

German-Russian Workshop

# Russia and Germany in Tribology and Materials Science

Tomsk, 10. September 2021

in the framework of the  
**Deutschlandjahr in Russland**

<https://germania.diplo.de/ru-de/themen/politik/02-Politik>

**Год Германии в России**

<https://germania.diplo.de/ru-ru/themen/politik/02-Politik>

**Venue:**

Institute of Strength Physics and Materials Science of the Russian Academy of Sciences,  
pr. Akademicheskii, 2/4, Tomsk, 634055, Russia

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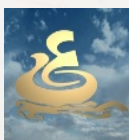


DEUTSCHLANDJAHR IN RUSSLAND

Technische Universität  
Berlin



Institute of Strength Physics and  
Materials Science  
Russian Academy of Sciences



# PROGRAMM

10 September 2021 (Friday)

German-Russian Workshop

“Russia and Germany in Tribology and Materials Science”

(Tomsk time, UTC+7)

**Chairmen: Popov V.L., Romanova V.A.**

- 09:00-09:30 **Elena Popova & Valentin L. Popov**  
(Technische Universität Berlin)  
History of "Sneddon" solution in Contact Mechanics
- 09:30-10:00 **Romanova V.A., Balokhonov R.R., Schmauder S.**  
(ISPMS SB RAS, Tomsk; University of Stuttgart, Stuttgart, Germany)  
Mesomechanical aspects of deformation-induced surface roughening in polycrystalline metals
- 10:00-10:30 **Emanuel Willert**  
(Technische Universität Berlin, Germany)  
Ongoing German-Russian Research Cooperation in Materials Science Co-Financed by the German Research Foundation and the Helmholtz Association
- 10:30-10:45 **Coffee break**
- 10:45-11:15 **Kulkova S.E., Bakulin A.V., Hocker S., Schmauder S.**  
(ISPMS SB RAS, Tomsk; University of Stuttgart, Stuttgart, Germany)  
Ab-Initio Investigations of Metal-Ceramics Interfaces and Grain Boundary Cohesion
- 11:15-11:45 **Knyazeva A.G., Saifullin E., Travizky N.**  
(ISPMS SB RAS, Tomsk)  
Modeling of Transformations in Glue Layer in Laminating Object Manufacturing
- 11:45-12:15 **Johannes Thaten**  
(Technische Universität Berlin, Germany)  
Encounters - 15 years of cooperation between Tomsk and Berlin. A film about joint ventures and conferences.
- 12:15-14:00 **Lunch**
- Chairmen: Popov V.L., Shilko E.V.**
- 14:00-14:25 **Panin S.V.<sup>1,2</sup>, Buslovich D.G.<sup>1,2</sup>, Alexenko V.O.<sup>1,2</sup>, Luo Jiangkun<sup>2</sup>, Kornienko L.A.<sup>1</sup>**  
(ISPMS SB RAS, TPU, Tomsk)  
Design of three-component high-strength low-friction composites based on polyimide. Effect of tribological loading scheme and conditions on wear resistance
- 14:25-14:50 **Dymnich E.M., Romanova V.A., Balokhonov R. R., Sadegh Mohebbi M., Ploshikhin V.**  
(ISPMS SB RAS, Tomsk; University of Bremen, Bremen, Germany)  
Physically-based simulations for the deformation behavior of additively manufactured materials within micromechanics
- 14:50-15:15 **M.A. Khimich**  
(ISPMS SB RAS, Tomsk)  
Structure and Phase Composition of Additive Co-Cr-Mo Alloy Affected by the Duration of Composite Powder's Mechanical Alloying
- 15:15-15:40 **Johannes Thaten**  
(Technische Universität Berlin, Germany)  
Use of Elastomers for Vibration Damping: A pragmatic approach to determining material parameters
- 15:40-16:05 **Shilko E.V.**  
(ISPMS SB RAS)  
Formation of the third body in the contact zone and friction coefficient. A computer-aided study using the particle-based approach