SCIENTIFIC PROGRAM

Tuesday, 9:00 – 13:00

Session 1, Chair – B.Skews

1. **G. Ben-Dor** Hysteresis phenomena in the reflection of shock waves
2. **Open discussion on the topic**
3. **R. Paton, M. Whalley, B. Skews** Mutual reflection of conical shock waves in a supersonic flow
4. **S. Kobayashi, T. Adachi** Experiment on the stability of oblique shock reflection in the dual-solution regime
5. **E. Timofeev, A. Hakkaki-Fard** On unsteady shock reflections from convex circular surfaces

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Session 2, Chair – F.Seiler

1. **D. Igra, O. Igra** Various Options for Achieving Significant Shock/Blast Wave Mitigation
2. **S. Wiri, C. Needham, J. Rogers** Reconstruction of IED Blast Loading to Personnel in the Open
3. **V. Eliasson, Qian Wan** Shock mitigation in ducts using obstacles placed along a logarithmic spiral
4. **M. Liverts, O. Ram, O. Sadot and G. Ben-Dor** Mitigation of Blast-Waves by Aqueous- Foam Barriers - Implementation of the Exploding Wire Technique
5. **R. Tosello, H. J. Duval, D. Leriche et al.** Numerical and experimental investigation of reflected and refracted blast waves

Tuesday, 14:20 – 18:30

Session 3, Chair – O.Igra

1. **S. Bobashev, B.Zhukov, R.Kurakin et al.** Specific features of shock-compressedgas flows in railgun channels
2. **H. Yoshioka, H. Otsu** Hypersonic Wind Tunnel Testing for Investigation of the Attitude of the Ballute
3. **R. Buttay, P.J. Martinez Ferrer, G. Lehnasch, A. Mura** Simulations of highly underexpanded jets
4. **M. Silnikov, M. Chernyshov, V. Uskov** Overexpanded jet flow analysis in the vicinity of the nozzle lip
5. **V. Uskov, P. Mostovykh** The gas flow in the vicinity of the center of a centered expansion wave

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Session 4, Chair – S. Kobayashi

1. **H. Oertel Sen., F. Seiler, J. Srulijes** Noise of supersonic jets produced by shock/vortex interaction
2. **J. Ryu, D. Livescu** Turbulent Vortex Dynamics across a Normal Shock Wave
3. **T. Ukai, K. Ohtani, S. Obayashi** Experimental Investigation of Weak Shock Wave Propagating through Turbulent Medium in Controlled Humidity Field
4. **L.A. de Oliveira; L.R. Cancino; A.A.M. Oliveira.** Shock Wave - Boundary Layer Interaction: A CFD Analysis of Shock Wave Propagation in Shock Tube Experiments
5. **A.Sakurai, M.Tsukamoto** Generation of wave from a wall surface by changing its temperature

Wednesday, 9:00 – 13:00

Session 5, Chair – I. Krassovskaya

1. **B. Skews, J. Bentley** Flows from two perpendicular shock tubes with a common edge.
2. **A. Sasoh, T. Tamba, N. M. Nguyen et al.** Shock Wave Interaction Experiments Using Double-Driver Shock Tube
3. **E. Koroteeva, I. Znamenskaya, F. Glazyrin, N. Sysoev** Numerical and experimental study of shock waves emanating from an open-ended rectangular tube
4. **L. Gvozdeva, S. Gavrenkov, A. Nesterov** Dependence of Parameters Across Slip Stream in Triple Shock Wave Configuration on Adiabatic Index
5. **N.Petrov, A. Schmidt** Effect of a bubble nucleation model on cavitating flow structure in rarefaction wave

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Session 6, Chair – C. Needham

1. **R. Patwardhan, V. Eliasson** Numerical simulations of shock wave propagation and fluid-structure coupling in water-filled convergent thin shells
2. **N. Apazidis** Numerical investigation of shock induced bubble collapse in water
3. **Y. Kai, B. Meyerer, W. Garen, U. Teubner** Experimental investigation of laser generated shock waves and the onset of evaporation in a mini-shock glass tube filled with water

4. **H. Yamamoto** Micro underwater shock waves generated by irradiations of Q-switched Ho:YAG laser beams
5. **Z. A. Walenta, A. M. Slowicka** Structure of shock waves in molecular liquids - influence of moments of inertia of molecules

Wednesday, 14:20 – 18:30

Session 7, Chair – G. Ben-Dor

1. **F. Alzamora Previtali, E. Timofeev** On shock reflection from the straight wedges with circular concave tips
2. **O.Ram, M.Geva, O.Sadot** High spatial and temporal resolutions experimental shock-tube system for studying transient shock reflections
3. **F. Gnani, H. Zare-Behtash, K. Kontis** Shock wave diffraction phenomena interacting with a supersonic co-flow
4. **A. Baryshnikov, I. Basargin, S. Bobashev et al.** Peculiarity of shock wave propagation in glow discharge plasma
5. **V. Uskov, P. