



# PROGRAM

VI International Scientific and Practical Symposium  
**INNOVATION AND SUSTAINABILITY  
OF MODERN RAILWAY**



September 25 – 28

Irkutsk 2018

Federal Agency for Railway Transportation  
Irkutsk State Transport University  
East China Jiaotong University

# **PROGRAM**

**VI International Scientific and Practical Symposium  
INNOVATION AND SUSTAINABILITY  
OF MODERN RAILWAY**

September 25 – 28

Irkutsk 2018

## SCIENTIFIC COMMITTEE

### Chairmen:

#### **KARGAPOLTSEV Sergei**

*Rector, Professor, Irkutsk State Transport University(ISTU), Russia*

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#### **LUO Yufeng**

*President, Professor, East China Jiaotong University(ECJTU), China*

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### Vice-chairmen:

#### **KHOMENKO Andrei**

*President, Professor, ISTU, Russia*

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#### **FAN Yong**

*Vice-president, Professor, ECJTU, China*

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### Committee Members:

#### **BYCHKOV Igor**

*Chairman of the Presidium of Irkutsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences (SB RAN)*

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#### **DOROFEEV Vladimir**

*Principal deputy governor of Irkutsk region*

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#### **ELISEEV Sergei**

*D.Sc. in Engineering, professor, director of Scientific-educational Center of Modern Technologies, System Analyses and Modeling*

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#### **FROLOV Vasili**

*Chief of East-Siberian Railway – the branch of Joint Stock Company “Russian Railways”*

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#### **PEREGUDOVA Valentina**

*Minister of Education of Irkutsk region*

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#### **SULEIMANOV Arthur**

*Minister of Housing Policy, Energy and Transport of Irkutsk region*

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#### **ZHIGZHIDNYAMAA Damdinsuren**

*Chief of Joint Stock Company “Ulan-Bator Railway”, MONGOLIA*

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#### **SONG Pinggang**

*Professor, ECJTU, China*

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#### **LIU Linya**

*Professor, ECJTU, China*

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#### **YANG Hui**

*Professor, ECJTU, China*

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#### **HU Fengping**

*Professor, ECJTU, China*

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#### **CHEN Shiming**

*Professor, ECJTU, China*

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#### **LIU Yande**

*Professor ECJTU, China*

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#### **ZHAO Junhui**

*Professor, ECJTU, China*

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#### **HAN Shizhuan**

*Professor, ECJTU, China*

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*Professor, ECJTU, China*

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*Professor, ECJTU, China*

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#### **FENG Qingsong**

*Professor, ECJTU, China*

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#### **ZHENG Mingxin**

*Professor, ECJTU, China*

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**HUANG Zhichao**  
*Professor, ECJTU, China*

**CHEN Jianyun**  
*Professor, ECJTU, China*

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**ZHA Weixiong**  
*Professor, ECJTU, China*

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**HU Guoliang**  
*Professor, ECJTU, China*

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**LI Zili**  
*Professor, Delft University of  
Technology, Netherlands*

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## **ORGANIZING COMMITTEE**

### **Chairmen:**

**KHOMENKO Andrei**  
*President, Professor, ISTU, Russia*

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**WAN Ming**  
*Chancellor, Professor, ECJTU, China*

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**LUO Yufeng**  
*President, Professor, ECJTU, China*

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### **Vice-chairmen:**

**LIVSHITS Alexander**  
*Professor, vice-rector for Research, ISTU, Russia*

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**FAN Yong**  
*Vice-president, ECJTU, China*

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### **Committee Members:**

**ASLAMOVA Vera**  
*Professor, ISTU, Russia*

**ASTRAKHANTSEV Leonid**  
*Professor, ISTU, Russia*

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**BOGATOV Maxim**  
*Associate professor, Head of the  
International Cooperation Department,  
ISTU, Russia*

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**BYKOVA Natalia**  
*Professor, chair holder, the Construction  
of the Roads, Bridges and Tunnels chair,  
ISTU, Russia*

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**BUBNOV Vyacheslav**  
*Professor, Dean of the Management,  
Logistics and Customs Department,  
ISTU, Russia*

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**DEMYANOV Vladislav**  
*Associate professor, professor of the  
Automatics, Telemechanics and  
Communication chair, ISTU, Russia*

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**KRYUKOV Andrei**  
*Professor, professor of the Electric  
Power Industry of Transport chair, ISTU,  
Russia*

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**KHUDONOGOV Anatolii**  
*Professor of the Electric Rolling Stock  
chair, ISTU, Russia*

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**MELNICHENKO Oleg**  
*Professor, chair holder, the Electric  
Rolling Stock chair, ISTU, Russia*

