

**DAAD** Deutscher Akademischer Austausch Dienst  
German Academic Exchange Service

**DFG** Deutsche  
Forschungsgemeinschaft



# The Sixth German-Russian Week of the Young Researcher

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## “Urban Studies: The City of the Future”

Moscow State University of Civil Engineering  
National Research University

September 12-16, 2016

Deutsches Wissenschafts- und  
Innovationshaus – Moskau



Deutschland  
Land der Ideen



ПРАВИТЕЛЬСТВО  
МОСКВЫ



РОССИЙско-ГЕРМАНский  
ГОД МОЛОДЕЖных ОБМЕНОВ  
DEUTSCH-RUSSISCHES JAHR  
DES JUGENDAUSTAUSCHS

## **Conference Hotel**

### **Cosmos**

150, Prospect Mira, Moscow

Telefon: +7 (495) 234 10 00

## **Conference Location**

### **National Research University**

**Moscow State University of Civil Engineering (MISI/MGSU)**

26, Yaroslavskoye Shosse, Moscow, 129337

With financial support of



Federal Foreign Office

Welcome to the „6<sup>th</sup> German-Russian Week of the Young Researcher“!

Dear colleagues from Russia and Germany,

We would like to offer you a warm welcome to this, our Sixth Week of the Young Researcher! When we convened the “German-Russian Year of Science“, five years ago, the idea was born to invite young researchers from both countries to come together to discuss current topics of mutual interest. Since then it has grown from strength to strength. The success of the first week in Kazan encouraged us to turn it into an annual event. The following years we met in Ekaterinburg (2012), Novosibirsk (2013), St. Petersburg (2014) and Moscow (2015). The main goal of these meetings is to foster collaboration among young scientists and researchers who will be setting the agenda of scientific cooperation between Russia and Germany in the near future.

Research organizations and institutions of higher education of both our countries will be presenting their funding programmes and describing the platforms that they can offer to both Russian and German PhD students or PostDoctoral researchers. The overarching principle behind these presentations is to facilitate collaboration and to broaden research networks. The week will illustrate how young and experienced scientists can work across borders with local authorities, associations and industry in order to develop new approaches to global challenges.

This week we are glad to discuss matters of urbanism at the Moscow Institute of Civil Engineering (MGSU). Urban Studies comprise a wide range of interdisciplinary research areas from urban planning to civil engineering. With the sub-theme “City of the Future” we will also include ecological, social and economic aspects of the sustainable development of our cities. Our host university MGSU is famous for its participation in designing and constructing international giant building projects like the Aswan High Dam in Africa. MGSU is the top Russian university in the area of civil engineering and was granted the status of a National Research University by the Russian government. Later this autumn MGSU will celebrate the 95th anniversary of its foundation.

We would like to express our deepest gratitude to Moscow State University of Civil Engineering and its academic hospitality, to the German Embassy in Moscow for its kind support, as well as to the Moscow Government. And, of course, we thank all of you, the participants, for your involvement and cooperation in this conference.

Dr. Peter Hiller



German Academic Exchange Service  
Head of DAAD Office Moscow  
Managing Director of DWIH Moscow

Dr. Jörn Achterberg



German Research Foundation  
Head of DFG Office Moscow  
Deputy Director of DWIH Moscow

