

# Ural Federal University

named after the first President of Russia B.N.Yeltsin

**Graduate School  
of Economics  
and Management**

## GRADUATE SCHOOL OF ECONOMICS AND MANAGEMENT Research





**Dear colleagues!**

Graduate School of Economics and Management of Ural Federal University is an accredited research and educational institution that adheres to international academic standards. Over the past 14 years the Faculty of Economics of Ural State University, and then GSEM UrFU has been performing fundamental and applied research, as well as providing expert and analytical support for decision-making in the field of economic, social, scientific and technological development. Vast experience in fundamental and applied research made it possible to create our own strong methodological framework and unique research techniques. Accumulated competences enable us to conduct research and analysis of any complexity.

GSEM researchers' works have received numerous grants of research foundations, including the Russian Foundation for Basic Research, the Russian Science Foundation, and the Russian Foundation for Humanities. The School is substantially involved in implementation of Federal Targeted Programmes aimed at big interdisciplinary research. Among the clients commissioning applied research there are public authorities, regional development institutions, big industrial companies, organisations of the financial sector, international audit companies, etc.

Our basis is highly qualified researchers and teaching faculty. We cooperate with prominent Russian and foreign researchers and implement joint projects with the most reputable academic institutions and research centres in Russia.

Our objective is to transform scientific knowledge and research experience into real management tools serving the interest of a customer.

**Dmitry Tolmachev,**  
**PhD in Economics, Director of GSEM UrFU**

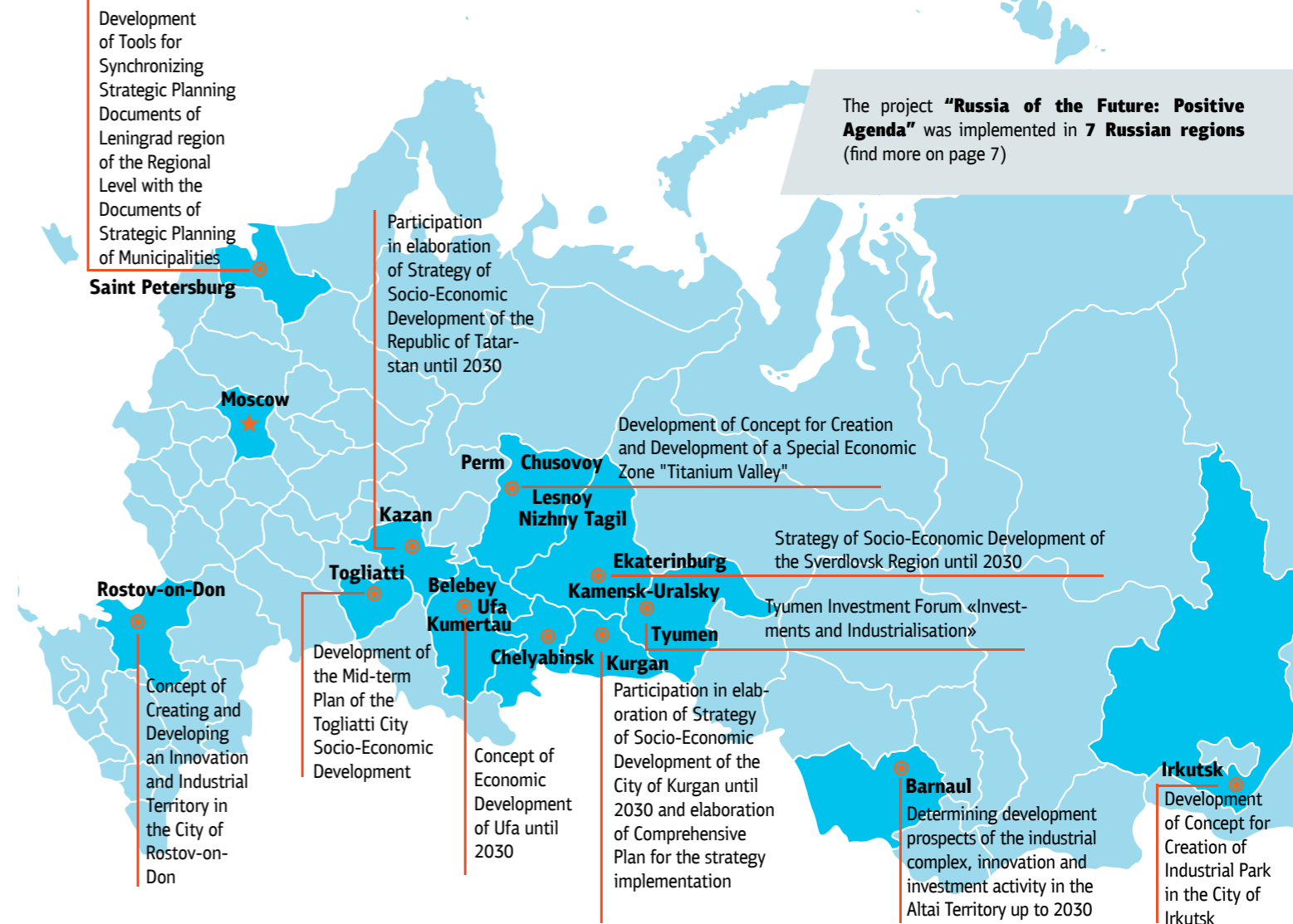
**Research at Graduate School of Economics and Management is based on the following principles:**