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**LIVSHITS Alexander**  
*Professor, vice-rector for Research,  
ISTU, Russia*

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**PODVERBNIY Vyacheslav**

*Professor, professor of the Railway  
Construction chair, ISTU, Russia*

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**SOLSKAYA Irina**

*Professor, professor of the Finance and  
Accounting chair, ISTU, Russia*

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**SAVOSTEEVA Margarita**

*Head of the Research and Contractual  
Work Department, ISTU, Russia*

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**RUSH Elena**

*Professor, Chair holder, the  
Technosphere Safety chair*

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**SACHKOV Dmitrii**

*Head of the Research Department, ISTU,  
Russia*

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## OPERATING PROCEDURE OF THE SYMPOSIUM

### September 25 (Tuesday)

9:00 – 20:00	Meeting the participants (airport), hotel check-in
12:00-13:00	Meeting the Rector
13:00-14:00	Tour around the University
17:30-20:00	Cultural program for the Symposium participants

### September 26 (Wednesday)

09:00 – 10:00	Registration of the participants (Room D-801)
10:00 – 11:00	Opening the Symposium, Plenary Session
11:00 – 11:15	Coffee-break
11:15 – 12:00	Opening the Symposium, Plenary Session
12:00 – 13:00	Lunch
13:00 – 15:00	Breakout Sessions
15:00 – 15:15	Coffee-break
15:15 – 17:00	Breakout Sessions
17:00 – 18:00	Lunch

### September 27 (Thursday)

10:00 – 11:00	Session: № 1. Railway rolling stock (Room E-207); № 2. Power supply of railway transport (Room D-208); № 3. Development of railway transport infrastructure and transport security (Room A-216); № 4. Operational work, transport logistics (Room A-407); № 5. Technosphere and environmental safety (Room A-803); № 6. Social and economic problems of railway transport development (Room A-405).
10:00 – 11:00	
10:00 – 11:00	
10:00 – 11:00	
10:00 – 11:00	
10:00 – 11:00	
11:00 - 11:15	Coffee-break
11:00 – 13:00	Session: № 1. Railway rolling stock (Room E-207); № 2. Power supply of railway transport (Room D-208); № 3. Development of railway transport infrastructure and transport security (Room A-216); № 4. Operational work, transport logistics (Room A-407); № 5. Technosphere and environmental safety (Room A-803); № 6. Social and economic problems of railway transport development (Room A-405).
11:00 – 13:00	
11:00 – 13:00	
11:00 – 13:00	
11:00 – 13:00	
11:00 – 13:00	
13:00 – 14:00	Lunch
14:00 – 16:00	Session: № 1. Railway rolling stock (Room E-207); № 2. Power supply of railway transport (Room D-208); № 3. Development of railway transport infrastructure and transport security (Room A-216); № 4. Operational work, transport logistics (Room A-407); № 5. Technosphere and environmental safety (Room A-803); № 6. Social and economic problems of railway transport development (Room A-405).
14:00 – 16:00	
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14:00 – 16:00	
14:00 – 16:00	

### September 28 (Friday)

10:00 – 18:00	Cultural program for the Symposium participants
23:00	Departure to the airport

# PROGRAM

September 26, room D-801 (start of working time is at 10:00 a.m.)

## Plenary Session

### The Chairman

Kargapol'tsev Sergei Konstantinovich  
Full professor, Rector of Irkutsk State  
Transport University,

### Co-Chair

Xiaoyan Lei  
Full professor, Director School of  
Civil Engineering and  
Architecture, China

### The Secretary

Livshits Aleksandr  
Valeryevich  
Full professor,  
Vice-rector for Research,  
ISTU

