



Conference Program, March 2, 2012

Oral Session 16:00

Chairman

Prof. L. G. Dyachkov

- 16:00 Melting curves of metals in quasi-harmonic approximation
Levashov Pavel Remirovich (JIHT RAS, Moscow, Russia), Minakov D. V., Khishchenko K. V.
- 16:15 Vitrification of aluminum melt. Molecular dynamics study
Kolotova Lada Nikolaevna (JIHT RAS, Moscow, Russia), Norman G. E., Pisarev V. V.
- 16:30 Atomistic simulation of structure and properties of uraniferous nuclear fuels
Smirnova Daria Evgenyevna (JIHT RAS, Moscow, Russia)
- 16:45 IT tools of thermophysical calculations: properties of substances and methods of determination
Ustjuzhanin Evgeny Evgenievich (MPEI (TU), Moscow, Russia), Ochkov V. F., Znamenskiy V. E., Shishakov V. V.

17:00



COFFEE-BREAK

Chairman

Dr. V. V. Milyavskiy

- 17:15 Low temperature non-thermal plasmas at atmospheric pressure: diagnostics and medical applications (plenary)
Petrov Oleg Fedorovich (JIHT RAS, Moscow, Russia), Ermolaeva S. A., Zigangirova N., Vasiliev M. M., Sysolyatina E., Alyapyshev M., Kolkova N., Mukhachev A., Naroditsky B. S., Shimizu T., Morfill G. E., Grigoriev A. I., Fortov V. E., Gintsburg A. L.
- 17:40 Sound velocity in shock-compressed polytetrafluoroethylene in stress range 1.5–45 GPa
Nikolaev Alexey Yurievich (RFNC-VNIITF, Snezhinsk, Russia), Vildanov V. G., Borshchevsky A. O., Tkachyov O. V., Zaikin V. T., Slobodenyukov V. M.
- 17:55 The structure of the superelastic&plastic shock wave
Khokhlov Victor Alexandrovich (ITP RAS, Chernogolovka, Russia), Inogamov N. A., Zhakhovsky V. V., Anisimov S. I., Petrov Yu. V.
- 18:10 Molecular dynamic study of plasticity under shock wave loading
Kuksin Alexey Yurievich (JIHT RAS, Moscow, Russia), Yanilkin A. V.
- 18:25 Wide-range constitutive modelling of multiscale plasticity and damage-failure transition under shock wave loading
Naimark Oleg Borisovich (ICMM UB RAS, Perm, Russia)
- 18:40–18:55 Detonation method of fabrication of novel high-energy magnetic composites with reduced rare earth content
Golub Victor Vladimirovich (JIHT RAS, Moscow, Russia), Kotelnikov A. L., Lenkevich D. I., Zvezdin A. K., Zvezdin K. A.

19:00



SUPPER

Chairman

Dr. V. P. Efremov

- 20:00 Quantum phenomena in initiation of detonation waves of condensation
Emelianov A. V., Eremin Alexander Viktorovich (JIHT RAS, Moscow, Russia), Gurentsov E. V., Petrushkevich Yu. V., Sivkova E. E., Starostin A. N., Taran M. D., Fortov V. E.
- 20:10 A conceptual model for carbon nanoparticle formation in shock wave pyrolysis processes
Eremin Alexander Viktorovich (JIHT RAS, Moscow, Russia)
- 20:30 Regimes of chemical reaction wave propagation initiated by temperature non-uniformity for chain-branching kinetics
Kiverin Alexey Dmitrievich (JIHT RAS, Moscow, Russia)
- 20:45–21:00 On instability of converging shock waves of polygonal form
Konyukhov Andrey Victorovich (JIHT RAS, Moscow, Russia), Likhachev A. P.