<b>September 11, Sunday</b>		
	Arrival of Participants	
19:00	<p><b>Words of Welcome</b> to the participants of the week by</p> <ul style="list-style-type: none"> <li>• Dr. Peter Hiller, DAAD Moscow</li> <li>• Dr. Jörn Achterberg, DFG Moscow</li> <li>• Dr. Martin Krispin, DWIH Moscow</li> <li>• Prof. Dr. Andrey Volkov, Rector of MGSU</li> </ul>	<p><i>Hotel COSMOS</i></p> <p><i>Executive Lounge, 25th floor</i></p>
<b>September 12, Monday</b>		
09:00	Transfer from Hotel	
09:30	Registration of Participants	<i>MGSU</i>
10:00	<p><b>Official Opening of the Week</b></p> <p><b>Presentation of MGSU</b></p> <p><b>Welcome Addresses by</b></p> <ul style="list-style-type: none"> <li>• Prof. Dr. Andrey Volkov, Rector of MGSU, President of AECEI (Association of Educational Civil Engineering Institutions)</li> <li>• Prof. Dr. Valery Telichenko, President of MGSU, Honorary President of AECEI</li> <li>• Rüdiger Freiherr von Fritsch, Ambassador of the Federal Republic of Germany</li> <li>• Marat Khusnullin, Deputy Mayor for Urban Development and Construction</li> <li>• Prof. Dr. Frank Allgöwer, Vice-President of DFG</li> <li>• Ulrich Grothus, Deputy Secretary General of DAAD</li> </ul>	<p><i>MGSU, Hall of Scientific Council, 1st floor</i></p>
11:15	<p><b>Opening Lecture</b> "From the Classical Feedback Loop to the New Cybernetics of the 21st Century"</p> <p><b>Professor Dr. Frank Allgöwer</b> Vice-President of DFG; Institute for Systems Theory and Automatic Control, University of Stuttgart</p> <p><i>- Discussion -</i></p>	

12:30	Light lunch	
13:30	<p><b>Introductory Remarks to The Sixth German-Russian Week of the Young Researcher</b></p> <ul style="list-style-type: none"> <li>• Ulrich Grothus, Deputy Secretary General of DAAD</li> <li>• Prof. Dr. Frank Allgöwer, Vice-President of DFG</li> </ul>	
14:00	<p><b>Prof. Andrey Volkov</b>, Rector of MGSU</p> <p>“Building Information Modeling &amp; Life Cycle Support: Russian Experience and Prospects”</p> <p>- <i>Discussion</i> -</p>	
15:00	Coffee Break	
15:30	<p><b>Scientific Lectures of Young Researches</b></p> <p>Chair:</p> <ul style="list-style-type: none"> <li>• Prof. Dr. Frank Allgöwer, DFG; University of Stuttgart</li> <li>• Prof. Dr. Andrey Volkov, MGSU</li> </ul>	
	<p><b>Marija Nikolaenko</b> (Tomsk University of Architecture and Building): “Modern Trends and Problems of Urban Areas Development”</p> <p><b>Yana Prelovskaya</b> (MGSU): “Creation of Modern Urban Space. Methodology of Reorganization of Typical Private-home Districts”</p> <p><b>Ekaterina Kalemeneva</b> (HSE St. Petersburg): “Imagining a Comfortable City in the Arctic: Leningrad Architects in Search of Northern Urban Planning in the 1960s”</p> <p><b>Joseph Prestel</b> (FU Berlin): “Shared Visions of the Urban Future: The Allure of Suburbs around the World at the Beginning of the Twentieth Century”</p>	
17:00	<b>University Tour: Campus, Labs, Museum</b>	
18:00	<b>Opening of the Exhibition “Architectural and Construction Projects”</b>	<i>MGSU, Scientific Library</i>
18:15	<b>Evening Reception</b>	<i>MGSU, Scientific Library</i>
19:30	Transfer to Hotel	