1.	<b>Kargapol'tsev Sergei Konstantinovich</b> , D. Sc. in Engineering, Full professor, Rector of Irkutsk State Transport University Opening of the VI International Scientific and Practical Symposium
2.	<b>Khomenko Andrei Pavlovich</b> , D. Sc. in Engineering, Full professor, President of Irkutsk State Transport University Welcoming address
3.	<b>Xiaoyan Lei</b> , Full professor, Director of the School of Civil Engineering and Architecture, China Welcoming address
4.	<b>Dorofeev Vladimir Yuryevich</b> , First vice-Governor of the Irkutsk region Welcoming address
5.	<b>Suleimenov Artur Mukhtarovich</b> , Minister of Housing Policy, Energy and Transport of the Irkutsk Region Welcoming address
6.	<b>Peregudova Valentina Vasilyevna</b> , Minister of Education of the Irkutsk Region Welcoming address
7.	<b>Milostnykh Igor` Vasilyevich</b> , First vice chief officer of the Ulan-Baatar Railways Welcoming address
8.	<b>Zarubin Igor` Fyodorovich</b> , Vice chief officer of the East-Siberian Railways. General auditor of the train traffic safety of the East-Siberian Railways Welcoming address
9.	<b>Bychkov Igor` Vyacheslavovich</b> , D. Sc. in Engineering, Member of Russian Academy of Sciences, Acting Rector of ISU Welcoming address
10.	<b>Livshits Alexandr Valeryevich</b> , Full Professor, Vice-rector for Research, Irkutsk State Transport University Report "The East-Siberian Railway is the basis for sustainability of the Siberian Polygon"
11.	<b>Xiaoyan Lei</b> , Full professor, Director of the School of Civil Engineering and Architecture, China Report "Results of studies of the impact of noise and vibration from urban rail transport on the environment"
12.	<b>Moskvichyov Vladimir Victorovich</b> , 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 Report of Moskvichyov V.V., Makhutov N.A., Kulagin V.A. "Modern technologies of the fuel and power complex and opportunities for the development of Siberia's railway transport"
13.	<b>Bubnov Vyacheslav Anatolyevich</b> , D. Sc. in Economics, Associate Professor, dean of the department of "Management, Logistics and Customs" Report "The impact of railway transport on Russia's economic growth and development"
14.	<b>Pykhalov Anatolii Alexandrovich</b> , D. Sc. In Engineering, Full professor, Director of the Training Center "Computer Technologies of Engineering Analysis" Report "Computer technologies of the engineering analysis in the Interregional branch university complex "Irkutsk State Transport University"

**SESSION № 1**  
**RAILWAY ROLLING STOCK**

September 26, room E-207 (start of working time is at 01:00 p.m.)

**Chairman**

Mel'nichenko Oleg Valeryevich  
*D. Sc. in Engineering, Full professor, Chair holder, the chair of Electric Rolling Stock*

**Secretary**

Dul'skii Evgenii Yuryevich  
*Ph.D. in Engineering, Associate Professor of the chair of Electric Rolling Stock*

1.	<b>Mingxin Zheng</b> ANALYSIS ON THE CREEP MECHANISM OF HIGH-SPEED RAILWAY EMBANKMENT
2.	<b>Bolin He</b> EFFECT OF UIT ON THE FATIGUE PROPERTIES OF WELDED JOINT FOR TRAIN BOGIE
3.	<b>Aslamova V.S., Rush E.A., Temnikova E.A., Tungalag T., Kargapoltsev S.K., Skopintseva T.A.</b> AUTOMATION OF NON-CONTROL DIESEL LOCOMOTIVE OF SERIES 2TE116UM No. 031
4.	<b>Belsky I.O., Lukyanov A.V.</b> AUXILIARY ASYNCHRONOUS ELECTRIC LOCOMOTIVES MACHINES MAGNETIC FIELD PARAMETERS MODELING IN CURRENT ASYMMETRY IN PHASES
5.	<b>Ilyin E.S., Ratushnyak V.S., Yuryev A.V., Vakhrusheva O.Yu.</b> EXPERIENCE IN THE MAGNETIC PULSE INSTALLATION MODEL USE TO CLEAN THE GONDOLA CAR FROM THE FROSTED AND PACKED CARGO
6.	<b>Ermolenko I.Yu., Zheleznyak V.N., Martynenko L.V.</b> INTERRELATION OF THE CAUSES OF FAILURE OF THE AXLE BOXES AND THE MALFUNCTION OF THE AUTOMATIC COUPLINGS (TYPE SA-3)
7.	<b>Baryshnikov V.I., Shestakov A.A., Vyaznikov A.S.</b> PULSE VISUALIZED CRYSTALLINE INFRARED LASER FOR AUTOMATED TESTING OF BOLOMETRIC SYSTEMS
8.	<b>Petrov G.I., Tarmaev A.A.</b> IMPROVING OF THE DYNAMIC QUALITIES OF CARS BY INSTALLING WEAR-RESISTANT VIBRATION-ABSORBING ELEMENTS IN A TRUCK
9.	<b>Dulsky E.Yu., Manuilov N.I., Ivanov P.Yu., Khudonogov A.M.</b> IMPROVEMENT OF METHODS AND MEANS OF CONTINUOUS DIAGNOSIS OF THE BRAKE TRAIN NETWORKS
10.	<b>Filippenko N. G.</b> DYNAMICS OF MECHANICAL CHARACTERISTICS OF POLYAMIDE SEPARATORS OPERATED IN CLIMATE CONDITIONS OF URAL, SIBERIA AND THE FAR EAST
11.	<b>Bychkovsky V. S., Filippenko N. G., Popov S. I., Livshits A. V., Kargapoltsev S.K.</b> THE CREATION OF SELF-LUBRICATING POLYMERIC MATERIALS FOR THE PRODUCTS WITH FRICTION UNITS IN MACHINERY PRODUCTION EQUIPMENT.
12.	<b>Dulskiy E.Yu., Ivanov P.Yu., Khudonogov A.M.</b> BASIS FOR LOCAL METHODS OF INSULATION HARDENING OF TRACTION ROLLING STOCK ELECTRICAL MACHINES



## SESSION № 2

### POWER SUPPLY OF RAILWAY TRANSPORT

September 26, room D-208 (start of working time is at 01:00 p.m.)