- determining and developing key competences that provide for competitive advantages of fundamental and applied research results;
- providing equal access to resources and ensuring transparent decision-making;
- establishing tools for sustainable and long-term support of research teams and individual researchers;

**RESEARCH AT GSEM: FACTS AND FIGURES**

- ★ more than **200** papers published in journals indexed in international databases Scopus and WoS, of them 30% are research collaborations with foreign colleagues;
- ★ **150** faculty and staff members involved in fundamental research;
- ★ about **400** papers published in Russian journals listed by Russian State Commission for Academic Degrees and Titles;
- ★ **grants** from Russian Science Foundation, Russian Foundation for Basic Research, participation in Federal Target Programmes;
- ★ about **20** international research conferences, seminars and workshops organised by GSEM;
- ★ new breakthrough research project **«Industry 4.0.»**;
- ★ more than **1600** papers presented at conferences and published in proceedings by GSEM faculty and staff;
- ★ **4** research teams and **2** research laboratories;
- ★ external funding for research in 2017 — more than **72 million** roubles;
- ★ more than **100** PhD and postdoc students.

**Projects map**



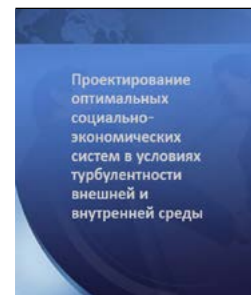
# Key competences in the field of fundamental and applied research

## GSEM UrFU key competences in fundamental research

### Developing optimal socio-economic systems that make it possible to model social, economic and innovative development at micro and macro levels in turbulent environment

#### Key projects:

- Projection of optimal socio-economic systems in turbulence of external and internal environment (2015–2017)
- Mathematical models of local payment system lifecycles (2015–2017)
- Microsimulation modelling of effectiveness of tax system regulatory function (2012–2014)
- Analysing patterns of competitive development of centralised and distributed energy cogeneration systems in the face of economic imbalances (2016)



#### Projection of optimal socio-economic systems in turbulence of external and internal environment

The fundamental research challenge of the project is to develop optimal socio-economic systems in dynamic external and internal environment implementing advanced physical and mathematical methods. In the

framework of this project researchers developed a theory of optimal socio-economic systems, summarised and systematised theoretical foundations of the simulation model for dynamic interactions of public health and socio-economic healthcare system indicators, elaborated theoretical basis for assessing dynamic interactions of socio-economic healthcare system characteristics and indicators of economic and social development and micro and macro levels.

[http://www.rscf.ru/enprjcard\\_int?15—18—10014](http://www.rscf.ru/enprjcard_int?15—18—10014)

### Research concerning fundamental problems of balanced spatial development of the economy

Fundamental research performed in this competence area creates the basis for formulating theoretically substantiated forecasts and strategies for socio-economic development of regions and municipalities.

