



**Call for Papers
For a Special Issue on
Computer-Aided creativity enhancement in engineering education**

Guest editors

Gaetano Cascini
Politecnico di Milano
Dipartimento di Meccanica
gaetano.cascini@polimi.it

Noel Leon Rovira
ITESM-Campus Monterrey
Centro de Diseño e Innovación de Productos
noel.leon@itesm.mx

Computers have gained more and more importance for product development since the dissemination of the first prototype CAD systems in aerospace industry. Nowadays, they play a crucial role in any industry in detail design tasks, as well as for planning production activities. Recently, Computer-Aided Innovation (CAI) systems have extended the domain of computer application to the earliest stages of product development and to the support of the entire innovation pipeline.

Moreover, in the last decade, Information Technology systems have substantially fostered a shared vision of creative patterns among different disciplines, resulting in a consistently growing interest in creativity concept. This led towards the birth of a novel and fertile field of research, namely the interplay between creativity stimulation and computer systems. Among the different research activities related to the role of computers to support innovation processes, an emerging role is constituted by software applications capable to develop human creativity by encouraging the perseverance of designer in the research of innovative solutions and by aiding the designer with a coaching activity, acting as an expert system that guides the user throughout cognitive processes.

Within this context, many open research issues still require to be investigated, from the theoretical models of the cognitive processes involved in inventive design, to the assessment of computers' potential to reduce learning efforts and to enhance technical creativity.

The present special issue aims at investigating the complementary aspects governing the adoption of computers in the complex field of building and developing inventive design capabilities.

Topics:

You are invited to submit original papers related to computer-aided creativity enhancement including but not limited to the general themes of:

- Theories, methods and tools for inventive design
- Computer instruments to develop and support creative reasoning
- Best practices in academia and in industry for TRIZ introduction
- Inventive and creative innovation measurements
- Computer-Aided inventive problem solving
- Lifelong creativity learning

Submissions must be sent electronically in MS-Word (.doc) format to:

Gaetano Cascini
Politecnico di Milano
Dipartimento di Meccanica
gaetano.cascini@polimi.it

Manuscripts must be written in English and limited to 12 one-sided, one-column, single-spaced pages. Manuscripts should include keywords, complete affiliation of the authors and a short biography, and the citing and listing of references should be in the IJEE style. Figures and illustrations should be suitable for non-color printing.

General information and guidelines are available at the IJEE web site: <http://www.ijee.ie/>

Submission deadlines

April 1, 2011	Submission of extended abstracts
April 29, 2011	Notification of acceptance of extended abstracts
June 24, 2011	Full paper submission due date
September 16, 2011	Notification of reviewers' feedback
October 28, 2011	Revised paper submission due date