#### Chairman

Kryukov Andrei Vasilyevich

*D. Sc. in Engineering, Full professor, Chair  
professor of Electric Power Industry of Transport*

#### Secretary

Cherepanov Alexandr Valeryevich

*Ph.D. in Engineering, Associate Professor of the  
Chair of Electric Power Industry of Transport*

1.	<b>Zakaryukin V.P., Kryukov A.V., Alekseenko E.A.</b> SIMULATION OF EMERGENCY CONDITIONS IN RAIL ELECTRIC TRACTION NETWORKS
2.	<b>Rongguang Di, Lixia Zuo</b> HIGH-SPEED RAILWAY TRACTION SUBSTATION VIDEO LINKAGE SYSTEM
3.	<b>Bulatov Yu.N., Kryukov A.V., Cherepanov A.V., Avdienko I.M., Kutsyi A.P.</b> ELECTRIC ENERGY QUALITY MANAGEMENT IN RAILWAYS POWER SUPPLY SYSTEMS
4.	<b>Jie Yuan</b> DESIGN OF DIFFUSE REFLECTIVE FREE SURFACE BASED ON TRAIN TUNNEL LIGHTING
5.	<b>Kolmakov V.O.</b> INCREASE IN ELECTROMAGNETIC COMPATIBILITY OF INFRASTRUCTURE FACILITIES OF THE RAILROADS
6.	<b>Zakaryukin V.P., Kryukov A.V., Kushov A.V., Cherepanov A.V.</b> PARAMETRICAL IDENTIFICATION OF RAILROAD TRACTION POWER SUPPLY SYSTEMS OF ALTERNATING CURRENT
7.	<b>Bakanin D.V., Filatova S.N., Bychkovsky V.S., Chipizubova S.V., Gadzhieva A.A.</b> USE OF HIGH FREQUENCY HEATING IN SANDWICH PANELS MANUFACTURING WITH SILICON-CONTAINING PRODUCTION WASTES INSULANT.
8.	<b>Filippenko N.G., Livshits A.V., Kargapoltsev S.K., Shastin V.I.</b> ANALYSIS OF THE METHODS OF PROCESSING MATERIALS WITH THE USE OF MAGNETOELECTRIC FIELDS
9.	<b>Butorin D.V.</b> AUTOMATION OF THE PROCESS OF CONTROL OF STATES OF POLYMER MATERIALS AT ELECTROTHERMAL TREATMENT

**SESSION № 3**  
**DEVELOPMENT OF RAILWAY TRANSPORT INFRASTRUCTURE**  
**AND TRANSPORT SECURITY**

September 26, room A-216 (start of working time is at 01:00 p.m.)

**Chairman**

Podverbnyi Vyacheslav Anatolyevich  
*D. Sc. in Engineering, Associate professor,  
 Professor of the chair of Railways, Bridges and  
 Tunnels Construction*

**Secretary**

Koven`kin Dmitrii Alexandrovich  
*Ph.D. in Engineering, Associate Professor, Chair  
 holder, the chair of Railway Track and Facilities*

