



Conference Program, March 2, 2015

Oral Session 16:00

Chairman

Prof. A.V.Eremin

- 16:00 Shock response of magnesium single crystals at normal and elevated temperatures
Kanel Gennady Isaakovich (JIHT RAS, Moscow, Russia), Garkushin G. V., Savinykh A. S., Razorenov S. V., de Resseguier T., Proud W. G., Tyutin M. R.
- 16:15 Halide based shock-wave treatment of fluid-rich natural phases
Schlothauer Thomas (TUBAF, Freiberg, Germany), Schimpf C., Brendler E., Keller K., Heide G., Kroke E.
- 16:30 Electrical conductivity and thermophysical properties of lithium hydride and lithium deuteride in the megabar shock pressure range
Shakhray Denis Vladimirovich (IPCP RAS, Chernogolovka, Russia), Golyshev A. A., Molodets A. M.
- 16:45 Multi-scale model of the dynamic fracture of molten and solid metals
Mayer Alexander Evgenievich (CSU, Chelyabinsk, Russia), Mayer P. N., Krasnikov V. S., Voronin D. S.
- 17:00 Propagation of shock waves and fracture in the composite: numerical simulation
Pogorelko Viktor Vladimirovich (CSU, Chelyabinsk, Russia), Mayer A. E.

17:15



COFFEE-BREAK

Chairman

Prof. G.I.Kanel

- 17:30 Numerical simulation of deformation and fracture of space protective shell structures from concrete and fiber concrete under shock-wave loading
Radchenko Pavel Andreevich (TSUAB, Tomsk, Russia), Batuev S. P., Radchenko A. V., Plevkov V. S.
- 17:45 Numerical simulation of $ZrO_2(Y_2O_3)$ ceramic plate penetration by cylindrical plunger
Kazarinov Nikita Andreevich (SPbSU, Saint-Petersburg, Russia), Bratov V. A., Petrov Y. V.
- 18:00 Detonation of mehanaoactivated composites of aluminium and ammonium perchlorate
Shevchenko Arseniy Andreevich (NRNU MEPhI, Moscow, Russia), Dolgoborodov A. Yu., Kirillenko V. G., Brazhnikov M. A.
- 18:15 Hydrodynamic instability at the interaction between sound and diffusion flame
Golub Victor Vladimirovich (JIHT RAS, Moscow, Russia), Krivokorytov M. S.
- 18:30 The role of radiant preheating of the fresh fuel in flame acceleration in different gaseous mixtures
Ivanov Mikhail Fedorovich (JIHT RAS, Moscow, Russia), Kiverin A. D.
- 18:45 Modes of choked flame instability defined by the peculiarities of combustion kinetics at rising pressure
Kiverin Alexey Dmitrievich (JIHT RAS, Moscow, Russia), Yakovenko I. S.

19:00




SUPPER

Chairman

Prof. V.V.Golub

- 20:00 Numerical simulation as important tools in developing novel hypersonic technologies
Bocharov Aleksey Nikolaevich (JIHT RAS, Moscow, Russia), Balakirev B. A., Bityurin V. A., Gryaznov V. K., Golovin N. N., Iosilevskiy I. L., Evstigneev N. M., Medin S. A., Naumov N. D., Petrovskiy V. P., Ryabkov O. I., Solomonov Yu. S., Tatarinov A. V., Teplyakov I. O., Tikhonov A. A., Fortov V. E.

- 20:15 Problems of heat shielding and plasma phenomena of hypersonic flying vehicles
Son Eduard Evgeievich (JIHT RAS, Moscow, Russia)
- 20:30 New energy-power equipments, chemical energy resources, and their applications at super-high-speed flying vehicles
Prudnikov Alexander Grigorievich (CIAM, Moscow, Russia)
- 20:45 Experimental investigations of hypersonic flying vehicles
Prokhorov Aleksandr Nikolaevich (CIAM, Moscow, Russia)
- 21:00 Numerical simulation of aerogasdynamics of a flight vehicle with a hypersonic liquid-fuel ramjet
Khlybov Vladimir Iliich (OAO "Makeyev GRTs", Miass, Russia), Degtiar V. G., Grakhov Yu. V., Lepikhov A. V., Kalashnikov S. T.
- 21:15 Simulation of 3D flows past hypersonic vehicles in FlowVision software
Aksenov Andrey Alexandrovich (JIHT RAS, Moscow, Russia), Savitsky D. V., Zhlyukov S. V.
- 21:30 On the mechanisms of energy dissipation of galactic comets bombarding terrestrial planets
Barenbaum Azary Aleksandrovich (OGRI RAS, Moscow, Russia)
- 21:45–
22:00  **COFFEE-END**