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NATIONAL RESEARCH UNIVERSITY
MOSCOW
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OF CIVIL
ENGINEERING



The Sixth German-Russian Week of the Young Researcher

“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

Welcome to the “6th 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 over arching 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

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

September 11, Sunday

Arrival of Participants

19:00	Words of Welcome to the participants of the week by	Hotel COSMOS, Executive Lounge, 25th floor
	<ul style="list-style-type: none">• Dr. Peter Hiller, DAAD Moscow• Dr. Jörn Achterberg, DFG Moscow• Dr. Martin Krispin, DWIH Moscow• Prof. Dr. Andrey Volkov, Rector of MGSU	

September 12, Monday

09:00	<i>Transfer from Hotel</i>	
09:30	Registration of Participants	MGSU
10:00	OFFICIAL OPENING OF THE WEEK Presentation of MGSU	MGSU, Hall of the Scientific Council, 1st floor
	Welcome Addresses by	
	<ul style="list-style-type: none">• Prof. Dr. Andrey Volkov, Rector of MGSU, President of AECEI (Association of Educational Civil Engineering Institutions)• Prof. Dr. Valery Telichenko, President of MGSU, Honorary President of AECEI• Rüdiger Freiherr von Fritsch, Ambassador of the Federal Republic of Germany• Marat Khusnullin, Deputy Mayor for Urban Development and Construction• Prof. Dr. Frank Allgöwer, Vice-President of DFG• Ulrich Grothus, Deputy Secretary General of DAAD	

11:15	OPENING LECTURE "From the Classical Feedback Loop to the New Cybernetics of the 21st Century" Professor Dr. Frank Allgöwer, Vice-President of DFG; Institute for Systems Theory and Automatic Control, University of Stuttgart - Discussion -
12:30	<i>Light lunch</i>
13:30	Introductory Remarks to The Sixth German- Russian Week of the Young Researcher <ul style="list-style-type: none">• Ulrich Grothus, Deputy Secretary General of DAAD• Prof. Dr. Frank Allgöwer, Vice-President of DFG
14:00	Prof. Andrey Volkov, Rector of MGSU "Building Information Modeling & Life Cycle Support: Russian Experience and Prospects" - Discussion -
15:00	<i>Coffee Break</i>
15:30	SCIENTIFIC LECTURES OF YOUNG RESEARCHES Chair: <ul style="list-style-type: none">• Prof. Dr. Frank Allgöwer, DFG; University of Stuttgart• Prof. Dr. Andrey Volkov, MGSU Mariya Nikolaenko (Tomsk University of Architecture and Building): "Modern Trends and Problems of Urban Areas Development" Yana Prelovskaya (MGSU): "Creation of Modern Urban Space. Methodology of Reorganization of Typical Private-home Districts" Ekaterina Kalemeneva (HSE St. Petersburg): "Imagining a Comfortable City in the Arctic: Leningrad Architects in Search of Northern Urban Planning in the 1960s" Joseph Prestel (FU Berlin): "Shared Visions of the Urban Future: The Allure of Suburbs around the World at the Beginning of the Twentieth Century"

17:00	University Tour: Campus, Labs, Museum	
18:00	Opening of the Exhibition “Architectural and Construction Projects”	MGSU, Scientific Library
18:15	Evening Reception	MGSU, Scientific Library
19:30	<i>Transfer to Hotel</i>	

September 13, Tuesday

08:30	<i>Transfer from Hotel</i>	
09:00	DWIH Moskau Deutsches Haus für Wissenschaft und Innovation / German House of Research and Innovation Dr. Martin Krispin, Project Coordinator	MGSU, Hall of Scientific Council, 1st floor
09:30	DFG – Deutsche Forschungsgemeinschaft / German Research Foundation “DFG – Funding Engineering Sciences in Germany” Dr. Michael Lentze, Programme Director, Group of Engineering Sciences	
10:15	Prof. Dr. Thomas Krupp, Prof. Dr. Hartmut Reinhard University of Applied Sciences Cologne “Entrepreneurs’ View on Urban Mobility in Cologne – the Case of a German Metropolitan Area from an Economic Perspective” - Discussion -	
11:00	<i>Coffee Break</i>	

11:30 SCIENTIFIC LECTURES OF YOUNG RESEARCHES

Chair:

- Prof. Dr. Thomas Krupp,
University of Applied Sciences Cologne
- Prof. Dr. Hartmut Reinhard,
University of Applied Sciences Cologne

Stefanie Halwas (University of Applied Sciences Cologne): “Urban Mobility and Startups – Analysis of the Special Requirements of New Enterprises”

