

Preface

Since 1974 ATENA, the Italian Association of Naval Architects and Marine Engineers, organizes every three years the NAV conference, an international event intended to discuss the matters related to the maritime field. Papers presented by authors from industries, universities, shipping companies deal with various topics such as conceptual and practical ship design, offshore and naval vessels, structural design and production technology, stability, numerical and experimental hydrodynamics. The conference has always been an excellent opportunity for the international maritime community to discuss the state of the art of all aspects of marine technology.

Since a few years the rapid progress in design and production activities, the evolving international regulatory framework, the increasing attention to the environment, the evolution of computer and information technologies indicates that in a very near future the ships will substantially differ from the today's ones. Nowadays many aspects of new projects are focused on numerical simulations, safety and security, new fuels, protection of the marine environment, and renewable energy. In addition, the aim of the research activities has changed: consistent responses are required in order to give prompt and practical solutions for the innovation needs of the industry. It is not the sunset of the free intellectual curiosity, but a new aspect of the synergy between industry and academia.

For this reason, most of the research papers presented at NAV 2018 dealt with new topics, such as ship digitalization, unmanned vehicle, cyber security, marine renewable energy, deep-sea mining, and marine robotics. NAV 2018 represented therefore a novelty with respect to the past editions: the expected technological evolution in ship design and management in the coming years has been clearly highlighted with the theme proposed to the maritime community: "The Ship of the Future".

This issue of the ISP Journal contains extended versions of a number of selected conference papers, illustrating the variety of topics presented at the conference.

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