# Call for papers Special Issue on

# 'Collaborative Working Environments for Practical Engineering Education & Professional Development'

### **Guest Editors**

Michael Callaghan, Jim Harkin

Contributions are invited for a special issue of the **International Journal of Online Engineering** (I-JOE) http://www.i-joe.org.

Experience in teaching engineering related subjects has shown that a complementary approach combining theoretical and practical exercises is vital for effective learning. Increasingly, teaching institutions are offering remote access to distant laboratories as part of an overall e-learning strategy. However, the majority of remote access laboratories developed to date have suffered from a major deficiency, namely the provision of a web based environment that accurately recreates the group working and tutor driven experience of traditional on-campus based laboratories. New collaborative remote experimentation environments and architectures are required to enable students in disparate locations to simultaneously and collaboratively complete complex experimental exercises. This special issue is seeking to publish the latest research and practices being used to facilitate collaborative e-learning in the context of remote experimentation for engineering education and professional development.

### Topics may include but are not limited to:

- Design of and innovations in web-based collaborative working for online engineering education.
- Design of innovative web-based interfaces, architectures and environments to support collaborative working.
- Technologies to facilitate collaborative remote experimentation
- Development and assessment of courses and/or teaching materials based on collaborative remote experimentation between diversely located users.
- The unique challenges in developing and using collaborative remote experimentation for engineering education.
- Case studies of collaborative working in use and of their impact on practical experience to engineers.
- Pedagogy challenges in delivering effective online collaborative courses.
- Speculative engineering education applications from emerging web technologies and remote-access software tools.

### **Submission Deadlines**

May 18	2007	Submission of abstract
June 21	2007	Notification of reviewers' feedback
August 31	2007	Submission of draft manuscript
October 01	2007	Camera ready version due
November	2007	Journal published

## Manuscripts

Submissions should be sent electronically in MS-Word or RTF format to the coordinating guest editors. Layout and format should conform to the guidelines given in the IJOE Notes for Contributors http://www.i-joe.org/ojs/submissions.php

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