#### Among the most important projects in this area there are the following:

- Quantitative assessment of foreign direct investment import and export potential in the Russian economy on the basis of gravity models development (2014, 2015)
- External effects of foreign direct investment: empirical analysis for companies in the Ural region (2014, 2015)
- Stimulating development of the Silk Road Economic Belt. Synchronisation of tax institutions and customs procedures (2017)
- Assessment of early-developed territories assimilation potential in the context of increasing economic activity (2012-2013)
- Factors of spatial development in the Russian economy (2016)



#### Stimulating development of the Silk Road Economic Belt. Synchronisation of tax institutions and customs procedures

The ground-breaking idea of this challenge lies in the system approach towards aligning fiscal interests of the countries participating in this

global project. It includes synchronisation of tax instruments across the territory of the Silk Road Economic Belt. The current research includes comparative analysis of Russian and Chinese tax systems with calculations of effective tax rates for basic tax types; fiscal burden on the main factors of production in Russia and China with calculations of implicit tax rates for groups of taxes with common or similar tax base; formulation of recommendations and proposals in response to possible increase in illegal activities in the area of tax and customs duty evasion, as well as smuggling of goods.



Факторы пространственного развития в российской экономике

#### Factors of spatial development in the Russian economy

The goal of this project is to solve a fundamental research problem of balanced spatial development of the Russian economy. In order to achieve this goal, the following issues have been addressed: the researchers suggested a

uniquely designed approach to the assessment of spatial development level of Russian regions considering their sectoral, territorial and infrastructural characteristics; developed an econometric model for national companies efficiency dependence from factors of spatial development, as well as regional and sectoral characteristics; defined sectoral, regional, geographical and other factors influencing the level of Russian regions economic diversification; investigated special features determining spatial location of national and foreign investments in the Russian economy.

### Issues of the higher education system development in the Russian Federation: state, region, university, individual

The importance of these competences is conditioned upon the mission of a federal university in Russia at the national and Ural-Siberian macro-region scale of the education system.

#### Key projects:

- Analysis of interaction and demand for technologies, pilot and problem-oriented works between key Russian heavy engineering companies and related industries on the one side, and Russian specialised universities on the other (2012)
- Modelling individual learning trajectories and monitoring the

higher education system as the basis for decision-making regarding its competitiveness enhancement (2015, 2016)

- Expert, consulting and analytical support for universities in key international rankings (BRICS and former USSR countries) (2015)



#### Modelling individual learning trajectories and monitoring the higher education system as the basis for decision-making regarding its competitiveness enhancement

In the framework of this project the researchers developed tools for monitoring and modelling the system of higher education and individual learning trajectories as the basis for decision-

making regarding its competitiveness enhancement. The system of higher education monitoring includes methodological and conceptual components. The elements of the methodological component are: methods of diagnostic assessment for the system of higher education in Russian regions in regards to operational conditions and the state of infrastructure, the level of training and research, influence of higher education system on the economy and population in a region. The conceptual component includes the following elements: the government regulation concept for training specialists in the higher education system, scenario analysis for implementation of the government regulation concept for training specialist with a university degree.

### Providing rationale for innovation, research and technology development priorities

Projects realised in this field provide the basis for efficient government policies aimed at developing research and development, as well as innovation infrastructure.

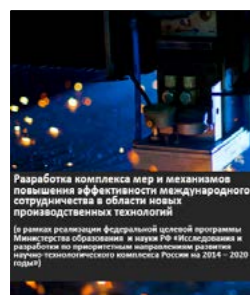
#### Key projects:

- Development of a set of measures and mechanisms to enhance international cooperation effectiveness in the field of new production technologies (within the framework of the Federal Targeted Programme of the Ministry of Education and Science of the Russian Federation «Research and Development in Priority Areas of Development of the Russian Scientific and Technological Complex for 2014-2020»).
- Development of integrated management accounting and analysis of innovation activity at industrial enterprises (2013)

