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Guest Editorial

Modern Engineering degrees combine a necessary in-depth theoretical focus on basic disciplines of science and technology, with more applied activities, aimed at the promotion, not only of technical skills, but also of fundamental professional outcomes, so as to educate successful engineers. Among the typical applied actions in Engineering Education we can cite: practicals in laboratories with state-of-the-art technologies, project-based learning activities, collaborations in research projects, visits to industrial environments, professional practices, and the usual final degree theses. Such combination between theoretical and practical teaching-learning strategies helps to configure interesting curricula for building well-trained professionals, but requires important dedication from a teaching staff in continuous methodological recycling, as well as well-equipped laboratories and research centres with advanced technologies. All this makes Engineering studies especially expensive, which usually directly affects tuition costs and, in many cases, prevents talented aspirants from studying Engineering.

In recent years, the concept of ''Engineering Education for all'', meaning ''Engineering studies available for all those loving Engineering, without taking account of their social class and economical status'', is in the middle of universal changes and should be analyzed in detail. On one hand, public universities, which traditionally aim at the universal access to knowledge, are facing extremely harmful spending restriction policies (mainly all over Europe), which importantly increase tuition costs and limit, not only the access to Higher Education, but also the positive impact of high-quality teaching and research. On the other hand, some of the most world-renowned (as well as traditionally expensive and exclusive) private universities have established new ways of freely opening their courses to all those showing interest for them, mainly in the form of massive open online courses and extracurricular activities, which constitutes an unseen knowledge democratization process. At the same time, increasing public-private partnerships and university-enterprise collaborations are also helping to promote the access to high-quality Engineering Education, with very attractive dedication and mobility schemes for students worldwide. In addition, developing countries rely on appropriate educational strategies to fight poverty and inequality and many technological universities are key players in such a scene.

In connection with the aforementioned changing environment, the UNESCO ''Education for all'' Movement proposed in year 2000; six goals (connected mainly to promoting an equitable access to Education, to eliminating class and gender disparities and to improving lifelong learning), which should have been met in year 2015, so as to provide quality education for all children, youth and adults. Much has been achieved, but there is still a long way ahead of us, especially in such a complex and technology-dependent discipline as Engineering. Right now, with year 2015 just gone by, it is important to analyze and exchange success strategies and cases, so as to promote ''Engineering Education for all'' and to align such a relevant concept with the Millennium Development Goals, as engineers must play a very relevant role for enabling the fulfillment of such objectives.

This Special Issue on ''Engineering Education for all'' aims to exchange strategies and teaching-learning experiences and to focus in depth on aspects such as: Strategies for promoting equitable access to Engineering Education worldwide, integral actuations linked to complete program implementations in developing countries, case studies aimed at eliminating class and gender disparities in Engineering Education, public-private partnerships, fundraising and patronage activities in Engineering Education, promotion and assessment of engineering professional skills in developing countries, comparative studies of the performance of Engineering Education systems worldwide, discussions on public and private university schemes and the equitable access to Education, good practices for the promotion of Engineering Education sustainability and, to some extent, successful experiences with (massive) open (online) courses, as well as discussions on future directions and proposals for improvement.

Due to the outstanding response and to the number of papers finally accepted, this Special Issue is grouped into different topics: I. Good practices, II. Project based learning and capstone projects, III. Virtual labs and simulators, IV. Massive open online courses, V. Student mobility and international collaboration, and VI. Assessment and outreach. The final 16 papers have been selected, after a comprehensive peer-review process among more than 45 initially received extended abstracts, and detail teaching-learning experiences from 13 countries of the 5 continents and 15 universities, which helps to highlight the relevance and universality of the topics covered.

Personally, I am truly grateful to authors for their support to this Special Issue and for their patience during the review processes, extended due to the number of submissions received. We have also counted with the help

of an international team of reviewers covering several Engineering disciplines and we are grateful indeed for their assistance. We truly hope that final results will be according to authors' expectations and, of course, of interest for the readers of the International Journal of Engineering Education. Finally, we would also like to acknowledge the support and continued confidence of the Editor-in-Chief Ahmad Ibrahim, whose advice and suggestions have been a source of inspiration, hoping for future collaborations.

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