

## Guest Editorial

The contemporary world has been changing rapidly. Both the environment and societies have been undergoing changes, and new technologies have been emerging. To meet the challenge, the process of engineering education should be positioned for advancement and continuous improvement. Engineers have to meet the requirements of the economic, natural and social environments, and also offer solutions to problems as they occur. Discussions, good practice and exchange of experiences within the widest possible international group of practitioners and theoreticians of engineering education are required to adapt the content and methods of education to the current needs.

The 2020 Conference on Engineering and Architecture Design Education (EADE) held between 16 and 18 June 2020 at Gdańsk University of Technology, Gdańsk, Poland is an example of such an activity. The four co-organisers come from three different countries and two continents, including: the World Institute for Engineering and Technology Education (WIETE), Melbourne, Australia; the Faculty of Architecture, Gdańsk University of Technology, Gdańsk, Poland; the Faculty of Architecture, Slovak University of Technology in Bratislava, Bratislava, Slovakia; and the Faculty of Architecture, Cracow University of Technology, Kraków, Poland.

This Conference follows the 2019 Conference on Engineering and Architecture Design Education, held in Kraków, Poland, and the 2018 Conference on Engineering and Architecture Design Education, held in Bratislava, Slovakia, and it builds on the series of extremely successful international conferences held in the past by the World Institute for Engineering and Technology Education (WIETE), and previously by the UNESCO International Centre for Engineering Education (UICEE), Melbourne, Australia. The conferences formed a network of international exchange of experiences and achievements in the field of engineering education, established by Professor Zenon J. Pudlowski, Director of the WIETE. Without his initiative, energy and efforts to improve the quality of engineering education, the 2020 EADE Conference would not had been possible.

More than 70 academics took part in the Gdańsk Conference. They presented 59 papers based on their experience from universities in Egypt, Germany, Italy, Poland, Slovakia, Slovenia, South Africa and Spain. Papers presented during the Conference, concerned mainly the education of architects, and they constitute the core of Vol. 18, No. 3 of the World Transactions on Engineering and Technology Education (WTE&TE).

All previous EADE conferences, and other conferences organised by the WIETE, were held in a traditional form - as a meeting of the international community of academics dealing in the field of engineering education. However, in 2020, it was no longer possible. Due to the coronavirus (COVID-19) pandemic, the 2020 EADE Conference was held entirely on-line. Although held in difficult conditions, the three-day session on the education of architects was successful - the participants presented their papers as scheduled and lively discussions took place. Despite the success, it has also demonstrated that the direct contact between people cannot be replaced by technology, even the best one. Without a real, face-to-face meeting, a direct, often non-verbal, reaction to the speeches and presentations is impossible. The on-line way of holding the conference excludes backstage meetings, often of great importance in the substantive discussion. The obvious advantage of on-line conferencing is, of course, a significant reduction in costs, but it does not compensate for the substantial loss of social and academic value incurred due to the lack of direct conversation.

Some of the Conference presentations concerned the use of virtual reality and augmented reality technologies in education. These technologies offer the perspective for improvements in, among other things, remote meeting methods. It remains to be hoped, however, that the achievements of modern science, including the effects of engineers' work, will lead to the defeat of the pandemic, and that subsequent conferences on the latest technologies will take place in the most traditional way - face-to-face as it is the most effective and rewarding communication.

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