

Global Journal of Engineering Education

Guest Editorial

In 2024, Gdańsk University of Technology (Gdańsk Tech) is celebrating the 120th anniversary of its foundation. Established in 1904 as the Royal Prussian Higher Technical School, it was transformed into a state Polish academic university in 1945. For 120 years, the University has not only been a thriving centre of scientific research but also a place of education for many generations of students. Many of the University's graduates are outstanding scholars and inventors who have made a lasting mark on the world of science and technological advancements. The University's rich history provides us with a solid foundation and a great responsibility in the ongoing pursuit of excellence in research and education. We are one of the eight Polish universities listed in the prestigious Shanghai Ranking and QS World University Rankings, which classify the best global universities. The University actively participates in implementing the UN Sustainable Development Goals and is highly ranked in the pro-ecological UI GreenMetric World University Ranking. It is also a signatory of the Universities' Declaration of Social Responsibility and an active promoter of activities aimed at shaping social attitudes conducive to the implementation of the declaration's postulates.

In 2019, Gdańsk Tech achieved the status of a *Research University* in the first competition organised by the Ministry of Science and Higher Education in Poland under the *Research University - Excellence Initiative* programme, receiving the highest rank in Poland among technical universities. The purpose of this competition is to select universities capable of effectively competing with the best academic centres in Europe and the world. This prestigious position as the first research university of technology in the country has been confirmed by the latest evaluation of scientific activities in Poland, where Gdańsk Tech stands at the forefront of Polish universities, earning an A+ rating in six research disciplines. In recognition of the high quality of its processes, the European Commission has granted Gdańsk Tech the right to use the HR Excellence in Research logo.

Moreover, the year 2020 marked a significant event in the academic history of Gdańsk: the establishment of the Daniel Fahrenheit Union of Universities. Named after the world-famous scientist born in Gdańsk, this union comprises Gdańsk University of Technology, the University of Gdańsk, and the Medical University of Gdańsk. The primary goals of this initiative are to facilitate interdisciplinary research and to collectively enhance Gdańsk's standing as a leading academic centre in Poland and abroad. In November 2022, Gdańsk Tech joined the ENHANCE Alliance, becoming a member of the European Universities Initiative. Membership in the ENHANCE Alliance aims to create a European and interdisciplinary space for fostering innovative technological and social progress, while adhering to the principles of sustainable development.

All these achievements have a significant impact not only on the research conducted by Gdańsk Tech scholars but also on the quality of education. Approximately 14,000 students from more than 60 countries are currently studying at Gdańsk Tech. They can pursue their passions at eight faculties, with a selection of 35 fields of study available for first and second-cycle studies. The newly established (2021) Center for Innovative Education helps academics navigate a variety of methods, becoming an incubator for the professional development of academic staff at Gdańsk Tech. The articles presented in this issue illustrate different approaches in the pursuit of excellence in education with a goal to support students with attractive and innovative insights into their fields of study. They confirm that research and education are inseparably merged together, highlight the virtue of interdisciplinary approaches, the numerous benefits of project-based learning, and industry cooperation. They also reveal the importance of adjusting teaching methods to the ongoing digital transformation and the demands of the constantly changing market. We hope that the insights provided in this issue will encourage the most talented high school graduates and young scientists to choose Gdańsk as a suitable place to study and build their professional careers.

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 Gdańsk Tech. We would like to thank the whole editorial team for their continuous support. We share with the WIETE organisation our passion for science and education.

Krzysztof Wilde & Lucyna Nyka