  
*Sustainable Biomaterials,  
Virginia Polytechnic Inst.  
and State University*

Prof. Adisa Azapagic  
*Sustainable Chemical  
Engineering, University of  
Manchester*

The conference will include parallel sessions for presentation of papers in the fields of agricultural and forestry science, mathematical optimization, operations research, marketing, business informatics, production and logistics. Each track contains different sessions for expert talks. The interdisciplinary exchange is fostered through special talks and meetings, where all groups come together.

More information about the organizing DFG Research Training Group 1703 "Resource Efficiency in Interorganizational Networks" is available on the website [www.resource-efficiency.uni-goettingen.de](http://www.resource-efficiency.uni-goettingen.de)

## Session Description (AT1): Characterization of Fibres and Particles

To start a cascade utilization of raw materials and by-products one has to gain knowledge of their properties and suitability for specific applications. Therefore this session focuses on methods for the characterization of (natural) fibres and particles like wood particles, annual plant fibres, and regenerated cellulose fibres. Topics of interest in this section comprise the morphological characterization of fibre/particle size and shape and of surface characteristics, the chemical composition, testing methods for the determination of mechanical properties, and the reinforcement potential in composite materials. Furthermore, we are interested in contributions to the topic of the influence of extraction methods, fibre processing, composite production and recycling techniques on the fibre/particle characteristics. Interesting topics include, but are not limited to:

- Characterization of natural fibres and particles
  - Testing methods
  - Morphology: size and shape, surface characteristics
  - Mechanical properties and chemical composition
  - Reinforcement potential in composites
- Influence of modification and processing on fibre characteristics
  - Extraction methods
  - Thermoplastic composite production: injection moulding, extrusion
  - Recycling

The deadline for submission of abstracts (approximately two pages) is 12 June 2013. Guidelines for submission can be found on the conference website. Submissions are subjected to an independent and professional *blind peer review* and will be judged on originality, significance, interest, clarity, relevance, correctness and presentation.

A more detailed description of the topic and the submission and review process can be found on the conference website.

#### Important Dates

12 June 2013	Deadline for Abstracts
20 June 2013	Notification of Acceptance
20 June 2013	Begin of Registration
15 Sept 2013	Camera Ready Deadline
13-14 Nov 2013	ResEff

#### Contact

[reseff2013@uni-goettingen.de](mailto:reseff2013@uni-goettingen.de)

#### Website

<http://reseff2013.uni-goettingen.de>