



# 13th Global Conference on Sustainable Manufacturing

## Working Sessions

Wednesday 16/09/15

### 1 Learning Factories to Promote Sustainable Value Creation

To achieve a sustainable development, the mediation of sustainability-oriented skills has a special significance. It requires new forms of social learning for having better-trained citizens with a sustainable set of values. Therefore, the development of knowledge, tools and training is required to address the challenge of sustainability in an integrative approach that is action orientated and goes beyond technical fixes to engage local communities in a new way. This session includes a discussion about new solutions and perspectives for the mediation of sustainable manufacturing competencies for low-skilled people in early-industrialized and emerging countries.

#### Chair

Mr. Muschard  
*Technische Universität  
Berlin, Germany*



## 2 Multi-Perspective Modelling of Sustainability Artefacts in Knowledge Intensive Value Creation Networks

In an interactive case study the participants will model a knowledge intensive process of a value creation network. Following the integrated approach of multi-perspective modelling and the process-oriented design of intellectual capital the application workshop will allow a discussion on challenges and potential for corporate planning and management. The modelling of sustainability artefacts and specifically intellectual capital shall allow a detailed discussion on the contribution to the achievement of defined objectives and the evaluation of sustainability performance.

### Chair

Ms. Oertwig  
*Technische Universität  
Berlin, Germany*



Mr. Galeitzke  
*Fraunhofer IPK  
Berlin, Germany*



## 3 Sustainable Sanitation

Current sanitation problems and challenges face the world. In this session, some sustainable sanitation solutions applicable or even already applied in developing countries will be presented. Perspectives of innovative systems for more sustainability in the sanitation sector and the current gap between researcher's findings and industrial developments in this field will be discussed. The effects of locally available materials and the adaptation of the high technology equipment and manufacturing processes into low technology sanitation systems will be part of the debate.

### Chair

Mr. Alnahhal  
*Technische Universität  
Berlin, Germany*



## 4 Modular Equipment in Sustainable Manufacturing Environments

Within collaborative research, a modular machine tool frame concept is developed as a grid for increased reusability and flexibility in modern machine tools. Hereby, strong focus lies on sustainable engineering and design. Goal of this working session is to combine interdisciplinary expert knowledge and to identify hotspots helping to improve the overall sustainability impact of the modular machine tool frame design. Of special interest is the derivation of business models, establishment of possible use-cases and show-cases as well as first hand feedback from representatives of participating sustainability concerned industries.

### Chair

Mr. Saoji  
*Technische Universität  
Berlin, Germany*



Mr. Peukert  
*Technische Universität  
Berlin, Germany*

