

CONFERENCE

“Planetary rovers and exploration of celestial bodies”

Sponsorship: Government of S.-Petersburg and VNIITransmash

Location of the Conference: S.-Petersburg, “Pribaltiiskaja” hotel, Korablestroiteley avenue, 14

2 October

Session Chair: M.I. Malenkov

- 12.30 – 12.40 **Malenkov M.I., Stepanov V.V.,** J.-St. Co. VNIITransmash, *Russian technologies for projection and debugging of planetary rovers' locomotion systems*
- 12.40 – 12.50 **Dovgan V.G.** Union of veterans of space forces. Moscow, *Application of command-measuring complexes for Moon-mission space vehicles.*
- 12.50 – 13.00 **Ignatjev M.B., Nikitin A.V., Ovodenko A.A.** Saint Petersburg State University of airspace instrument engineering. St. Petersburg, *Mastering of the Moon is the most important problem of mankind*
- 13.00 – 13.10 **Zaharov A.V., Uljanov A.B., Linkin V.N.** Space Research Institute (IKI) of the Russian Academy of Sciences. Moscow, *“Phobos-soil” project: some aspects of a program for scientific investigations.*
- 13.10 – 13.20 **Uspenskiy G.R., Cheremukhina Z.P., Gubaidullin V.Sh., Antonjan V.G.** FGUP TsNIImash, Korolev, Moscow Region, *On-planetary long duration automatic base-stations using mobile means*
- 13.20 – 13.30 **Polischuk G.M., Pichkhadze K.M, Rogovskiy G.K., Buslaev S.P** FGUP “Lavochkin NPO”. Himki, Moscow Region, *Development of technical vision for automatic control of planetary rover motion at “Lavochkin NPO”.*
- 13.30 – 13.40 **Bolkhovitinov I.S.** J.-St. Co. VNIITransmash, Ustinov BGTU “Voenmekh”. St. Petersburg, *Information-controlling TV-system of technical vision for planetary rovers.*
- 13.40 – 13.50 **Egorov A.V.¹, Dolgikh A.S.¹, Sokolov B.A.², Cherakov A.N.², Terentyev I.P.², Sljuta E.N.³** (1- FGUP “Barmin KB OM”, 2- J.-St. Co «Energy» by S.P.Korolev, 3- GEOHI, Moscow), *The research automatic Moon rover rigged with a boring plant with the source of energy on the basis of hydrogen technologies.*
- 13.50 – 14.00 **Koval S.D., Romashkin A.M.** FGUP TsNIImash, Korolev, Moscow Region, *Analysis of versions for transport systems Earth-the Moon –Earth for serving lunar bases.*
- 14.00 – 15.00 Lunch
- 15.00 – 15.10 **Kuzoro V.I., Khalimanovich V.I., Tjumerov O.Ju.** FGUP “Reshetnev NPO PM”. Zheleznogorsk, Krasnojarskiy Kraiy, *Solar battery on a flexible base plate.*
- 15.10 – 15.20 **Malenkov M.I., Koutcherenko V.I., Vladykin S.A., Manukjan A.V.** (J.-St. Co. VNIITransmash, St. Petersburg, Russia), **Kozlov O.E.** (FGUP “Lavochkin NPO”, Himki, Moskow Region), **M.Maurette** (CNES, TOULOUSE, France), *Development of locomotion system for the Mars rover with pneumatic wheels*
- 15.20 – 15.30 **Sljuta E.N., Abdrahimov A.M.** Vernadskiy GEOHI RAN. Moscow, *The initiative*

project of creating the strong system of logging bore-holes and of long duration automatic mini stations on the Moon.

- 15.30 – 15.40 **Razhikov V.N.** Ustinov BGTU “Voenmekh”. St. Petersburg, *Contribution of BGTU “Voenmekh” in creation of designs of highly-reliable electro-mechanical drives for equipment of spacecraft executive automatics.*
- 15.40 – 15.50 **Malkov S.P.** The State University of air-space instrument engineering. St. Petersburg, *Rightful aspects of extraction of mineral resources on the Moon*
- 15.50 – 16.00 **Mikhalkin V.M., Perminov M.D.**, FGUP “Reshetnev NPO PM”. Zheleznogorsk, Krasnojarskiy Kraiy, *Simulation of zero-g conditions when opening large-dimension transformed structures of space apparatuses when experimental debugging on Earth.*
- 16.00 – 16.10 **Lihachev A.V.** Ustinov BGTU “Voenmekh”. St. Petersburg, *Intellectual structures is a new stage of development of aviation and space technique*
- 16.10 – 16.20 **Uljanov A.B.** Project-manufacturing enterprise “RaRos”. Moscow, *Soil-taking devices of home-made apparatuses.*
- 16.20 – 16.30 **Voinov I.V., Morozov B.A.** The branch of the South-Ural technical university. Miass, Cheljabinsk Region, *Mobile robot-technical complex Mustang.*
- 16.30 – 16.40 **Krusanov V.S., Sidorkin N.A., Lihomanova O.I.** The engineering-technical and educational centre of robotics. Moscow, *Application of robots developed at VNIITransmash.*
- 16.40 – 16.50 **Briskin E.S., Chernishov V.V.** Volgograd technical university. Volgograd, *Mobile robot-technical complexes on the basis of cycle mechanisms of walking: dynamics, control, fields of possible utilization.*
- 16.50 – 17.00 **Morozov B.A., Voinov I.V.** The branch of the South-Ural technical university. Miass, Cheljabinsk Region, *The robot-technical complex Bogomol 3M.*
- 17.00 – 17.10 **Voinov I.V., Morozov B.A.** The branch of the South-Ural technical university. Miass, Cheljabinsk Region, *Control system of chassis for robot-technical complex Mustang.*
- 17.10 – 17.20 **Nefedov D.V.** Chelyabinsk Higher Military Vehicle Academy (Military Institute), *Prospects of designing and use of robot-aided shooting complexes*
- 17.10 – 17.20 **Zhoga V.V., Pokrovskiy D.N.** Volgograd State Technical University. Volgograd. *Specialized walking robot with orthogonal movers.*
- 17.30 – 17.40 **Noskov V.P., Rubtsov I.F.** Bauman MGTU. Moscow, *Experience of development and exploitation of autonomous mobile robots of special purpose.*
- 17.40 – 17.45 **Bondar D.B., Romanov O.N.** The engineering-technical and educational centre of robotics. Moscow, *The radiation-protected robot-technical complex for remote welding works.*

* **Kupriyanov V.N.** (the North-West branch of FK RF), **Malenkov M.I.** (J.-St. Co. VNIITransmash), St. Petersburg, *A role of Leningrad’s enterprises and Higher Educational Establishments in creating and ensuring successful operation Lunokhod 1 on the Moon.*

* **Kupriyanov V.N.** The North-West branch of FK RF. St. Petersburg, *About history of appearance of the first VNIITransmash’s publications on planetary rovers.*

* **Rozen I.I.** VNIITransmash Veteran. USA, *Lunokhod and Korolev S.P., 1964.*

^x **Malenkov M.I., Gromov V.V. , Koutcherenko V.I., Kuznetsov I.S., Stepanov V.V.,** (J.-S. Co. VNIITRANSMASH, St. Petersburg, Russia),

SuBo, Wenming Wang, Guoxuan Luo (NOVERI, Beijing, China). «*Key technologies of the Moon exploration: realization and perspectives of creation of highly effective locomotion systems for the Moon rovers*»

*Abstracts of papers were not placed in web-site as authors did not give theirs in time.

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