



## The Sixth International Scientific and Practical Symposium

## «INNOVATIONS AND SUSTAINABILITY OF MODERN RAILWAY»

## Irkutsk, ISTU September 25–28

## **Resolution of the Symposium**

On September 25-28, 2018, the Sixth International Scientific and Practical Symposium "Innovations and Sustainability of Modern Railway" was held at the Irkutsk State Transport University. The Symposium was organized with the support of the Federal Agency for Railway Transport, East China Transport University, Irkutsk State Transport University, Zhantianyou Development Foundation for Science and Technology.

The main objectives of the symposium were: the exchange of information, experience, existing developments, opinions on the problems of transport infrastructure; solution of many topical scientific problems and conducting applied scientific researches related to the development of the railway transport; innovations and ensuring the sustainability and operation safety and of modern railways; discussion of international cooperation issues, significant events in the field of transport and much more.

The founders, guests and participants of the symposium delivered their opening addresses and made reports at the plenary session: Kargapol'tsev Sergei Konstantinovich, D. Sc. in Engineering, Full professor, Rector of Irkutsk State Transport University; Khomenko Andrei Pavlovich, D. Sc. in Engineering, Full professor, President of Irkutsk State Transport University; Xiaoyan Lei, Full professor, Director of Railway Noise and Vibration Engineering Research Center of the Ministry of Education, East China Jiaotong University (welcoming address); Dorofeev Vladimir Yuryevich, First Vice Governor of Irkutsk region; Milostnykh Igor` Vasilyevich, First vice chief officer of the Ulan-Baatar Railways; Popov Sergei Ivanovich, General auditor of the train traffic safety of the East-Siberian Railways; Livshits Alexandr Valeryevich, Full Professor, Vice-rector for Research, Irkutsk State Transport University; Moskvichyov Vladimir Victorovich, D. of Sc. in Engineering, Full professor, honored scientist of the Russian Federation, Director of the Special Design and Technology Bureau "Science" of the Institute of Computational Technologies of the Siberian Branch of Russian Academy of Sciences; Bubnov Vyacheslav Anatolyevich, D. Sc. in Economics, Associate Professor, dean of the department of Management, Logistics and Customs; Pykhalov Anatolii Alexandrovich, D. Sc. in Engineering, Full professor, Director of the Training Center "Computer Technologies of Engineering Analysis". More than 200 people took part in the plenary session, 5 reports were presented.

Traditionally, along with scientific workers and graduate students, the symposium was attended by the leaders and specialists of the East Siberian Railway. Scientists from Russia, China and Mongolia discussed the problems of innovation and ensuring the sustainability and operation safety of the modern railways, as well as the problems of the innovation activity in the railway industry, the exchange of scientific and technical information, the development of relations between education, science and industrial enterprises.

There were 6 sessions at the symposium:

- 1. Railway rolling stock (22 reports were announced, 12 were presented).
- 2. Power supply of railway transport (22 reports were announced, 9 were presented).
- 3. Development of railway transport infrastructure and transport security (38 reports were announced, 26 were presented).
  - 4. Operational work, transport logistics (27 reports were announced, 21 were presented).
  - 5. Technosphere and environmental safety (42 reports were stated, 14 were presented).
- 6. Social and economic problems of railway transport development (19 reports were announced, 6 were presented).

The symposium was attended by more than 300 people, including different regions of the Russian Federation, China, and Mongolia.

During the work of the 6 sessions of the symposium, 170 reports were announced, outlining the results of research aimed at innovation and ensuring the operation safety and sustainability of modern railways and the creation of new innovative technologies for the development and operation of transport infrastructure.

Summing up, the organizers and participants of the symposium consider that the program of the symposium has been fully implemented and emphasize:

- 1. High scientific level of the symposium, achieved, among other things, thanks to the efforts of the co-founders and organizers of the symposium;
- 2. High practical orientation of the works, their interrelation with the existing problems of transport branch;
  - 3. The need to develop and strengthen international relations;

At the final meeting, the Symposium participants decided to:

- 1. Recognize the work of the symposium as effective and successful.
- 2. Form a plan for joint research in the sphere of application of intelligent technologies in railway power supply systems.
- 3. Develop a two-year work plan for the High-Speed Railway Research Institute, established jointly with East China Jiaotong University.
- 4. Hold the 7th International Scientific and Practical Symposium on Innovations and Sustainability of Modern Railway on the basis of East China Jiaotong University (China) in 2020.

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