


2022, 69 (141), 5–6  
ISSN 1733-8670 (Printed)  
ISSN 2392-0378 (Online)  
DOI: 10.17402/494

## Editorial preface

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### Dear Readers,

As the year 2022 has come, people expect much and are looking to achieve new goals and face challenges. We are happy to offer to you another issue of the Scientific Journals of the Maritime University of Szczecin. In this issue, we present views, opinions and research findings from different areas of research. Articles have been grouped into the following thematic sections: Civil Engineering and Transport, Material and Mechanical Engineering, Economics, Management and Quality Science and Information and Communication Technology.

In Civil Engineering and Transport, there are two articles. The authors of the first study believe that the shoreline is an important geographical zone, and a better understanding of it could have key importance for shore management and creating maps. An analysis of methods for delineating the shoreline was made, where the focus of attention was accuracy. The second paper describes the mathematical formulas for the boundary element method (BEM) governing the dynamics of mooring with buoy equipment. The paper dealt with the semi-submersible FOWT OC4-DeepCwind platform. It was found that by properly selecting the volume and the position of a buoy on the rope the rope's stress can be reduced by up to 45%.

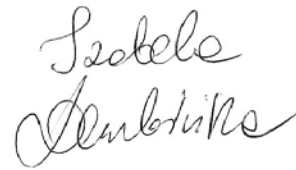
Material and Mechanical Engineering consists of two articles. In the first study, a functional diagram for an automatic sliding mode control system for a three-phase bridge buck current converter was developed. To achieve this, a simulation program was created in MATLAB/Simulink which analysed the dynamic performance of the developed automatic control system, operating in the active rectifier and network current inverter modes. The second article analyses the impact of gas turbine contamination on a drop in airflow, pressure ratio and compressor efficiency. The analysis was based on the assumption that the turbine contamination results in a decreased rated power of the gas turbine and an increased fuel consumption. The case of a shipborne MT30 gas turbine with a nominal power of 36 MW is used in the study.

In Economics, Management and Quality Science, we present three articles. Authors of the first study have set out to determine the main conditions for cost-effective production of motor boats in Poland taking into account the implementation of an R&D project. A descriptive analysis was carried out to describe the market conditions for the operation of manufacturers of motor boats, including electric boats. The results obtained allowed defining changes in the business model based on the R&D project. The subject of consideration in the second paper of this section is the concept of a green port. The authors have analysed various initiatives and strategies for ports that are already called "green". Recommendations based on the analysis are profiled specifically for the Port of Gdynia. The authors of the third study focused on the relationship marketing aspects of container transport. They believe that the strategic competitive advantage in this area of transport is no longer entirely dependent on the basic characteristics of the service provided, and that customer

relationships are becoming more important. Authors conclude that container shipping lines must develop effective customer-oriented relationship marketing strategies. Guided by this view, the authors examined selected relationship marketing strategies that are practised in the container shipping industry.

Information and Communication Technology presents a study, in which the authors explore the use of ontology for semi-automatic marine vessel navigation and ship-to-ship communication to mitigate collision risk. Examples of how such communication can be used are discussed, based on a comprehensive analysis of selected marine collisions, with particular attention to the communication conducted on ships. The effectiveness of such communication was assessed and compared.

I am hoping that the studies presented will meet with wide interest implying discussions and research not only in the discussed research areas, but also going beyond them, giving a stimulus to interdisciplinary and heuristic analyses.

A handwritten signature in black ink, appearing to read 'Izabela Dembińska', written in a cursive style.

dr hab. Izabela Dembińska, Associate Professor  
Editor-In-Chief  
Szczecin, 31.03.2022