1.	<b>Chao Yang</b> THE DEVELOPMENT STATUS AND RESEARCHES ON DYNAMIC CHARACTERISTICS OF HIGH-SPEED TRAIN IN CHINA
2.	<b>Leonenko E.G., Kapustina E.P., Buynova N.P.</b> ANALYSIS OF CAUSES OF DERAILMENT OF EMPTY WAGONS TO THE INSIDE OF THE CURVE AND POSSIBLE SOLUTIONS FOR THE PROBLEM
3.	<b>Zhaoping Tang</b> RAILWAY EMERGENCY DISPATCHING OPTIMIZATION BASED ON THE SATISFACTION DEGREE UNDER FAIR PRINCIPLE
4.	<b>Zhichao Huang</b> DEVELOPMENT OF SELF-PIERCING RIVETING
5.	<b>Orlenko A.I., Bol'shakov R.S., Dimov A.V.</b> EVALUATING DYNAMIC CONSTRAINT REACTIONS IN THE INTERACTIONS OF ELEMENTS OF MECHANICAL OSCILLATORY SYSTEMS DEVELOPMENT OF METHODOLOGICAL POSITIONS
6.	<b>Weiqing Yu</b> THE EXPERIMENTAL ANALYSIS AND RESEARCH OF THE INFLUENCE FACTORS OF THE UNDERFLOOR WHEEL LATHE FOR THE EFFECT OF TURNING REPAIR
7.	<b>Jianping Sun</b> THE INFLUENCES ON DISC CUTTER WEAR OF SHIELD MACHINE BASED ON ORTHOGONAL TEST METHOD
8.	<b>Shijuan Fan</b> STUDY ON LUMINAIRE-DISTRIBUTION PARAMETERS OPTIMIZATION OF THRESHOLD AND TRANSITION ZONE OF HIGHWAY TUNNEL LIGHTING
9.	<b>Podverbniy V.A., Titov K.M., Kholodov P.N.</b> URBAN HIGH-SPEED TRAM SYSTEMS DESIGNING
10.	<b>Dil V.F., Daneev A.V., Sizykh V.N.</b> INVESTIGATION OF OWN PROPERTIES OF THE AIRCRAFT MOVEMENT THROUGH THE FIRST AND GENERAL INTEGRALS OF MOVEMENT OF EILER'S DYNAMIC EQUATIONS
11.	<b>Butorin D. V., Bychkovsky V. S., Filippenko N. G., Livshits A. V., Kargapoltsev S. K.</b> INVESTIGATIONS OF MECHANICAL, PHYSICAL AND TECHNICAL PROCESSES IN OIL-FILLING OF PRODUCTS MADE OF POLYMERIC AND COMPOSITE MATERIALS
12.	<b>Kargapoltsev S. K., Shastin V. I., Livshits A. V.</b> METHOD FOR ASSESSING THE MUTUAL INFLUENCE OF THE MICROSTRUCTURE OF A MODIFIED SURFACE LAYER ON ITS PHYSICAL AND MECHANICAL PROPERTIES
13.	<b>Alexandrov A.A.</b> MODELING OF NON-UNIFORM DISTRIBUTION OF THERMAL RESIDUAL STRESSES
14.	<b>Rusanov V.A., Agafonov S.V., Daneev A.V., Okladnikova E.V.</b> PERFORMANCE OF COATINGS: A STATISTICAL TECHNIQUE FOR CALCULATING THE STRENGTH

15.	<b>Skorobogatova M.V., Arshinsky L.V., Daneev A.V. Noskov S.I., Sizykh V.N.</b> PROBLEMS OF DETERMINATION OF THE OPTIMAL FORM OF A GROUND EFFECT WING OF FINITE SPAN BY ANALYTICAL AND NUMERICAL METHODS
16.	<b>Popov M. S., Livshits A.V., Filippenko N. G., Popov S. I., Popov A. S.</b> THE AUTOMATED EXPERIMENTAL STUDY OF THE COMBINED TREATMENT OF POLYMERIC MATERIALS
17.	<b>Shastin V. I., Kargapoltsev S. K., Filippenko N.G.</b> METHOD FOR DETERMINING THE HARDNESS OF MICROSCOPIC OBJECTS
18.	<b>Butorin D.V., Filippenko N.G., Livshits A.V., Kargapoltsev S.K.</b> STUDIES OF STRUCTURAL TRANSFORMATIONS OF POLYMERIC MATERIALS IN THE PROCESS OF THEIR THERMAL TREATMENT
19.	<b>Qincui Fu, Hanhua Zhong</b> RAILWAY POWER MALFUNCTION DATA PROCESSING BASED ON PUBLISH AND SUBSCRIBE AND INVERTED INDEX
20.	<b>Eliseev S.V., Bol'shakov R.S., Orlenko A.I., Mironov A.S.</b> EVALUATION OF THE DYNAMIC STATE OF MECHANICAL VIBRATIONAL SYSTEMS WITH A SOLID ON ELASTIC SUPPORTS WITH MOTION TRANSFORMATION DEVICES
21.	<b>Kashkovsky V.V., Tikhii I.I.</b> METHOD OF ASSESSMENT STIFFNESS AND STRENGTH OF HIGHWAY AND RAILROAD BRIDGES
22.	<b>L'vova A.S.</b> ORGANIZATION OF NON-DESTRUCTIVE EXAMINATION OF RAILS
23.	<b>Bykova N.M., Baranov T.M., Baranova S.A.</b> ENSURING THE SAFETY OF RAILWAY BRIDGES METHODOLOGY USING MONITORING SYSTEMS
24.	<b>Semenov R.M., Lopatin M.N.</b> HYDROGEOCHEMICAL PRECURSORS OF EARTHQUAKES AND THEIR SEARCH IN THE SOUTHERN CIS-BAIKAL REGION
25.	<b>Surhovetskia G.N., Arshinsky L.V., Daneev A.V</b> THE STRUCTURE OF THE TRANSPORT INFORMATION SYSTEM AND DATA SECURITY IN EXTERNAL DATA WAREHOUSES
26.	<b>Baryshnikov V.I., Goreva O.V., Tupitsin A.A.</b> LINEAR LUMINESCENT SENSORS FOR LASER CONTROL RESPONSIBLE CONSTRUCTIONS

## SESSION № 4

### OPERATIONAL WORK, TRANSPORT LOGISTICS

September 26, room A-407 (start of working time is at 01:00 p.m.)

