# The International Journal of ENGINEERING EDUCATION

#### **CALL FOR PAPERS**

#### **SPECIAL ISSUE ON**

#### MAKER SPACES IN ENGINEERING EDUCATION

## Guest Editor Pao-Nan Chou – Northern Illinois University, USA & National University of Tainan, Taiwan

Contributions are invited for a special issue of the International Journal of Engineering Education (IJEE) on Maker Spaces in Engineering Education.

Maker spaces are informal sites in which people with the same interests can collaboratively build creative projects by using emerging technologies. In recent years, libraries and museums in the U.S. have established a lot of maker spaces to promote making (or DIY) experiences. The trend of out-of-school maker movement also spreads to K–16 learning environments. Universities and high schools not only designed maker spaces at campus, but also regularly hosted a maker faire to facilitate student innovation. However, the growing interest in maker spaces is often linked to STEM (or STEAM) learning practices. The engineering design as a core principle in maker spaces is not emphasized. The key theme in this special issue is to explore pedagogical and learning issues with a focus on engineering projects in maker spaces.

Example topics in the issue may include, but are not limited to:

- Curriculum design in maker spaces
- Engineering design methods in maker spaces
- Learning environment design in maker spaces
- Instructional strategies for facilitating engineering projects
- Maker faire for promoting engineering professions
- Teachers' engineering professional training in maker spaces
- Assessment tools for measuring learners' engineering projects
- Computer applications in engineering projects
- Design thinking in engineering projects
- Engineering practices in out-of-school maker spaces
- Comparison between college and pre-college maker spaces

### **Important Deadlines**

Extended abstract (around 2 pages)
 Notification of Reviewers' feedback
 Submission of manuscripts
 Notification of Reviewers' feedback
 Submission of final manuscripts
 Submission of final manuscripts

February 15, 2019
March 30, 2019
August 31, 2019
October 31, 2019

Submissions are to be sent by e-mail in MSWord to Prof. Pao-Nan Chou at pnchou@gm2.nutn.edu.tw

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