<b>September 13, Tuesday</b>		
08:30	Transfer from the Hotel	
09:00	<b>DWIH Moskau</b> <b>Deutsches Haus für Wissenschaft und Innovation</b> / German House of Research and Innovation  Dr. Martin Krispin, Project Coordinator	<i>MGSU,</i>  <i>Hall of</i> <i>Scientific</i> <i>Council,</i>  <i>1st floor</i>
09:30	<b>DFG - Deutsche Forschungsgemeinschaft /</b> German Research Foundation  “DFG - Funding Engineering Sciences in Germany” Dr. Michael Lentze, Programme Director, Group of Engineering Sciences	
10:15	<b>Prof. Dr. Thomas Krupp,</b> <b>Prof. Dr. Hartmut Reinhard</b> University of Applied Sciences Cologne  “Entrepreneurs´ View on Urban Mobility in Cologne - the Case of a German Metropolitan Area from an Economic Perspective”  - <i>Discussion</i> -	
11:00	Coffee Break	
11:30	<b>Scientific Lectures of Young Researches</b> Chair: <ul style="list-style-type: none"> <li>• Prof. Dr. Thomas Krupp, University of Applied Sciences Cologne</li> <li>• Prof. Dr. Hartmut Reinhard, University of Applied Sciences Cologne</li> </ul>	
	<b>Stefanie Halwas</b> (University of Applied Sciences Cologne): “Urban Mobility and Startups – Analysis of the Special Requirements of New Enterprises”  <b>Frederik Hupperts</b> (Cologne Chamber of Commerce and Industry): “Decision Making in Urban Mobility - Capacity Analysis of Different traffic-infrastructures in Limited Public Areas Using the Example of Cologne”  <b>Nina Danilina</b> (MGSU): “Park-and-ride value under intermodal transportation system integration”	

	<p><b>Aleksey Levashev</b> (Irkutsk National Research Technical University): "Modern Approaches to Estimation of Transportation Demand Based on GIS-technologies"</p> <p><b>Sergey Tsiulin</b> (South Ural State University, Chelyabinsk): "Urban Freight: A Literature Review"</p>	
13:15	Lunch	
14:00	<p><b>Prof. Dr. Alexander Mikhailov</b>, Irkutsk National Research Technical University</p> <p>"Proposals for German-Russian Collaboration in Urban Transportation Planning"</p> <p>- <i>Discussion</i> -</p>	
14:45	<p><b>Scientific Lectures of Young Researches</b> Chair:</p> <ul style="list-style-type: none"> <li>• Prof. Dr. Thomas Krupp, University of Applied Sciences Cologne</li> <li>• Prof. Dr. Hartmut Reinhard, University of Applied Sciences Cologne</li> <li>• Prof. Dr. Mikhailov, Irkutsk National Research Technical University</li> </ul>	
	<p><b>Maksim Sharov</b> (Irkutsk National Research Technical University): "Evaluation of transport accessibility of territory"</p> <p><b>Olga Antuvelyeva</b> (Volgograd University of Architecture and Civil Engineering): "Urban planning aspects of development of museums in the city structure"</p> <p><b>Maria Krutilova</b> (Belgorod State Technological University named after V.G. Shukhov): "Methodology of cost-effective eco-directed structural design"</p>	
15:45	Coffee Break	
16:15	<p><b>Dr. Yulia Strashnova</b>, Genplan Institute of Moscow</p> <p>"Territorial Planning as Instrument for Creating Quality Urban Environment"</p> <p>- <i>Discussion</i> -</p>	

17:00	<p><b>Scientific Lectures of Young Researches</b></p> <p><b>Khazbi Sugarov</b> (North Caucasus Federal University, Stavropol): "Urban Open Spaces"</p> <p><b>Ekaterina Korenkova</b> (Orel State Agrarian University): "Landscape Management and Soil Reclamation of Different Urban Areas"</p> <p><b>Olga Golovina</b> (Ed. Züblin AG): "Teamwork Makes the Dream Work – Global Collaboration in Construction Project Planning"</p>	
18:00	Transfer to the Hotel and Dinner	
<b>September 14, Wednesday</b>		
08:30	Transfer from the Hotel	
09:00	<p><b>Dr.-Ing. Heiko Kirschke,</b> Bauhaus-Universität Weimar</p> <p><b>Prof. Markus König,</b> Ruhr Universität Bochum</p> <p><b>Dr. Jochen Teizer,</b> Rapids Construction Safety and Technology Laboratory</p> <p>„Overview of BIM in Education, Research and Industry Application“</p> <p>- Discussion –</p>	<p><i>MGSU,</i></p> <p><i>Hall of Scientific Council,</i></p> <p><i>1st floor</i></p>
10:00	<p><b>Prof. Aleksey Krasheninnikov,</b> Moscow Architectural Institute MARKHI (Academy of Architecture) / Higher School of Economics Moscow</p> <p>"Public Space in Built Environment"</p> <p>- Discussion –</p>	
10:40	Coffee Break	
11:00	<p><b>Scientific Lectures of Young Researches</b> Chair:</p> <ul style="list-style-type: none"> <li>• Dr.-Ing. Heiko Kirschke, Bauhaus-Universität Weimar</li> <li>• Prof. Aleksey Krasheninnikov, MARKHI / HSE</li> </ul>	