- The role of vertical inter-firm relations in innovation-driven development of the Russian economy (2012-2013)

- Research of Russian energy companies' competitiveness in conditions of alternative renewable power sources development and distributed generation (2017-2018)

- Innovation-driven development in the resource-dependent Russian economy (2013)



for Development of the Russian Research and Technological Complex for 2014-2020»)

**Development of a set of measures and mechanisms to enhance international cooperation effectiveness in the field of new production technologies (within the framework of the Federal Targeted Programme of the Ministry of Education and Science of the Russian Federation «Research and Development in Priority Areas**

Within the framework of the project approaches to identification and determination of priorities and trends of scientific and technological development were analysed. It also describes an analytical review of competencies for new production technologies, including analysis of publications, patent landscapes, research grants, Russian and foreign clusters. The needs of Russian research groups in the use of intellectual and technological resources of foreign partners were identified. Within the project key international markets for the implementation of technologies and R&D products of Russian companies and organisations were analysed, and a list of potential foreign consumers of R&D technical products was formed.

**GSEM UrFU key competences in applied research**

The core competencies of GSEM UrFU in the field of fundamental research provide the basis for formation of competencies in applied research.

The main area of applied research projects is **management of territories**, especially balanced development of regions and cities of industrial specialisation located in the Urals, Western and Eastern Siberia and development of territories with complex living conditions. Directions of research include issues of environmental development, preservation of human capital, management of industrial and innovation infrastructure development (Special Economic Zones, industrial and technological parks), urban economy, agglomeration development and urban development.

**Elaboration of programmes on municipality and regional strategic development**

Recently several major projects on creation of strategic documents for various territories have been implemented. The Strategy of Socio-Economic Development of the Sverdlovsk region was finalized and development programmes of a number of single-industry towns have been formed. Team of GSEM UrFU also took part in elaboration of economic policy of St. Petersburg, development strategy of the Republic of Tatarstan and socio-economic development strategy of the city of Kurgan until 2030.

**Key projects:**

- Strategy of Socio-Economic Development of the Sverdlovsk Region until 2030 (2015)
- Participation in elaboration of Strategy of Socio-Economic Development of the City of Kurgan until 2030 and elaboration of Comprehensive Plan for the strategy implementation (2014)
- Participation in elaboration of Strategy of Socio-Economic Development of the Republic of Tatarstan until 2030
- Concept of Economic Development of Ufa until 2030 (2015)
- Development of Tools for Synchronizing Strategic Planning Documents of Leningrad Region of the Regional Level with the Documents of Strategic Planning of Municipalities (2014)
- Participation in elaboration of Proposals on the Formation and Mechanisms for Implementing the Economic Policy of St. Petersburg for the period until 2030 (2014)



**The Strategy of Socio-Economic Development of the Sverdlovsk Region until 2030**

The main objective of the document was to increase the competitiveness of the region. To this end, competitive advantages of the Sverdlovsk region were analysed and promising development vectors and growth areas of the region

were identified. All the focus areas of the Strategy were closely connected with the main development priorities of the Russian Federation and Ural Federal District. The interests of the leading regional companies and external investors were taken into consideration. Strategy 2030 was developed basing on the three main priorities: New Quality of Life, New Industrialization and Territory for Life and Business. The document included 27 projects for implementation of the main priorities which became a basis for the plan of the strategy realisation. The Strategy was approved by Law of the Sverdlovsk Region.

**Projects for development of industrial, investment and innovation infrastructure**

Over a dozen projects for development of industrial sites, industrial and technology parks, Special Economic Zones (SEZ) have been carried out on the given subject. The list of projects includes programmes for development of a number of innovative territorial clusters, and in particular the only one in the Ural Federal District that has been included in the list for support from the Ministry of Economic Development of the Russian Federation – «Titanium Cluster of the Sverdlovsk Region».