#### Chairman

Bubnov Vyacheslav Anatolyevich  
*D. Sc. in Economics, Associate Professor, Dean  
of Management, Logistics and Customs  
Department*

#### Secretary

Yakhno Tatiana Vyacheslavovna  
*Ph.D. in Philology, Associate Professor, Vice  
Dean of Management, Logistics and Customs  
Department*

1.	<b>Molchanova E.D., Battogtoch Batnasan</b> ACTIVITIES OF THE TRANSPORT PROCESS PARTICIPANTS IN MONGOLIA AGGREGATING STRUCTURAL OBJECTS OF THE MODULAR MONITORING AND CONTROL SYSTEM.
2.	<b>Ren Zhong</b> EVALUATION OF HIGHWAY FREIGHT PLATFORM COMPETITIVENESS BASED ON FUZZY MULTILEVEL EXTENSION THEORY
3.	<b>Belogolov Yu.I., Olentsevich V.A., Astashkov N.P.</b> IMPROVEMENT OF TRANSPORT PROCESSES OPERATIONAL MANAGEMENT ON RAILWAY TRANSPORT
4.	<b>Zhuoqun Li</b> FORECASTING METHOD AND TARGET INVENTORY ON THE EFFECT OF SUPPLY CHAIN: THE CASE STUDY OF FAST MOVING CONSUMER GOOD
5.	<b>Bazilevskiy M.P., Banshchikova A.A.</b> LINEAR-MULTIPLICATIVE REGRESSION MODELS OF TRAFFIC VOLUMES OF LARGE- CAPACITY CONTAINERS ON RAILWAY CHECKPOINT OF ZABAYKALSK – MANCHURIA
6.	<b>Weihua Gan</b> THE INTERACTION THROUGH LOGISTICS PLATFORMS: A LITERATURE REVIEW
7.	<b>Demyanov V.V., Imarova O.B., Garmysheva E.S., Yasyukevich Yu. V.</b> MAIN CURRENT PROBLEMS AND DIRECTIONS FOR THE DEVELOPMENT OF GNSS TECHNOLOGIES
8.	<b>Li Han</b> RESEARCH ON THE FACTORS OF LOGISTICS PLATFORM RESOURCE INTEGRATION BASED ON IT-UTAUT MODEL
9.	<b>Gefan G.D.</b> MODELING THE SEASONAL COURSE OF PASSENGER TURNOVER ACCORDING TO STATISTICAL DATA OF TIME SERIES
10.	<b>Xinjian Zhou</b> STABILITY ANALYSIS OF HIGH SPEED MULTIPLE UNITS
11.	<b>Dorzherem M., Daneev A.V., Daneev R.A.</b> ON THE ESTABLISHMENT COMMON INFORMATION SPACE INFRASTRUCTURE FOR ULAANBAATAR RAILWAY
12.	<b>Likhota R.V., Pulyakov A.V., Alekseenko V.A., Lontsikh P.A.</b> ORGANIZING OPERATION OF MICROPROCESSOR DEVICES OF RAILWAY AUTOMATION BASED ON THE INCIDENT MANAGEMENT SYSTEM
13.	<b>Rusakova O.I., Borodavko L.S., Golovan S.A.</b> RISK MANAGEMENT IN THE INTERNATIONAL CARGO TRANSPORTATION BY THE RAILWAY
14.	<b>Zakharov D. V., Kuzmin O. V.</b> THE APPROACH TO THE PROBLEMS OF MONITORING OF CONTROLLING SYSTEMS FOR RAILWAY TRANSPORT BASED ON RELATIONAL INTERACTIVE LOGIC

