

# New Experiences and Strategies in Remote Laboratories and apps for Electronics

The Special Session “New Experiences and Strategies in Remote Laboratories and apps for Electronics” is Co-Located with 13th International Conference on Remote Engineering and Virtual Instrumentation (REV2016).

## **Focus:**

Universities and educational organizations or institutions, when designing any electronics course, trust in experimentation through laboratory practices in order to build successful cross-curricular capabilities and capacities. In electronics courses there is a need to have practical experiences, the benefits of electronics laboratory practices are widely known for professionals and necessary for any person who seeks for a broad comprehension of the real-time performance beyond the ideal modelling. Therefore, when designing any electronics course, the laboratory practices are one of the basis on which the learning is established.

New areas of application outside the University, regarding informal education, long-life learning or Senior education are everyday more attractive for users, students and teacher, as well as the increasing importance of STEM education in medium and high schools bring new areas of use of the remote instrumentation and laboratories as well as new software/virtual tools and apps.

Nowadays, there is an extensive variety for providing theoretical contents in on-line learning (videos, documents, tutorials, scaffolding activities, peer-to-peer reviews, forums, etc.) to students, using traditional digital media (Learning Objects or Open CourseWare) as well as less traditional media as MOOCs (or variations as SPOCs or MOOLs). These tools, by an efficiently and appropriate selection from professors and use from students, can complement or replace successfully face-to-face education, as well as student-to-student support using the principle of peer-to-peer collaboration is highly increasing.

The use of remote laboratories, virtual laboratories, MOOCs environment as well as new on-line learning applications are the key of this Special Session inside the REV 2016 conference.

## **Topics of interest:**

The target audience will be industry experiences, academic and researchers that are within the scope of interest at main conference REV 2016 in the areas of application of laboratories in electronics area, as well as direct based students experiences in-class or on-line of mash-up or scaffolds using those applications, laboratories or environments. Comparison of traditional learning and traditional use of electronic laboratories with new systems are welcomed. Aspects should show enough evidences to achieve intended learning outcomes more effectively.

The topics of paper contributions for this special session include (but are not limited to):

- Remote and Virtual Laboratories for Electronics
- Practical Resources
- Practical Competences
- Remote Instrumentation and Engineering for Electronics Competence

## **Manuscript Submission:**

Authors wishing to contribute to this special session must follow same style rules for papers sent to main conference.

Manuscripts must be submitted electronically through the main conference web site within “Special Session” being selected as “Manuscript Type” in the corresponding menu.

All submissions will be peer-reviewed by selected experts from REV 2016 program committee and the Special Session organizers that will follow same review standards and processes of main conference. Accepted contributions will be included into proceedings of the main conference.

## **Important Dates:**

15 Nov 2015	Submission deadline for complete papers for the Special Session
15 Dec 2015	Notification of Acceptance
15 Jan 2016	Author registration and camera-ready due
24 Feb 2016	Conference Opening

## **Program Committee:**

For further information about preparation of contributions for this special session, contact the Special Session co-chairs.

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## **Publications**

All accepted papers will appear in the REV2016 proceedings, published by IEEE and listed in IEEE Xplorer.