



## YOUNG SCIENTISTS CONTEST

**On December 2, 2015, in the framework of «Transport Week» a forum «Young scientists of the transport industry» was held.**



**112** works from 13 transport universities participated in the competition. Participants competed for victory in three categories: «Development of a single transport space of the Russian Federation: organizational, legal and economic issues», «Development of transport infrastructure, innovative approaches to construction and operation of engineering structures», «Innovations in management of rolling stock movement, energy saving, security as the main vector of transport sector development».

Summing up, the Minister of transport Maxim Sokolov noted that the forum stands out among other events of Transport Week. «This format allows us to more clearly present future techniques and technologies of the transport industry, – he said. – The image of the future is created by the efforts of young scientists who will directly contribute to the practical implementation of current transport projects».

According to the Minister, the forum is not only a competition of ideas, but also an effective platform for discussion and debate, creative communication of like-minded persons,

formation of innovative proposals. «We are ready to examine them carefully and to facilitate the implementation of the most effective and meaningful», – assured M. Sokolov.

«The forum really opens up new possibilities, allowing to properly assess the choice of scientific activity. I wish all participants great success, contributing to our common advancement along the path of development of our entire national transport system», – the Minister concluded.

M. Sokolov awarded the participants of the contest, whose works were recognized as the best in each of the submitted categories. In the category «Development of a single transport space of the Russian Federation: organizational, legal and economic issues» the first place was taken by Ph.D. student of Volga State University of Water Transport Maria Lebedeva. Her work is related to the development of a catamaran type vessel of large cargo capacity with minimal impact on the riverbed. With the help of colleagues from her university Maria Lebedeva substantiated conditions of a model experiment intended to compare ship waves of river cargo



vessels of various types and presented measurement results. According to Ph.D. student, the problem lies in the fact that the movement of vessels at high speeds is accompanied by significant wave formation, which leads to increased resistance to their motion, as well as negative environmental impacts on inland waterways. In this regard, it may be a task to provide high speed to large capacity trailer ships capable of carrying general cargo in the supply chain.

Alexander Gorlov of MIIT won in the category «Development of transport infrastructure, innovative approaches to construction and operation of engineering structures». Ph.D. student has proved the usefulness of innovation in reconstruction and strengthening of the railway subgrade. He believes that in this issue it is possible to rely on world experience of the use of structures of reinforced soil structures and nagel structures. To assess the stability of such structures in their design a young scientist proposes to use the technique of limiting balance.

The work of Ph.D. student of Maritime State University named after admiral G. I. Nevelsky Ruslan Tsirik was the best in the category «Innovations in management of rolling stock movement, energy saving, security as the main vector of transport sector development». Despite his youth, Ruslan has worked in his native Vladivostok as a senior assistant to the vessel's captain. Now, he takes care of a comprehensive approach to safety of sea container transportation.

Ph.D. student of MSU named after admiral G. I. Nevelsky notes that sea container transportation is characterized by all general risks inherent to the shipping industry: from collisions and groundings to equipment failure

and acts of external aggression. At the same time risks associated with peculiarities of goods transported, technology of loading and unloading operations are inherent to container transportation. For a professional evaluation of all these risks a detailed analysis of accidents, development of technical and organizational solutions to minimize the likelihood of similar emergency situations in the future are required.

Minister of Transport Maxim Sokolov noted the relevance of the submitted works. He recommended Ph.D. student Alexander Gorlov to study the technology of cold recycling to be used for stabilization and strengthening of soil during construction and repair of highways, promised Maria Lebedeva to help to organize the research on «big water» in the Volga basin. The Minister noted also the importance of research on safety of container transportation in our country. According to Maxim Sokolov, not by chance the winners of the contest of previous years continue to pursue science. So, of seven winners of the last year from MIIT, two young people have got Ph.D. degree, two more submitted their theses, continuing education, and one student enrolled in Ph.D. studies on a budgetary basis.

*The journal World of Transport and Transportation will publish in its pages the works of the winners, who received a positive assessment and also of our reviewers, as well as will publish works of awardees and best papers of other participants in «Soiskatel» supplement.*

**(Press service of the Ministry of Transport  
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