

Operations the Arctic

Mitigating the Risks

Up until recently, areas within the Arctic region and especially its large ocean were not considered as promising fields for economic activities and endeavours of maritime transport for a rather self-explanatory reason: extremely harsh environmental conditions that resulted in significant ice-coverage, which, at a minimum, severely hindered or even completely blocked the necessary access and transport connections. As the Arctic's ice-coverage maintains a downward trend, extraordinary opportunities to capitalize on its plethora of untapped resources are now looming. Furthermore, an extended number of new/emerging technologies has now become available in order to effectively address the still adverse weather conditions of the region under discussion; the Arctic Ocean is now considered a promising field for offshore energy and exploration, tourism, fishing, and last but not least, maritime transport.

In case there is no dramatic shift regarding the retreat of ice, more and more traffic is clearly expected for the Arctic routes. Shipping, being directly dependent on weather conditions, is significantly affected by overturning the prevailing notion of an inaccessible Arctic. Specialized ice-capable vessels along with well-trained crews will be essential to operate safely in the Arctic. Icebreakers' support will still be a need, both in the short term and the medium time-framework. Issues such as uncharted areas, ice that is drifting and harsh environmental conditions are just a few examples of challenges for Arctic shipping; strengthening the necessary technical infrastructure in order to support the expected increase of maritime traffic in the Arctic routes, with emphasis on facilitating timely response to emergencies and search and rescue (SAR) activities should be added to the equation.

The winter 2018 issue of the Journal of Ocean Technology – with guest editors Professor Aykut I. Ölcer and Associate Professor Dimitrios Dalaklis of the World Maritime University (WMU') in Malmö, Sweden – will expand global knowledge in relation to the Arctic Region's truly pristine environment and promote the understanding of newly emerging technologies and regulatory efforts that are paving the way towards responsible ocean utilization and management. We're inviting the submission of technical papers, essays, and short articles that focus on operations in polar waters.

WMU is a postgraduate maritime university founded by the International Maritime Organization (IMO), a specialized agency of the United Nations.