15.	<b>Golskaya Yu. N.</b> THE USE OF FORESIGHT IN DEVELOPING THE STRATEGY FOR THE DEVELOPMENT OF TRANSPORT INFRASTRUCTURE IN THE REGION
16.	<b>Fufacheva M.V., Ivankova L.N., Sirazetdinova A.D.</b> USE OF VARIOUS TECHNIQUES IN THE CONDUCT OF ADVANCED TRAINING COURSES FOR RAILWAY WORKERS
17.	<b>Yakimova L. D., Yarkova S.A., Danilova A.S., Malakhova A.A.</b> THE USE OF THE PERSONNEL MANAGEMENT METHODS TO MANAGE THE SAFETY CULTURE
18.	<b>Iluin E.S., Shvedov V.A.</b> DETERMINATION OF ROAD SIGNS SIMILARITY AT THE EXAMPLE OF SPEED RESTRICTION SIGNS
19.	<b>Golskaya Yu. N., Basova A.</b> FORMATION OF INTERNAL CONTROL SYSTEM AT RAILWAY TRANSPORT ENTERPRISES
20.	<b>Arshinsky V.L., Arshinsky L.V., Khishigsuren Dorjsuren</b> PROBLEMS OF THE DEVELOPMENT OF A KNOWLEDGE-BASED EXPERT SYSTEM FOR THE AGGREGATED ASSESSMENT OF THE RAILWAY STATION PERFORMANCE
21.	<b>Yermakov A.A., Yermakova L.V.</b> ESTIMATED MODEL OF THE ARRIVAL TIME OF TRAINS TO THE STATION
22.	<b>Malovetskaya E.V.</b> THE ORGANIZATION OF PASS OF GROUP TRAINS UPON TRANSITION TO SOLID LINES OF THE SCHEDULE

## SESSION № 5

### TECHNOSPHERE AND ENVIRONMENTAL SAFETY

September 26, room A-803 (start of working time is at 01:00 p.m.)

#### Chairman

Rush Elena Anatolyevna  
*D. Sc. in Engineering, Full professor, Chair  
holder, the chair of Technosphere Safety*

#### Secretary

Mashukov Andrei Alexandrovich  
*Ph.D. in Engineering, Associate Professor,  
Associate Professor of the chair of Technosphere  
Safety,*

1.	<b>Tarmaeva I.Yu., Sandalkhan E., Savchenkov M.F., Pankov V.A., Kuleshova M.V.</b> ASSESSMENT OF WORKING CONDITIONS AND OCCUPATIONAL RISK TO THE HEALTH OF THE CONDUCTORS OF PASSENGER RAILROAD CARS OF MONGOLIA
2.	<b>Kurenkova G. V., Sudeikina N. A., Potapova M. O.</b> CARCINOGENS IN MANUFACTURING ENTERPRISES OF THE RAILWAY
3.	<b>Dulsky E.Yu., Ivanov P.Yu., Khudonogov A.M., Lobytsin I.O., Manuilov N.I., Ivanov V.N.</b> CLIMATIC CONDITIONS OF EAST-SIBERIAN RAILWAY
4.	<b>Bo Deng, Xueyi Xiao</b> THE ASSESSMENT INDEX SYSTEM AND EVALUATION OF HIGH-SPEED RAIL CARBON EMISSION REDUCTION
5.	<b>Grigoryeva N.N.</b> EVALUATION OF THE FEASIBILITY OF IMPLEMENTING AN INNOVATIVE PROJECT OF THE AUTOMATED CONTROL SYSTEM OF LOCOMOTIVE SAFETY IN THE SERVICE LOCOMOTIVE DEPOT "IRKUTSKOYE"
6.	<b>Arshinsky L.V., Aslamova E.A., Krivov M.V., Aslamova V.S.</b> EXPERT SYSTEM OF THE AGGREGATE ASSESSMENT OF THE STATUS OF INDUSTRIAL SAFETY AT RAILWAY TRANSPORT FACILITIES
7.	<b>Zabuga G.A., Efimova N.V., Elfimova T.A.</b> IMPACT OF THE FOREST FIRES SMOKE ON THE URBANIZED TERRITORIES WITH COMPONENTS OF THE RAILWAY TRANSPORT INFRASTRUCTURE
8.	<b>Rush E.A., Obuzdina M.V., Korchevin N.A., Anardovich S.S., Skopintseva T.A.</b> SOLUTION OF ENVIRONMENT PROBLEMS OF WASTEWATER TREATMENT BY MEANS OF CREATING SORBENTS BASED ON NATURAL ZEOLITE
9.	<b>Yarkova S.A., Yakimova L. D., Yarkov K.V., Vashko T.A.</b> THE USE OF THE RISK - MANAGEMENT TECHNOLOGY TO DECREASE THE INJURIES THREAT TO THE WORKERS OF THE POWER SUPPLY DISTANCE
10.	<b>Begunov A.A., Begunova L.A.</b> INTER-RELATION OF MOISTURE AND FLUORHYDRIC ACID BEING CONTAINED IN THE PROCESS OF ELECTROLYTIC PRODUCTION OF ALUMINIUM
11.	<b>Ilyin E.S., Ratushnyak V.S., Yuryev A.V., Parfenov D.Yu.</b> INCREASE OF THE TREATMENT FACILITIES EFFICIENCY BY MEANS OF ELECTROHYDROPULSE TREATMENT OF SEWAGE
12.	<b>Polishchuk S.S., Skums V.A.</b> EVALUATION OF THE ENVIRONMENTAL FOOTPRINT OF A WOULD-BE IRKUTSK STATE TRANSPORT UNIVERSITY ENGINEER
13.	<b>Molchanova E.I., Korzhova E.N., Elshina K.A.</b> ANALYSIS OF THE COMPOSITION OF AEROSOLS USING ARTIFICIAL NEURAL NETWORKS
14.	<b>Fedorova N.V.</b> RISK-ORIENTED APPROACH TO LABOUR PROTECTION ACTIVITIES PLANNING.

