



Innovation in Knowledge Based and Intelligent Engineering Systems

# INVITED SESSION SUMMARY

#### Title of Session:

Challenges and Opportunities of Clean Technology in Production Engineering

## Name, Title and Affiliation of Chairs:

Dr Wai Ming Cheung, Northumbria University, UK (Chair)

Dr Parag Vichare, University of the West of Scotland, UK (Co-chair)

Dr Yuchun Xu, Cranfield University, UK (Co-chair)

Dr.Carlos A Costa, Universidade de Caxias do Sul, Brazil (Co-chair)

## Details of Session (including aim and scope):

The global initiatives to make product Environmental Compliance have changed the way new products are designed and existing products are produced. Today, "Clean Technology" themes and associated novel production methods are exceedingly researched and implemented in order to solve environmental problems. Clean technology is a general term used to describe products, processes or services which are designed to reduce waste and require as few non-renewable resources as possible.

<u>The aim of this special session</u> is to address new advances in "Clean Technology" and review its implications on the manufacturing industry. This session will be focused on various implementation pathways (such as new materials, design approaches, process, production systems, life cycle engineering approaches, etc.) to produce products with minimum material wastages, low carbon footprint and less energy requirement.

**This special session** is to serve as an international forum for exchange of information and research concepts, methods, policies and technologies toward 'cleaner production methods' and to make greener and sustainable products. It is also designed to stimulate the development and implementation of a competitive advantage for businesses to consider sustainability aspects early on in the decision making process.

Authors are invited to submit papers within the **<u>scope</u>** of the following areas:

- 1. New and non-conventional methods, technologies and processes for cleaner production
- 2. Novel concept for cleaner production
- **3.** Sustainable product lifecycle management
- 4. Information and Communication Technology for cleaner production.

Main Contributing Researchers / Research Centres (tentative, if known at this stage): Contributions are welcome.

Website URL of Call for Papers (if any):

http://sdm-17.kesinternational.org/submission.php

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