Frederik Hupperts (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”

Nina Danilina (MGSU): “Park-and-ride Value under Intermodal Transportation System Integration”

Aleksey Levashev (Irkutsk National Research Technical University): “Modern Approaches to Estimation of Transportation Demand Based on GIS-technologies”

Sergey Tsiulin (South Ural State University, Chelyabinsk): “Urban Freight: A Literature Review”

13:15 *Lunch*

14:00 Prof. Dr. Alexander Mikhailov,
Irkutsk National Research Technical University

“Proposals for German-Russian Collaboration in Urban Transportation Planning”

- Discussion -

14:45 SCIENTIFIC LECTURES OF YOUNG RESEARCHES

Chair:

- Prof. Dr. Thomas Krupp,
University of Applied Sciences Cologne
- Prof. Dr. Hartmut Reinhard,
University of Applied Sciences Cologne
- Prof. Dr. Mikhailov,
Irkutsk National Research Technical University

14:45 **Maksim Sharov** (Irkutsk National Research Technical University): **“Evaluation of Transport Accessibility of Territory”**
Olga Antyufeeva (Volgograd University of Architecture and Civil Engineering): **“Urban Planning Aspects of Development of Museums in the City Structure”**
Maria Krutilova (Belgorod State Technological University named after V.G. Shukhov): **“Methodology of Cost-Effective Eco-Directed Structural Design”**

15:45 *Coffee Break*

16:15 **Dr. Yulia Strashnova**, Genplan Institute of Moscow
“Territorial Planning as Instrument for Creating Quality Urban Environment”
 - Discussion -

17:00 **SCIENTIFIC LECTURES OF YOUNG RESEARCHES**
Khazbi Sugarov (North Caucasus Federal University, Stavropol): **“Urban Open Spaces”**
Ekaterina Korenkova (Orel State Agrarian University): **“Landscape Management and Soil Reclamation of Different Urban Areas”**
Olga Golovina (Ed. Züblin AG): **“Teamwork Makes the Dream Work – Global Collaboration in Construction Project Planning”**

18:00 *Transfer to Hotel and Dinner*

September 14, Wednesday

08:30 *Transfer from Hotel*

09:00 **Dr.-Ing. Heiko Kirschke**, Bauhaus-Universität Weimar
Prof. Markus König, Ruhr-University Bochum
Dr. Jochen Teizer, Rapids Construction Safety and Technology Laboratory

MGSU,
Hall of
Scientific
Council,
1st floor

„Overview of BIM in Education, Research and Industry Application“

- Discussion -

10:00 **Prof. Aleksey Krasheninnikov**, Moscow Architectural Institute MARKHI (Academy of Architecture) / Higher School of Economics Moscow
“Public Space in Built Environment”
 - Discussion -

10:40 *Coffee Break*

11:00 **SCIENTIFIC LECTURES OF YOUNG RESEARCHES**
 Chair:
 • **Dr.-Ing. Heiko Kirschke**, Bauhaus-Universität Weimar
 • **Prof. Aleksey Krasheninnikov**, MARKHI / HSE

Jürgen Melzner (W. Markgraf GmbH):
“BIM Implementation in Small and Medium Enterprises”

Immo Feine / Eike Tauscher (Bauhaus-Universität Weimar): **“BIM and Sensor Data Fusion for Project Lifecycle Management”**

Olga Kuzina (MGSU): **“Complementary Functional Components of Information Modelling for Reorganization of City Environment and Infrastructure in Interactive Mode”**

Irina Nechaeva (HSE Moscow): **“Development of BIM in Russian Construction Industry”**

12:30 *Lunch*

13:30 **Kevin Schwabe** (Ruhr-University Bochum):
“Model-Based Construction Site Layout Planning”
Markus Scheffer (Ruhr-University Bochum):
“Simulation of Logistic Processes for Mechanized Tunneling Projects in Urban Areas”

13:30 Sebastian Hollermann (Bauhaus-Universität Weimar):
 "BIM to Production Implementation and Education
 in Small Construction Companies"
 Gerhard Schubert (TU Munich): "Interactive Interfaces:
 Tangible Tools for Architectural Design"
 Nils Seifert / Michael Mühlhaus (TU Munich):
 "Integrated Decision Support: New Interaction
 and Visualization Strategies in Urban Planning
 and Participation"

15:15 *Coffee Break*

15:45 **SPRINGER-Workshop** MGSU
 "Publishing Scientific Research in Journals,
 Conference Proceedings, Books"
 Daria Iovcheva, Representative of SpringerNature
 in the Russian Federation