**Key projects:**

- Development of Concept for Creation and Development of a Special Economic Zone «Titanium Valley» (Sverdlovsk region) (2014)
- Elaboration of Programme for Development of Innovative Territorial Cluster «Titanium Cluster of the Sverdlovsk Region» (2012)
- Development of Concept for Creation of Industrial Park in the City of Irkutsk (2013)
- Concept of Creating and Developing an Innovation and Industrial Territory in the City of Rostov-on-Don (2014)
- Analysis and Assessment of Realisation Potential for Investment Projects of Complex Development of Territories in the Cities Kamensk-Uralsky, Chusovoy, Belebey and Kumertau (2014)



**Development of Concept for Creation and Development of the Special Economic Zone «Titanium Valley» (Sverdlovsk Region)**

The concept included benchmarking of SEZ in Russia and in the world, defined target indicators and conceptual characteristics of the SEZ, elaboration of

a marketing strategy for SEZ development, evaluation of the project's effectiveness, assessment of promising markets for SEZ products. The concept was approved by the Supervisory Board of the SEZ and the Ministry of Economic Development of the Russian Federation.

**Support of R&D and Innovative Development Projects,**

including application of technological forecast methods. Over a dozen projects have been implemented on this subject, including the forecast of demand for R&D by large industrial companies in the region and identification of promising breakthrough markets. Among the projects possible models of regional enterprises to enter these markets were identified (for such narrow market segments as photonics, sensors and transducers, additive and laser technologies, nanotubes, production chains elements of aircraft construction, etc).

**Key projects:**

- Strategy of Sverdlovsk Region Innovative Development until 2020 and its updating (2012-2015)
- Creation of Strategic Documents for Development of Regional Engineering Center «Laser and Additive Technologies» (REC) based in UrFU (2013-2014)
- Identification of Promising Sources of Research for Ural Federal University (2013)
- Innovative Activity of Industrial Companies in the Urals: Current State and Forecast of Changes (2013)



**Strategy of the Sverdlovsk Region Innovative Development until 2020 and its updating**

The best world experience of innovative development and the current state of the Sverdlovsk region in comparison with other regions of the Russian Federation were analyzed in the following areas: Innovative Activity; Development of Innovative Infrastructure; Potential for the Development of R&D Sector; Human Capital Resources, etc. The goals, tasks, priorities, mechanisms of Sverdlovsk region economic policy in the area of innovative development were determined. Within the strategy the

following tasks have been carried out:  
 - analysis of the current state, resources, potential (including the demand for innovation) and contradictions of the innovative sector development of the Sverdlovsk region economy (based on the results of 2014 and the first half of 2015). The task was solved by a survey and on-site monitoring of innovative organisations;  
 - adjustment of the goals of the Sverdlovsk region innovative development and strategy of their achievement. Priorities, constraints, opportunities and external environment economic challenges were taken into account during the research;  
 - elaboration of an effective management model for regional innovation infrastructure;  
 - forecast of the Sverdlovsk region innovative development up to 2030.

# International Conference «Russian Regions in the Focus of Changes»

## Analytical support of decision-making in the area of territorial development and implementation of selected strategic projects

Several dozens of projects have been carried out on the given subject to identify promising markets for investment projects in the Urals, the Volga Region, Western and Eastern Siberia (from the Special Economic Zone "Titanium Valley" to specialised industrial parks and projects on new industrial production).

### Key projects:

- Programme of Creating High-Performance Workplaces in the Industry of the Sverdlovsk region until 2020.
- Elaboration of proposals on improving the tools for supporting entrepreneurship within Strategy for Development of Small and Medium-Sized Enterprises in the Sverdlovsk Region until 2030 (2014)
- Social research on attitude of residents of Novouralsk Urban District of the Sverdlovsk Region to the city status of Closed Administrative Territorial Unit (2014)
- Development of guidelines and monitoring of financial security parameters (2015)



### Programme of Creating High-Performance Workplaces in the Industry of the Sverdlovsk region until 2020

The programme was developed in pursuance of the decree of the Governor of the Sverdlovsk region on the implementation of the «May» Decrees of the President of Russia. The programme contains the instruments and mechanisms for implementing the measures to create and fundamentally modernize high-performance workplaces, to transfer the economy to the modern technological mode by increasing labour productivity in the basic industrial sectors

and related non-industrial ones. The main objectives of the programme are to ensure the operation of 700 thousand high-performance workplaces by 2020 and to increase labour productivity in the area of industry of the Sverdlovsk region at least 1,5 times.

