XXXI International Conference on Equations of State for Matter

ELBRUS 2016

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# *Conference Program, March 2, 2016*

## *Oral Session 16:00*

Chairman — *Prof. A. V. Eremin*

16:00 Dynamics of shock and shockless compression waves in solids
*Kanel Gennady Isaakovich (JIHT RAS, Moscow, Russia)*

16:15 One- and two-stage cumulative Mach-type shock wave generators
*Nikolaev Dmitry Nikolaevich (IPCP RAS, Chernogolovka, Russia)*, *Kvitov S. V.*, *Shutov A. V.*, *Ternovoi V. Ya.*

16:30 Energy dissipation rate in copper subjected to the high pressure loading
*Borodin Elijah Nikolaevich (IPME RAS, Saint Petersburg, Russia)*, *Mayer A. E.*, *Podurets A. M.*, *Beluhina P. S.*, *Grebennikova S. E.*, *Tkachenko M. I.*, *Balandina A. N.*

16:45 The role of decompression and micro-jetting in shock wave synthesis experiments
*Schlothauer Thomas (TUBAF, IIC, Freiberg, Germany)*, *Schimpf C.*, *Kroke E.*, *Heide G.*, *Schwarz M. R.*

17:00  **CONFERENCE PHOTO (OUTSIDE)**

 **COFFEE-BREAK**

Chairman — *Prof. V. V. Golub*

17:30 Activities on proton radiography at the Institute for Theoretical and Experimental Physics
*Golubev Alexander Alexandrovich (SSC RF ITEP, Moscow, Russia)*, *Kantsyrev A. V.*

17:45 Morphological turning, electroconductivity and structural phase transitions of shocked titanium
*Golyshev Andrey Anatolievich (IPCP RAS, Chernogolovka, Russia)*, *Kolobova A. Yu.*, *Kudymova Yu. E.*, *Molodets A. M.*

18:00 Continuum model of tensile fracture of metals and its application to the shock wave problems
*Mayer Alexander Evgenievich (CSU, Chelyabinsk, Russia)*

18:15 Research of fracture of materials and designs at shock-wave loadings by means of the program complex EFES
*Radchenko Pavel Andreevich (TSUAB, Tomsk, Russia)*, *Radchenko A. V.*, *Batuev S. P.*, *Tukaev A. M.*

18:30 Detonability of mechanoactivated ammonium-perchlorate-based mixtures with nano-Al
*Shevchenko Arseny (NRNU MEPhI, Moscow, Russia)*, *Dolgoborodov A. Yu.*, *Brazhikov M. A.*, *Kirilenko V. G.*

18:45 Theory and experiments of premixed turbulent combustion
*Krikunova Anastasia Igorevna (JIHT RAS, Moscow, Russia)*, *Son E. E.*

19:00  **SUPPER**

Chairman — *Dr. K. V. Khishchenko*

20:00 The behavior of boron carbide under non-hydrostatic stress
*Korotaev Pavel Yurievich (VNIIA(S), Moscow, Russia)*, *Pokatashkin P. A.*, *Yanilkin A. V.*

20:15 The viscosity and surface tension of nuclear matter and quark-gluon plasma
*Khokonov Azamat Khazret-Alievich (KBSU, Nalchik, Russia)*

20:30 Synthesis and thermal properties of pristine and hydrogenated carbon graphene-like materials
*Tarala V. A.*, *Akhmatov Zeitun Anuarovich (KBSU, Nalchik, Russia)*, *Khokonov A. Kh.*

20:45 Equation of state of fluid monolayer absorbed on a stochastic surface
*Khlyupin Aleksey Nikolaevich (MIPT, Dolgoprudny, Russia)*, *Dinariev O. Y.*

Chairman *Prof. A. E. Mayer*

21:00 Detection of micro- and nanoparticles in dynamic processes
*Ten Konstantin Alekseevich (LIH SB RAS, Novosibirsk, Russia)*, *Pruuel E. R.*, *Kashkarov A. O.*, *Rubtsov I. A.*, *Shechtman L. I.*, *Zhulanov V. V.*, *Tolochko B. P.*, *Rykovanov G. N.*, *Muzyrya A. K.*, *Smirnov E. B.*, *Stolbikov V. Yu.*, *Prosvirnin K. M.*

21:15 Dynamics of sizes of nanoparticles at trinitrotoluene detonation on the VEPP-4M synchrotron radiation
*Rubtsov Ivan Andreevich (LIH SB RAS, Novosibirsk, Russia)*, *Ten K. A.*, *Pruuel E. R.*, *Kashkarov A. O.*

21:30 Detonation initiation in AB model of explosive: Comparative atomistic and hydrodynamics simulations
*Murzov Semen Alexandrovich (MIPT, Dolgoprudny, Russia)*, *Sergeev O. V.*, *Dyachkov S. A.*, *Egorova M. S.*, *Parshikov A. N.*, *Zhakhovsky V. V.*

21:45 The method of calculating the thermodynamic properties and the composition of the explosion products if there is no full chemical equilibrium
*Shargatov Vladimir Anatolievich (NRNU MEPhI, Moscow, Russia)*, *Gubin S. A.*

22:00 A theory of pulsating and cellular detonations
*Kasimov Aslan (KAUST, Thuwal, Saudi Arabia)*, *Faria L. M.*, *Rosales R. R.*

22:15 Two-stage light-gas magnetoplasma accelerator for hypervelocity impact simulation
*Khramtsov P. P.*, *Vasetskij V. A.*, *Makhnach Anastasiya (HMTI NASB, Minsk, Belarus)*, *Hryshchanka U. M.*, *Chernik M. Yu.*, *Shikh I. A.*, *Doroshko M. V.*

22:30–22:45 The influence of coal particles on self-ignition of methane–air mixture at the temperature 950–1200 K
*Leschevich V. V.*, *Penyazkov O. G.*, *Shimchenko Sergey Yur'evich (HMTI NASB, Minsk, Belarus)*, *Yaumenchykau M. L.*

21:00–22:00  **COFFEE-CONTINUUM**