

## Integrative approach to the problem of the rogue waves appearance and elimination of their consequences

Artem Rodin (1) and Natalia Rodina (2)

(1) Nizhny Novgorod State Technical University, Nizhny Novgorod, Russia (xmrarro@gmail.com), (2) Lobachevsky State University of Nizhni Novgorod, Nizhny Novgorod, Russia (na4aikovskaya@mail.ru)

Every year marine natural disasters claim thousands of lives. Only rogue waves during the last 10 years caused the death of 125 and injury of 169 people. In addition to studying the physical mechanisms of generation of rogue waves is important to study the mechanisms of human behavior in such extreme situations. The impact as large-scale natural disasters, as well as less severe (in its consequences) disaster strikes must be assessed on the basis of the entire set of conditions, in whose framework the community of people appears to be, taking into account both the power of the elements, and the available resources at their disposal to restore an acceptable level of life, including social and psychological context. Here particular relevance acquire interdisciplinary researches. This interaction is extremely important not only for sociologists and psychologists, but also for the representatives of the natural sciences (physics, chemistry, mathematics) since the ultimate goal of all efforts is to minimize the harm produced by any element or negative influence of technological progress. This also work contains statistical analysis of the appearance of rogue waves on the wind wave background in the shallow bay, obtained during the experiment in the Baltic Sea.