The main objectives of the programme are formulated within the framework of five complex projects:

- Federal resources of industrial and innovative development of Sverdlovsk region;
- New markets;
- Territories of the new industrialisation;
- Ural University Technopolis;
- Personnel for the new industrialisation.



### Russia of the Future: Positive Agenda

The project was a part of the research conducted by the Centre of Strategic Development by order of the President of Russian Federation, which was aimed at development of the programme document on strategic development of Russian Federation for the period

of 2018-2024. The work was executed under the guidance of Alexei Kudrin, former Minister of Finance of Russian Federation. The main

project contractor was the Association of Russian Economic Think Tanks. GSEM UrFU organized a series of in-depth interviews, focus-group discussions and working sessions with participation of active part of society ready for dialogue about the future in a number of Russian regions. As a result, prospective areas for development of the country were suggested by representatives of authorities and large enterprises, successful fast-growing companies and progressive small enterprises, budgetary institutions and nonprofit organisations in Kazan, Rostov-on-Don, Vladivostok, Sevastopol and other Russian cities.

For many years the conference has been one of the biggest discussion platforms covering issues of industrial regions development, gathering about **700 persons of business representatives, government authorities, expert community of Russian regions**. The Conference takes place with the support of leading Russian media holding «Expert».

### The programme includes:

- business and academic days,
- open lectures and master classes of visiting experts,
- more than 20 research thematic sessions,
- youth forum,
- round table discussions of leading business schools
- other special events:
- 2 dozens of sessions during 3 days,
- 27 federal and foreign speakers,
- a great number of speakers from corporates and regional authorities, around **700 participants from 22 Russian regions and 12 countries**.

From one year to another leading experts participate at the Conference: **Evgeny Yasin**, Ex-Minister of Economic Development of Russia (personal commitment), **Andrey Klepach**, Deputy Chairman of Vnesheconombank, leading national bank for Foreign Economic Activity (annual plenary speaker), **Kseniya Yudaeva**, Bank of Russia First Deputy Governor and others.

**In 2017** EEPAS EFMD Accreditation Seminar took place within the framework of the Conference. Director of Quality Services EFMD David Asch and Associate Director of EFMD Global Network Central and Eastern Europe Ivana Marinkovic become the key speakers of the event.

**The Conference also include** workshop of Regional Studies Association (the United Kingdom), a round table with Association of Russian Economic Think Tanks gathering all the leading think tanks of the country, a round table for international business schools, more than 20 thematic sessions, and other events.



### Andrey Klepach,

former Deputy Minister of Economic Development and Trade of the Russian Federation, Deputy Chairman (chief economist) – Member of the Board of the Bank for Development and Foreign Economic Affairs (Vnesheconombank):

— **We need new solutions that allow to invest in human capital even at the low price of oil.**



### Dr. Evgeny G. Yasin,

Academic Supervisor of Higher School of Economics (Moscow), Ex-Minister of Economic Development of Russian Federation, member of Programme Committee Presidium of the Conference:

— **According to my estimates, entrepreneurs have adjusted their businesses well during the favorable years, and today companies have resources. But they need guarantees to spend their own money. If there are no changes in the investment climate, in relationship between authorities and business, then the economic recovery will not be possible.**

## Strategic Partners



## Major partners in the area of fundamental and applied research

### Leading Russian universities and research institutions

Russian Academy of Sciences (Ural Branch), including Institute of Economics, Institute of Mathematics and Mechanics, Institute of Industrial Ecology, Russian Division of Regional Studies Association, Friedrich Ebert Foundation



### Global corporates



### Public Authorities



**LABORATORY FOR INTERNATIONAL AND REGIONAL ECONOMICS IS THE LARGEST RESEARCH DIVISION OF GRADUATE SCHOOL OF ECONOMICS AND MANAGEMENT** (Academic Head of Laboratory is Prof. Dr. Hans Wiesmeth, Professor Emeritus at TU Dresden, President of Saxon Academy of Sciences in Leipzig).

