Special Issue

Modeling and Experimental Testing of Composites Used in the Maritime Industry

Message from the Guest Editors

Modern ship design focused on pro-ecological solutions follows a comprehensive approach to all elements of construction and equipment, which must meet a number of stringent requirements in the fields of safety, ecology and functionality. The materials used require a combination of low weight, flame retardancy, high strength, high stiffness, and good fatigue resistance. One of the key aspects is reducing the weights of the structural elements and equipment of passenger vessels such as cruise ships, yachts, passenger ferries, in which the share of crew and passengers relative to the size of the vessel is relatively high. Then, reduced equipment weight means reduced energy consumption, translating into increased efficiency and reduced pollutant emissions. The lower weight of the equipment means that the standard displacement of the vessel increases. This Special Issue focuses on composite materials used in the maritime industry. It will highlight recent progress in the study of properties and applications of these materials, covering both experimental characterization and modeling methods.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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