17:00 **Excursion to Ostankino TV Tower**

20:00 *Transfer to Hotel and Dinner*

September 15, Thursday

08:30 *Transfer from Hotel*

09:00 **DAAD – Deutscher Akademischer Austauschdienst /** MGSU,
 German Academic Exchange Service Hall of
 Dr. Peter Hiller, Head of DAAD-Office in Moscow Scientific
 Council,
 1st floor

09:45 **DFG – Deutsche Forschungsgemeinschaft /**
 German Research Foundation
 "Promoting Research Careers"
 Dr. Sebastian Granderath, Group of Research Careers

10:30 *Coffee Break*

11:00 **HONORARY LECTURE**
 "Current Prospects of Germany's Science
 and Research System"
 Dorothee Dzwonnek, Secretary General, DFG
 Chair:
 • Prof. Dr. Andrey Volkov, Rector of MGSU
 • Prof. Dr. Valery Telichenko, President of MGSU
 - Discussion -

12:00 *Lunch*

13:00 Prof. Dr. Reinhard Hinkelmann,
 Technical University Berlin
 DFG-Research Training Group 2032
 „Urban Water Interfaces“
 „Simulation-based Design for Restoring
 a Small Urban River“
 - Discussion -

14:00 Prof. Dr. Evgeny Pupyrev, The Interregional Union
 of Designers, Expert and Technological Council of The
 Russian Association of Water Supply and Sewerage
 "Special Aspects of Water Management in the
 Communal Services of Russia"
 - Discussion -

14:45 **SCIENTIFIC LECTURES OF YOUNG RESEARCHES**
 Chair:
 • Prof. Dr. Reinhard Hinkelmann
 • Dr. Michael Lentze, DFG

Nikolay Makisha (MGSU): "Approaches
 for Reconstruction of Waste Water Facilities
 on the Energy Efficiency Basis"
 Olga Yantsen (MGSU): "The Solution of Water
 Environment Issues in Cities and Localities"

15:30 *Coffee Break*

- 16:00 Clara Romero (TU Berlin): "Urban Water Interfaces: Biogeochemical Processes"
- Robert Ladwig (TU Berlin): "Urban Water Interfaces: Interfaces in Urban Surface Waters"
- Katharina Teuber (TU Berlin): "Urban Water Interfaces: Interfaces in Sewer Systems"
- Mikael Gillefalk (TU Berlin): "Urban Water Interfaces: Surface Water – Groundwater Interactions"
- Olga Solkina (Samara State University of Architecture and Civil Engineering): "Dairy Wastewater Treatment in Urban Environment"

17:40 *Transfer to Hotel and Dinner*

September 16, Friday

08:30 *Transfer from Hotel*

09:00 **Helmholtz Association of German Research Centres** MGSU
Aleksey Shipilov, Project Coordination and Public Relations, Moscow Office

09:30 **Alexander von Humboldt Foundation (AvH)**
Prof. Dr. Vladimir Tishkov,
Ambassador Scientist of Humboldt Foundation;
Lomonosov Moscow State University

10:00 Dr. Irina Ivashkina, Genplan Institute of Moscow
"Environmental Priorities of Territorial Planning of Moscow"
- Discussion -

10:45 *Coffee Break*

11:15 **SCIENTIFIC LECTURES OF YOUNG RESEARCHES**

Chair:

- Dr. Martin Krispin, DWIH-Moscow
- Dr. Irina Ivashkina, Genplan Institute of Moscow

Oliver Barfusz (RWTH Aachen): "Sustainable Buildings of the Future- Focus on Finite Element Technology"

Katharina Martin (RWTH Aachen): "Simulation-Based Development of Original Road Pavement Materials"

Ekaterina Zyryanova (Irkutsk National Research Technical University): "Methodical Aspects of Environmental Impact Assessment related to MSW (Municipal Solid Waste) Landfills"

Sten Gillner (Technical University Dresden): "Enhancing Multifunctionality of Urban Trees – Considering Site Factors and Human Demands"

Denis Gritsiyenko (MGSU): "Reflected Sunlight Radiation to Improve Insolation Condition in Urban Environment"

Alexander Tunik (Irkutsk National Research Technical University): "The Complex Mobile Independent Power Station for the Urban Areas"

13:15 *Lunch*

14:00 **MGSU Scientific Seminar and Discussion:**
"Social Integrative Architecture, Urban Design and Political-administrative Solutions – New Tendencies in Germany and Russia"
Prof. Zinaida Ivanova, Department of Social, Psychological and Juristic Communications, MGSU

15:00 **Closing remarks**

15:20 *Transfer to Hotel*