#### Research priorities:

- Health Economics
- Environmental Economics
- Political Economy
- Corporate Social Responsibility
- Smart Cities
- Regional economics

#### Research Units of the Laboratory:

- Economic Theory (headed by Dr. Dmitriy Vorobyev)
- Regional Economics (headed by Dr. Oleg Mariev)
- Global Social Responsibility Excellence and International Business (headed by Dr. Zhanna Belyaeva)
- Social Sphere Research (headed by Dr. Alexander Nepp)

#### RESEARCH GROUPS:

- Engineering and economics inter-disciplinary research in energy and high-tech industries (headed by Prof. Dr. Elena. R. Magaril)
- Engineering and economic studies of economic security issues (headed by Prof. Dr. Igor A. Mayburov)
- Study of university development issues (headed by Prof. Dr. Gavriil A. Agarkov)
- Laboratory for Applied System Research (created in the end of 2016, headed by Associate Professor Dr. Sergey V. Kruglikov)

## Journals

There are 5 research journals at Graduate School of Economics and Management UrFU:



### Bulletin of Ural Federal University Series Economics and Management.

The journal is published since August 2002. It is included in the List of Leading Peer-reviewed Scientific Journals and Publications recommended by State Commission for Academic Degrees and Titles of Russia for publishing the major research results of these for Dr.Sc. (Economics). The journal is included in Russian Science Citation Index.

<http://vestnik.urfu.ru/en/>



«R-Economy» is a journal in the area of economics which gives an opportunity to publish research results dedicated to a wide range of economic issues. The topics include socio-economic development of regions and inter-industry regional complexes, economic security, government regulation of regional development, integration of Russia into global socio-economic processes.

<http://r-economy.ru>



### Journal of Tax Reform

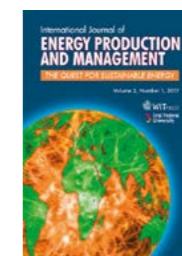
The journal is published jointly with Baikal State University since 2015. The journal is included in Russian Science Citation Index and Emerging Source Citation Index (WoS).

<http://jtr.urfu.ru/en>



**Economy of Region** is published jointly with Institute of Economics, Russian Academy of Sciences (Ural Branch). The aim of the journal is to show distinctive results of both theoretical and applied research in the area of regional economy. Presence in Scopus, EBSCO, RePEC, NEICON, Ulrich's Periodicals Directory, E-Library databases gives to Russian scientists an opportunity to make their research contributions available for international academic community. Economy of Region is the only economic journal published across the Urals, Siberia and the Far East and indexed in Scopus and Emerging Source Citation Index (WoS).

<http://economyofregion.ru/en/about>



**The International Journal of Energy Production and Management** is published jointly with WIT Press, the United Kingdom. The journal includes research contributions on a variety of aspects related to energy: development and restoration of primary and renewable energy sources, generation, storage and distribution of energy. The journal is functioning as an interdisciplinary forum of theorists and practitioners from all over the world whose work is related to a wide range of issues of the energy future.

<http://www.witpress.com/journals/eq>

#### The distinctive features of GSEM journals are:

- Cooperation with partners of a high reputation in academy field
- High level of internationalisation. Three out of the five journals («Journal of Tax Reform», «R-Economy», «The International Journal of Energy Production and Management») are published in English.
- Objectives to ensure the journals being indexed in international bibliographic databases Scopus and WoS.

<http://gsem.urfu.ru/en/>

## CONTACTS

**Dmitry E. Tolmachev**, Director of GSEM UrFU  
+7 (343) 375-48-80, d.e.tolmachev@urfu.ru

**Irina D. Turgel**, Vice Director for Research at GSEM UrFU  
+7 (343) 375-95-23, i.d.turgel@urfu.ru

**Svetlana V. Kovalenko**,  
Vice Director for Development at GSEM UrFU  
+7 (343) 375-94-92, sv.kovalenko@urfu.ru