



2<sup>nd</sup>

**Korea-Russia**

**Science & Technology Day**

Science Day

President Hotel, Moscow / May 30 to 31, 2018

Technology Day

SKOLKOVO, Startup Village / May 31 to June 1, 2018

Organized by



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## PROGRAM for Science Day

President Hotel, Moscow / May 30 to 31, 2018

Day 1

May 30 (Moderator : Olga Lizogubova)

- 09:00 ~ 09:30 Registration
- 09:30 ~ 09:35 Opening Remarks by Dr. Suh, Gill Won, Director of KORUSTEC
- 09:35 ~ 09:40 Welcoming Address by Academician, Prof. Balega Yuriy, Vice president of RAS
- 09:40 ~ 09:45 Welcoming Address by Ms. Kim, Hye Soo, Team Head of Asian & African Affairs, NRF
- 09:45 ~ 09:50 Congratulatory Remarks by Dr. Andrey Anikeev, Deputy Director of Science & Technology department, Russian Ministry of Education and Science
- 09:50 ~ 09:55 Congratulatory Remarks by Dr. Song, Kyung Hee, Director-General of Korean Ministry of Science and ICT

### ■ Key-note Speech

- 10:00 ~ 10:20 *Korea-Russia collaboration in the fourth industrial revolution* by Prof. Lee, Soo Young, School of Electrical Engineering & Institute for Artificial Intelligence, Korea Advanced Institute of Science and Technology
- 10:20 ~ 10:40 *Recent Advances and International Cooperation in Space Science and Applications, Proposals for Russia-Korea Collaboration in Space Exploration* by Eduard Son, Academician RAS, Director of Electrophysics and Thermophysics Center, Head of Physical Department Moscow Institute of Physics and Technology
- 10:40 ~ 11:00 *New opportunities for Russian and Korean researchers in AI and Aerospace* by Mr. Sergey Konovalov, Russian Science Foundation

 Photo Session from 11:00 to 11:15 for all speakers and dignitaries

Lunch will be served at restaurant 'YAKIMANKA' , 2<sup>nd</sup> floor, President Hotel from 11:30 to 13:00 (open to those who make a registration beforehand)



### Scientific Session 1 : Aerospace (Chairperson : Prof. Alexey Vorobiev, MAI)

- 13:00 ~ 13:20 *Recent development of Scientific balloon in Seoul National University* by Prof. Yee, Kwan Jung, Seoul National University
- 13:20 ~ 13:40 *Computer modeling Stationary and dynamic parameters of liquid rocket Engines* by Prof. Alexey Vorobiev, MAI
- 13:40 ~ 14:00 Development of Mars Exploration Airplane by Prof. Jeong, Shin Kyu, Kyunghee University
- 14:00 ~ 14:20 The Project “UNIVERSAT – SOKRAT” of small satellites constallation to monitor antropogenic and natural treats, including asteroid danger by Prof. Mikhail Panasyuk, Skobeltsyn Institute of Nuclear Physics, MSU
- 14:20 ~ 14:40 *Thermal buckling measurement of a laminated composite plate using DIGITAL IMAGE CORRELATION method* by Prof. Goo, Nam Seo, Konkuk University
- 14:40 ~ 15:00 *Main educational and research directions of the Institute of Space Rocket Engineering of Samara National Research University* by Dr. Anton V. Doroshin, Institute of Space Rocket Engineering, Samara National Research University

#### Coffee Break 15:00 ~ 15:15

- 15:15 ~ 15:35 *Failure load analysis of C-shaped composite beams using a cohesive zone model* by Prof. Kweon, Jin Hwe, Gyeongsang National University
- 15:35 ~ 15:55 *On board heterogeneous plasmoid generator of thermal power, electric power and cheap hydrogen for flying vehicles* by Prof. Anatoliy Klimov, Joint Institute for High Temperature RAS
- 15:55 ~ 16:15 *Pseudo flight test environment for micer-aerial vehicles* by Prof. Han, Jae-Hung, Korea Advanced Institute of Science and Technology
- 16:15 ~ 16:35 *Research on injection of chemically active gaseous jets in supersonic fuel-air flows* by Dr. Alexander Nikitenko, JSC “Hypersonic Systems Research Enterprise” , St. Petersburg
- 16:35 ~ 16:55 *Research and Development on unmanned vehicle technologies of KARI and UVARC* by Dr. Hwang, In Seong, Korea Aerospace Research Institute
- 16:55 ~ 17:15 *Electron-beam plasmas for Plasma Aerodynamics and Combustion(PAC)* by Prof. Vladimir Bychkov, Moscow Radio -technical Institute RAS
- 17:15 ~ 17:30 Q&A
- 17:30 ~ 17:40 Wrap-up and policy recommendation



**Scientific Session 2 : Artificial intelligence  
(Chairperson : Prof. Lee, Jong Hwan, Korea University)**

- 13:00 ~ 13:20 *Emotional conversational agents* by Prof. Lee, Soo Young, School of Electrical Engineering & Institute for Artificial Intelligence, Korea Advanced Institute of Science and Technology
- 13:20 ~ 13:40 *Areas of joint research with Korean specialists* by Prof. Alexey Nazarov, MIPT(Moscow Institute of Physics and Technology)
- 13:40 ~ 14:00 *Deep learning approaches to neuroimaging data analysis* by Prof. Lee, Jong Hwan, Department of Brain and Cognitive Engineering, Korea University
- 14:00 ~ 14:20 *Memristive systems based on 2D crystals for interfacing artificial electronic neural networks and neurons* by Prof. Gennady Panin, IMT&HPM of RAS
- 14:20 ~ 14:40 *Bias Reduction and Metric Learning for Nearest-Neighbor Estimation of Kullback-Leibler Divergence* by Prof. Noh, Yung Kyun, Department of Mechanical and Aerospace Engineering, Seoul National University
- 14:40 ~ 15:00 *We teach high-tech gurus for tomorrow: technology and challenges* by Dr. Airat Khasianov, Higher Institute for Information Technology and Intelligent Systems, Kazan Federal University

 **Coffee Break 15:00 ~ 15:15**

- 15:15 ~ 15:35 *DeepPavlov: Open-Source Library for Dialogue Systems* by Dr. Mikhail Burtsev, MIPT
- 15:35 ~ 15:55 *Fuzzy learning rule : with an emphasis on data near the decision boundary* by Prof. Kim, Yong Soo, Department of Computer Engineering, Daejeon University
- 15:55 ~ 16:15 *Cognitive communications of robots and a universal language for human-machine interaction* by Dr. Dmitry Mouromtsev, ITMO
- 16:15 ~ 16:35 *Simultaneous Localization and Mapping in the Epoch of Semantics* by Prof. Kim, Gon Woo, Chungbuk National University
- 16:35 ~ 16:55 *Research, Innovation and education in machine learning, distributed intellectual systems and advanced computing at Skoltech* by Prof. Maxim Fedorov, Center for Computational and Data-Intensive Science and Engineering, Skolkovo Institute of Science and Technology (Skoltech)
- 16:55 ~ 17:15 *Regulation of Artificial Intelligence (AI)* by Prof. Andrey Neznamov, Research Center of the Problems of Regulation of Robotics and Artificial Intelligence, Dentons
- 17:15 ~ 17:30 Q&A
- 17:30 ~ 17:40 Wrap-up and policy recommendation

**Networking Reception will be open only to speakers at Restaurant 'Barin' , 14<sup>th</sup> floor, President Hotel from 18:30 to 20:30**



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