

## Editorial

Dear readers of International Shipbuilding Progress,

It is my pleasure to present to you the triple issue 67(2,3,4) of International Shipbuilding Progress (ISP). These are challenging times that have left no-one unaffected. COVID-19 has enormous repercussions on our day-to-day lives and on our work. The editorial board of ISP and I have noticed a decline in the number of articles that have been submitted. Nevertheless, I am glad to say that we have been able to present another set of outstanding articles that covers almost the full range of shipbuilding topics that ISP addresses, including the logistics of bulk material, ship design and detailed ship hydromechanics.

Issue 67(2,3,4) contains the following articles.

The first article, titled *Pneumatic transport of bulk materials in construction of composite floating docks* by Rashkovskiy et al. is about abrasive wear on pipelines. Equations have been derived to estimate the lifetime of pipelines before failure. This is a topic that is relevant for transshipment of dry bulk as well as for dredging and we at ISP encourage anyone with a background in dredging to provide similar relations when transporting sand-water mixtures are concerned.

The second article concerns ship design. It is titled *How uncertainty influences decision-making effectiveness in conceptual ship design processes* by Garcia et al. Anyone having been concerned with design will recognize that the word “design” is almost synonymous with “decision making”. And some decisions are made with more confidence than others. The authors propose a method to study how the level of uncertainty has an effect on the effectiveness of decisions. They formulate a couple of strong recommendations to improve the effectiveness of the overall design process.

The third article is about the accelerations of a rescue vessel in irregular waves. The title is *Experimental and numerical assessment of vertical accelerations during bow re-entry of a RIB in irregular waves* and it is written by Van der Eijk and Wellens. The assessment of vertical accelerations during transit with relatively fast boats in a sea state is typically done by means of experiments in tanks or by semi-empirical methods. This article now shows that vertical accelerations can also be predicted by means of a detailed Navier-Stokes solver with Volume-of-Fluid formulation for the free surface. It is demonstrated that the results in terms of accelerations from the detailed solver without calibration are closer to the experiment than the calibrated semi-empirical method Fastship. This outcome opens up opportunities for evaluating vertical accelerations for boats in realistic, rather high sea states by means of detailed numerical models like these.

The article *Practical numerical method for erosion risk prediction on ship propellers* by Shin and Anderson can be helpful in the design phase of ship propellers.

They found that detached eddy simulations make for an efficient and reliable tool to determine erosion risk indices. The simulations are validated with experimental assessments and good agreement was found.

The final article in this issue, *Ship design complexity, sources, drivers, and factors: A literature review* by Ebrahimi et al., presents a review of recent literature on ship design complexity, including a detailed discussion of what “complexity” entails during design. Complexity factors are tabulated and reflected upon so that the theory may benefit the design process.

The editorial board and I wish that you may use the research results in these articles to your benefit.

All the best,  
Peter Wellens  
Editor-in-chief