

*First Announcement and Call for Papers*

**THE 45<sup>th</sup> CIRP CONFERENCE  
ON MANUFACTURING SYSTEMS (45<sup>th</sup> CIRP CMS 2012)**



**INNOVATION: THE CHALLENGE  
FOR THE MANUFACTURING OF THE FUTURE**

**MAY 16-18, 2012  
ATHENS, GREECE**

**SCOPE**

Our societies face challenges, requiring innovative solutions: Returning to growth and to higher levels of employment, combating climatic changes and moving towards a low-carbon society, using our natural resources more wisely, are grand challenges that also provide powerful opportunities for manufacturing. Economies, around the world, need to move from cost competition towards strategies based on innovation. The globalization of the economy and the rising living standards open new markets for innovative products and services and their growing capabilities create new prospects for world-wide collaboration in the product design and manufacturing. Recent developments in information and communication technology, the wide spread of the Internet, the e-commerce and the other Web based business activities present manufacturing with new opportunities and allow manufacturing companies to become global players, irrespective of their size and location. The manufacturing scientific community is expected to generate world class breakthroughs and help in turning innovation into new manufacturing knowledge. The manufacturing education paradigm has to change rapidly in order to provide industry with a new generation of engineers with an innovative philosophy.

**TOPICS**

Manufacturing processes and systems modeling, simulation and optimization. Nanomanufacturing. Rapid Manufacturing. Novel manufacturing processes for advanced materials, Advanced machine architectures and control technologies, Manufacturing systems planning, control and scheduling. Manufacturing networks, Supply Chain and Global Production Management, e-Manufacturing. Logistics and Manufacturing data management. Flexible and reconfigurable manufacturing systems. Lean production. Agile manufacturing for turbulent markets, Adaptive manufacturing Systems, Concurrent Engineering. Quality Engineering. Innovative metrology, Energy-efficient processes and systems, Life cycle design and manufacturing. Virtual reality and manufacturing. Digital manufacturing. Digital Knowledge based tools, Collaborative design, Intelligent manufacturing of smart & new products, Human factors, Manufacturing education and training, Methods & tools for Knowledge Management & skills adaptation

**CONFERENCE LANGUAGE**

The conference language is English.

**VENUE**

The conference will be held in Athens, Greece, at the resort area of Vouliagmeni, 8 Km east of the airport of Athens and 25 Km outside of the centre of Athens.

**IMPORTANT DATES**

**15 November 2011: Abstracts due.** Authors should submit an abstract of maximum 300 words. The abstract should explicitly indicate the relevance of the paper to the seminar theme and highlight the novel aspects of the work.

**30 November 2011: Notification of abstract acceptance.** Authors whose abstracts meet the review criteria will receive a formal invitation to submit a full-length paper, with instructions for the final preparation of the manuscript.

**16 January 2012: Full Papers due.** Complete manuscript shall not exceed 8 pages, including figures and tables.

**19 March 2012: Notification of full paper acceptance**

**16 April 2012: Camera ready papers due**

**Submission address:**

Professor Dimitris Mourtzis

Laboratory for Manufacturing Systems and Automation (LMS)

Director Professor G. Chryssolouris

Department of Mechanical Engineering and Aeronautics

University of Patras

Rio, Patras 26110 - Greece

Phone: +30 2610 997262 & 997848

Fax: +30 2610 997744

E-mail: [mourtzis@lms.mech.upatras.gr](mailto:mourtzis@lms.mech.upatras.gr)

**CONTEST**

On the initiative of Professor Ueda, Kobe University, Japan, a Best Paper Award will be given. This contest is open for authors who are 35 years of age or under. When abstracts are sent in, the author should indicate whether or not he/she is interested in entering the contest.

**SOCIAL PROGRAM**

The social program will include a reception, banquet and for the accompanying persons a tour of Athens / Acropolis in the 1<sup>st</sup> day.

**ACCOMMODATION**

A block of rooms has been reserved for the conference participants.

**INFORMATION**

Mrs. Angela Sbarouni

Laboratory for Manufacturing Systems and Automation (LMS)

Director Professor G. Chryssolouris

Department of Mechanical Engineering and Aeronautics

University of Patras

Rio, Patras 26110 - Greece

Phone: +30 2610 997262 & 997848

Fax: +30 2610 997744

E-mail: [angela@lms.mech.upatras.gr](mailto:angela@lms.mech.upatras.gr)

For continuous information, please look at: [http://www.lms.mech.upatras.gr/CIRP\\_CMS2012/](http://www.lms.mech.upatras.gr/CIRP_CMS2012/)