**SESSION № 6**  
**SOCIAL AND ECONOMIC PROBLEMS**  
**OF RAILWAY TRANSPORT DEVELOPMENT**

September 26, room A-405 (start of working time at 01:00 p.m.)

**Chairman**

Yakobson Anatolii Yakovlevich  
*D. Sc. in Geography, Full professor,  
 Chair professor of Management*

**Secretary**

Kirillova Tatyiana Klimentyevna  
*Ph.D. in Economics, Associate Professor,  
 Associate Professor of the chair of Management*

1.	<b>Shura Bayaraa, Jakobson A.Y.</b> THE INSTITUTE OF TRANSPORT IN ULAN-BATOR: PROBLEMS AND PROSPECTS
2.	<b>Solskaia I.Yu., Grosheva N.B.</b> ECONOMIC SECURITY INVESTMENT ASPECTS OF JSC RUSSIAN RAILWAYS
3.	<b>Xiaoqiang Hu</b> ANALYSIS ON TRAINING METHODS OF SPOKEN ENGLISH IN CHINA RAILWAY PASSENGER TRANSPORTATION
4.	<b>Sedykh K.A., Khaletskaya S.A.</b> ENSURING RAILWAY TRANSPORT ECONOMIC SECURITY IN THE REFORMING CONDITIONS
5.	<b>Bogdanova L.V., Isaeva E.Yu., Rublyov G.V.</b> PERSON-ORIENTED TECHNOLOGY OF PROFESSIONAL DEVELOPMENT OF A SPECIALIST IN THE RAILWAY ENGINEERING UNIVERSITY
6.	<b>Merkulov S.A., Samarina M.V.</b> RAILWAY TRANSPORT IN RUSSIA, AS AN INFRASTRUCTURE FACILITY
7.	<b>Molchanova M.L., Freidman O.A., Sachkov D.I.</b> RISK MANAGEMENT IN SUPPLY CHAINS: MINIMIZING RISKS THROUGH INSURANCE
8.	<b>Jakobson A.Y., Perfilyeva A.I., Kulesh M.I.</b> SWOT-ANALYSIS IN REGIONAL STRATEGIC PLANNING
9.	<b>Bubnova Yu., Malanina Yu. N.</b> THE PROBLEMS OF FUNDING ATTRACTION FOR THE DEVELOPMENT OF THE EASTERN POLYGON
10.	<b>Dinets D.A., Konotopov M.V.</b> International Transport Corridors: China and Russia's interests
11.	<b>Rusakova O.I., Bylkov V.</b> THE SOCIAL AND ECONOMIC ASPECTS OF THE EMPLOYMENT IN RAILWAY TRANSPORT OF CHINA
12.	<b>Rudenko M.G., Shcherbakov I.S., Daneev A.V.</b> THE SUPERCOOLED WATER VAPOR TO THE CREEPING FOREST FIRE FRONT LINE EXPOSURE EFFECTIVENESS
13.	<b>Isaeva E.Yu., Bogdanova L.V., Rublyov G.V.</b> CIVIL AND PATRIOTIC UPBRINGING OF RAILWAY ENGINEERING STUDENTS (BASED ON THE EXPERIENCE OF THE HUMANITIES DEPARTMENT)
14.	<b>Yakovleva N.V.</b> COMPREHENSIVE INDEX OF LOYALTY OF CUSTOMERS OF ORGANIZATIONS PROVIDING TRANSPORT SERVICES IN THE CONDITIONS OF HIGH COMPETITION
15.	<b>Bubnova Yu., Malanina Yu. N.</b> CONFLICTOLOGICAL COMPETENCE OF THE LEADER AS A CONDITION OF PROFESSIONAL TEAM-BUILDING
16.	<b>Kashpurova O.V., Yahno T.V.</b> PHASES OF CONFLICTOLOGICAL COMPETENCE FORMATION