



XXXI International  
Conference  
on Equations  
of State for Matter

ELBRUS  
2016

March 1–6, 2016  
Elbrus, Kabardino-Balkaria  
Russia

## Conference Program, March 1, 2016

### Opening Ceremony 16:00

Introductory words by V. E. Fortov, V. P. Efremov, A. P. Savintsev, K. V. Khishchenko

Chairman

Prof. G. I. Kanel

16:15 A V Bushman and equation-of-state problem

*Lomonosov Igor Vladimirovich (IPCP RAS, Chernogolovka, Russia)*

16:40 Binodal layer and rarefaction shock in retrograde adiabatic expansion of warm dense matter in two-phase region of non-congruent phase transition

*Iosilevskiy Igor L'vovich (JIHT RAS, Moscow, Russia), Gryaznov V. K.*



### COFFEE-BREAK

Chairman

Prof. G. I. Kanel

17:30 On mechanical measurements in high-energy-density physics (plenary)

*Fortov Vladimir Evgenievich (JIHT RAS, Moscow, Russia)*

18:15 Complex structures of dense lithium: Electronic origin

*Degtyareva Valentina Feognievna (ISSP RAS, Chernogolovka, Russia)*

18:30 Nitrogen phase transformation under quasi-isentropic compression up to 130 GPa

*Ternovoi Vladimir Yakovlevich (IPCP RAS, Chernogolovka, Russia), Nikolaev D. N., Kvito S. V., Pyalling A. A.*

18:45 Deuterium compression isentrope: Analysis of temperature and electrical conductivity

*Levashov Pavel Remirovich (JIHT RAS, Moscow, Russia), Minakov D. V., Chentsov A. V.*



### SUPPER

Chairman

Prof. I. V. Lomonosov

20:00 Wide-range equations of state for compounds at high dynamic pressures

*Khishchenko Konstantin Vladimirovich (JIHT RAS, Moscow, Russia)*

20:15 Equation-of-state calculation for LiH and LiD based on quantum-statistical models

*Kadatskiy Maxim Alekseevich (JIHT RAS, Moscow, Russia), Khishchenko K. V.*

20:30 Region of validity of the Thomas–Fermi model with quantum, exchange and shell corrections

*Dyachkov Sergey Aleksandrovich (JIHT RAS, Moscow, Russia), Levashov P. R., Minakov D. V.*

20:45 Fluid–fluid–solid triple point on melting lines at high temperatures

*Norman Genri Edgarovich (JIHT RAS, Moscow, Russia), Saitov I. M.*

21:00 Dynamics of phonon spectrum and anomaly of the curve of melting of sodium at pressures 0–60 GPa

*Chingina E. A., Volkov Nikolay Borisovich (IEP UB RAS, Ekaterinburg, Russia)*

Chairman

Prof. I. L. Iosilevskiy

21:15 On the kinetics of graphite melting: A molecular modeling approach

*Orekhov Nikita (JIHT RAS, Moscow, Russia), Stegailov V. V.*

21:30 Attachment and accommodation at cluster growth in metal vapor

*Lenev Dmitrii Yurievich (JIHT RAS, Moscow, Russia), Norman G. E.*

21:45 Martensitic transformation and nanoscale aspects in shape memory alloys

*Adiguzel Osman (FiratUni, Elazig, Turkey)*

22:00 Investigations of thermal conductivity of metals in the field of centrifugal and vibration accelerations

*Lepeshkin Alexander Roaldovich (CIAM, Moscow, Russia), Vaganov P. A.*

- 22:15 Nucleation and spall strength of liquid metals  
*Lopanitsyna Nataliya Yurievna (JIHT RAS, Moscow, Russia), Kuksin A. Yu.*
- 22:30 Molecular dynamics study of viscosity during glass transition of aluminum melt  
*Kirova Elena Mikhailovna (MIPt, Dolgoprudny, Russia), Pisarev V. V.*
- 22:45–
- 23:00 Features of structure and phase transitions in pure uranium and U-Mo alloys: Atomistic simulation  
*Kolotova Lada Nikolaevna (JIHT RAS, Moscow, Russia), Kuksin A. Yu., Smirnova D. E., Starikov S. V., Tseplyaev V. I.*

21:15–  
23:00



### COFFEE-CONTINUUM