

## Venue and Contact

Design @ Eng  
5<sup>th</sup> Floor, School of Mechanical and  
Manufacturing Engineering  
The University of New South Wales  
Gate 14, Barker Street  
Kensington, Sydney – Australia

The workshop is free of charge.

**RSVP:** Email Dr Suphunnika Ibbotson at  
[suphunnika@unsw.edu.au](mailto:suphunnika@unsw.edu.au), your name,  
affiliated organization and any dietary  
requirements by Monday June 6<sup>th</sup> 2011.



**Joint German-Australian Research Group**  
**Sustainable Manufacturing and Life Cycle Management**

Technische Universität Braunschweig - The University of New South Wales, Sydney

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<http://www.sustainable-manufacturing.com>

Workshop  
**Energy and Resource Efficiency**  
**in Manufacturing**  
8 June 2011

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School of Mechanical and Manufacturing Engineering

## Background

Manufacturing is the transformation of inputs like material and energy into tangible outputs in terms of products. Thus, it is a value consuming and creating process at the same time.

Economic (e.g. rising prices for energy and resources, potential lack of strategic resources) and environmental (e.g. connected green house gas emissions) drivers are more and more forcing manufacturing companies to consciously consider their energy and resource flows.

The Joint German-Australian Research Group is a synergetic cooperation of the Life Cycle Engineering & Management Research Group at the University of New South Wales (UNSW) and the Product- and Life-Cycle-Management Research Group from Technische Universität Braunschweig in Germany. The collaborative research group aims at developing appropriate concepts to encounter global challenges in the context of Sustainable Manufacturing and Life Cycle Management.

Based on the work of the Joint German Australian Research Group, this workshop aims at giving stakeholders an overview of the latest development around the world in relation to energy and resource efficiency in manufacturing.

We look forward to welcoming you to our workshop!



Sami Kara



Christoph Herrmann

Directors of Joint German-Australian Research Group

## Agenda

- 9:30am **Registration and morning Tea**
- 10:00am **Welcome address**  
*TBA*
- 10:10am **Energy and Resource Efficiency in Manufacturing – the Australian Perspective**  
*A/Prof. S. Kara, UNSW, Sydney*
- 10:30am **Energy and Resource Efficiency in Manufacturing – the German Perspective**  
*A/Prof. C. Herrmann, IWF TU Braunschweig*
- 10:50am **Life Cycle Assessment as a Tool Towards Sustainability in Manufacturing**  
*Dr. T. Dettmer, IWF TU Braunschweig*
- 11:10am **Embodied Energy in Global Supply Chains**  
*Dr. S. Ibbotson, UNSW, Sydney*
- 11:30am **A systematic Approach Towards Energy Efficiency in Manufacturing**  
*S. Thiede, IWF TU Braunschweig*
- 11:50am **An Industrial Case Study on Energy and Water Efficiency in Manufacturing**  
*B. Kornfeld, Baxter Healthcare*
- 12:10pm **Discussion**
- 12:30pm **Light lunch will be served.**