World Transactions on Engineering and Technology Education

Guest Editorial

In 2024, Gdańsk University of Technology (Gdańsk Tech), Poland, is celebrating its 120th anniversary. For many years, the Faculty of Architecture at Gdańsk Tech has served as a hub for creative development, conducting top-tier scientific research and education. When shaping the visions and strategies for the future, we are aware of the excellent foundations of the past. The Faculty of Architecture was established in 1904 as one of the six faculties at the newly opened Royal Prussian University of Technology in Gdańsk. Among its professors were eminent architects who also designed the university campus and its most prominent historic buildings. After World War II, in 1945, among the scientists and architects working at the Faculty were prominent contributors to the great work of the post-war reconstruction of Gdańsk and other neighbouring cities and towns.

Today, we take this illustrious history as a commitment, we refer to it, and at the same time, we look to the future. The Faculty is home to outstanding architects - winners of international competitions and designers of buildings that, in many cases, became the symbols of the cities in which they have been constructed. The Faculty is also a very strong research and education centre. In a recent national evaluation of scientific activity, the discipline of architecture and urban planning at Gdańsk Tech was rated the highest in Poland and received an A+ grade. Strong research centres, many of them working internationally, offer many opportunities to involve Master's students in scientific programmes. The results of our research are presented at prestigious international events, such as the 2021 Venice Architecture Biennale or Centro de Arte Moderna Gulbenkian (CAM) in Lisbon in 2024.

Continuous work on the quality of education and research is an essential element of the strategy of the Faculty. Following this goal, we are modifying study programmes and developing new ones. By opening new laboratories, we offer students opportunities to experiment with digital fabrication, and to incorporate elements of robotics and artificial intelligence into the design process, not omitting humanistic, environmental and regenerative aspects, so crucial for the development of sustainable cities and communities. The goal is to expand the competencies of future architects to make them well-prepared for the coming challenges and respond to the needs of a changing world.

The Faculty's strength is its commitment to intensive international co-operation. We conduct many educational and research projects in consortia of top universities from Europe and other countries around the world, and maintain constant contact with international organisations, such as the European Association for Architectural Education, the International Society of City and Regional Planners and the International Council for the Preservation of Historic Monuments and Sites (ICOMOS).

The active collaboration with the World Institute for Engineering and Technology Education (WIETE) initiated in 2019 has opened new fields of investigation on the inspiring boundaries of research and education, which has brought about excellent results. Faculty academics published numerous articles in the Global Journal of Engineering Education (GJEE) and the World Transactions on Engineering and Technology Education (WTE&TE), often in co-authorship with researchers and teachers from foreign universities. This not only fosters further research revealing novel, uncharted approaches to research questions, but also influences the quality of working with students and PhD candidates. Thanks to the co-operation with the WIETE and the group of experts and representatives of other international universities gathered around this organisation, the courses offered by the Faculty are conducted in a methodologically innovative way, which brings tangible results in the sphere of education and research.

We are deeply grateful to Prof. Zenon. J. Pudlowski for offering us the opportunity to co-edit this issue and disseminate the innovative approaches and achievements of the academic staff and students of the Faculty of Architecture at Gdańsk University of Technology. We are delighted to see this material published in conjunction with articles from other academic centres around the world. We hope that this will lead to further strengthening of the co-operation and exchange of good practices between universities. We would like to take this chance to thank Prof. Zenon J. Pudlowski and the entire editorial team for their continuous support and for inaugurating the process that led to this publication.

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