11:00	<p><b>Jürgen Melzner</b> (W. Markgraf GmbH): "BIM Implementation in Small and Medium Enterprises"</p> <p><b>Immo Feine / Eike Tauscher</b> (Bauhaus Universität Weimar): "BIM and Sensor Data Fusion for Project Lifecycle Management"</p> <p><b>Olga Kuzina</b> (MGSU): "Complementary Functional Components of Information Modelling for Reorganization of City Environment and Infrastructure in Interactive Mode"</p> <p><b>Irina Nechaeva</b> (MGSU): "Development of BIM in Russian Construction Industry"</p>	
12:30	Lunch	
13:30	<p><b>Kevin Schwabe</b> (Ruhr Universität Bochum): "Model-Based Construction Site Layout Planning"</p> <p><b>Markus Scheffer</b> (Ruhr Universität Bochum): "Simulation of Logistic Processes for Mechanized Tunneling Projects in Urban Areas"</p> <p><b>Sebastian Hollermann</b> (Bauhaus University Weimar): "BIM to Production Implementation and Education in Small Construction Companies"</p> <p><b>Gerhard Schubert</b> (TU München): "Interactive Interfaces: Tangible Tools for Architectural Design"</p> <p><b>Nils Seifert / Michael Mühlhaus</b> (TU München): "Integrated Decision Support: New Interaction and Visualization Strategies in Urban Planning and Participation"</p>	
15:15	Coffee Break	
15:45	<p><b>SPRINGER-Workshop</b> "Publishing Scientific Research in Journals, Conference Proceedings, Books"</p> <p><b>Daria Iovcheva</b> Representative of SpringerNature in the Russian Federation</p>	<i>MGSU</i>
17:00	<b>Excursion to Ostankino TV Tower</b>	
20:00	Transfer to Hotel and Dinner	

<b>September 15, Thursday</b>		
08:30	Transfer from the Hotel	
09:00	<p><b>DAAD - Deutscher Akademischer Austauschdienst</b> / German Academic Exchange Service</p> <p>Dr. Peter Hiller, Head of DAAD-Office in Moscow</p>	<p><i>MGSU, Hall of Scientific Council, 1st floor</i></p>
09:45	<p><b>DFG - Deutsche Forschungsgemeinschaft</b> / German Research Foundation</p> <p>"Promoting Research Careers" Dr. Sebastian Granderath, Group of Research Careers</p>	
10:30	Coffee Break	
11:00	<p><b>Honorary lecture</b> "Current Prospects of Germany's Science and Research System"</p> <p><b>Dorothee Dzwonnek</b>, Secretary General, DFG</p> <p>Chair:</p> <ul style="list-style-type: none"> <li>• Prof. Dr. Andrey Volkov, Rector of MGSU</li> <li>• Prof. Dr. Valery Telichenko, President of MGSU</li> </ul> <p>– <i>Discussion</i> –</p>	
12:00	Lunch	
13:00	<p><b>Prof. Dr. Reinhard Hinkelmann</b>, Technical University Berlin DFG-Research Training Group 2032 „Urban Water Interfaces“</p> <p>„Simulation-based Design for Restoring a Small Urban River“</p> <p>– <i>Discussion</i> –</p>	
14:00	<p><b>Prof. Dr. Evgeny Pupyrev</b>, The Interregional Union of Designers, Expert and Technological Council of The Russian Association of Water Supply and Sewerage</p> <p>"Special Aspects of Water Management in the Communal Services of Russia"</p> <p>- <i>Discussion</i> -</p>	

