The 4th Global Maritime Conference (GMC’21), which was addressed by International Maritime Organization (IMO) General Secretary, Mr. Kitack Lim, took place as an online event on November 18 to 19, 2021. GMC’21 was organized with the partnership of the Turkish Chamber of Marine Engineers (TMMOB), the University of Strathclyde, (UK), Constanta Maritime University (Romania), and Iskenderun Technical University (Turkey). The event was extremely successful, with academics from over 19 countries presenting more than 110 high-quality scientific papers on various international maritime challenges, including the most pressing issues, “Decarbonization in the Maritime Sector” and “Effects of the Pandemic on Maritime Education and Maritime Transport.”

To limit the rise in global temperature to 1.5 °C, in accordance with the Paris climate challenge agreement, IMO (2018) agreed to a greenhouse gas (GHG) strategy for shipping that requires the shipping sector to reduce its emissions by at least 50% by 2050, compared to 2008, including a reduction in the carbon intensity from international shipping by at least 40% by 2030. These GHG emission targets for shipping require disrupting technological innovations and smarter operational practices, including energy-efficient ship design and technologies, non-fossil fuels such as hydrogen and ammonia produced using green electricity at a commercial scale, voyage optimization, and weather routing and port operations.

COP’26, which took place from October 31 to November 13, 2021, in Glasgow, hosted a number of shipping-related events, which highlighted the need for urgent actions to realize zero-emission shipping, including the much-needed policies, infrastructure, and finance for green technologies. Shipping, while trying to address the environmental challenges, has been the most adversely affected industry by the COVID-19 pandemic, as several ships ceased trading, the cruise industry stopped operating completely, and thousands of seafarers were trapped onboard ships for months. Furthermore, because of the travel and meeting restrictions, cadet education and seafarer training have suffered in a major way, resulting in certification and employment issues.

GMC’21 was a timely and vibrant international conference, demonstrating the capabilities and importance of academic research power in developing solutions to face immediate challenges and achieving ambitious environmental targets. It was encouraging to listen to so many young researchers from various parts of the world, presenting their high-quality research on a number of topics covered by the conference, including Alternative Fuels and Renewable Energy, Naval Architecture and Offshore Technologies, Autonomous Ships and Systems; Maritime Policy, Law and Governance; Port Operations and Technologies; Maritime Safety and Security, Navigation and Marine Traffic, Maritime Transportation and Economics; Maritime Education, Maritime Crew Management, and Seafarers Health and Environment.

The challenges the Maritime industry is facing are global and are significantly impacting the industry. These challenges can only be addressed by promoting and harnessing the industry-academia, and national and international academic collaborations. It was encouraging to see that many papers presented at GMC’21 were the outputs of international academic collaborations. Industry engagement in universities and maritime focus research is of paramount importance. It was also pleasing to see that some papers had coauthors from industry. However, GMC’23 must build on the success of GMC’21 and should target much.
wider industry involvement. In the digital age, real-world data is extremely valuable to gain insights and develop the much-needed solutions. It is crucial that industry supports academia with this data and measurement opportunities, and be a partner in the solution development. The IMO EEXI and CII regulations, which are coming into force in 2023, require another such industry-academia partnership.

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Prof. Turan has extensive experience in managing projects and acting as international expert reviewers to several large international projects while serving as the international scientific advisor to the Norwegian National project “Smart Maritime Project.” He has been involved in more than 80 research and consultancy projects. Prof. Turan has participated as an investigator in EPSRC’s largest-ever funded marine research projects in energy efficiency: Low Carbon Shipping (2010-2013) and Shipping in Changing Climates (2013-2017). Prof. Turan was the coordinator of the FP7 SEAHORSE project, which received the LR-RINA maritime safety award 2017. Prof. Turan was also the winner of the 2018 TRAVISION (TRA 2018) senior European Researcher award in waterborne transport, organized by the European Commission.