14:45	<b>Scientific Lectures of Young Researches</b> Chair: <ul style="list-style-type: none"> <li>• Prof. Dr. Reinhard Hinkelmann,</li> <li>• Dr. Michael Lentze, DFG</li> </ul>	
	<b>Nikolay Makisha</b> (MGSU): "Approaches for Reconstruction of Waste Water Facilities on the Energy Efficiency Basis"  <b>Olga Yantsen</b> (MGSU): "The Solution of Water Environment Issues in Cities and Localities"	
15:30	Coffee Break	
16:00	<b>Clara Romero</b> (TU Berlin): "Urban Water Interfaces: Biogeochemical Processes"  <b>Robert Ladwig</b> (TU Berlin): "Urban Water Interfaces: Interfaces in Urban Surface Waters"  <b>Katharina Teuber</b> (TU Berlin): "Urban Water Interfaces: Interfaces in Sewer Systems"  <b>Mikael Gillefalk</b> (TU Berlin): "Urban Water Interfaces: Surface Water - Groundwater Interactions"  <b>Olga Solkina</b> (Samara State University of Architecture and Civil Engineering): "Dairy Wastewater Treatment in Urban Environment"	
17:40	Transfer to the Hotel and Dinner	
<b>September 16, Friday</b>		
08:30	Transfer from Hotel	
09:00	<b>Helmholtz Association of German Research Centres</b>  Aleksey Shipilov, Project Coordination and Public Relations	<i>MGSU</i>
09:30	<b>Alexander von Humboldt Foundation (AvH)</b>  Prof. Dr. Vladimir Tishkov, Ambassador Scientist of Humboldt Foundation; Lomonosov Moscow State University	

10:00	<p><b>Dr. Irina Ivashkina,</b> Genplan Institute of Moscow</p> <p>“Environmental Priorities of Territorial Planning of Moscow”</p> <p>- <i>Discussion</i> –</p>	
10:45	Coffee Break	
11:15	<p><b>Scientific Lectures of Young Researches</b> Chair:</p> <ul style="list-style-type: none"> <li>• Dr. Martin Krispin, DWIH-Moscow</li> <li>• Dr. Irina Ivashkina, Genplan Institute of Moscow</li> </ul>	
	<p><b>Oliver Barfusz</b> (RWTH Aachen): “Sustainable Buildings of the Future- Focus on Finite Element Technology”</p> <p><b>Katharina Martin</b> (RWTH Aachen): “Simulation-Based Development of Original Road Pavement Materials”</p> <p><b>Ekaterina Zyryanova</b> (Irkutsk National Research Technical University): “Methodical Aspects of Environmental Impact Assessment Related to MSW (Municipal Solid Waste) Landfills”</p> <p><b>Sten Gillner</b> (Technical University Dresden): “Enhancing Multifunctionality of Urban Trees – Considering Site Factors and Human Demands”</p> <p><b>Denis Gritsyenko</b> (MGSU): “Reflected Sunlight Radiation to Improve Insolation Condition in Urban Environment”</p> <p><b>Alexander Tunik</b> (Irkutsk National Research Technical University): “The Complex Mobile Independent Power Station for the Urban Areas”</p>	
13:15	Lunch	
14:00	<p><b>MGSU Scientific Seminar and Discussion:</b> “Social Integrative Architecture, Urban Design and Political-administrative Solutions – New Tendencies in Germany and Russia”</p> <p><b>Prof. Zinaida Ivanova,</b> Department of Social, Psychological and Juristic Communications, MGSU</p>	
15:00	<b>Closing remarks</b>	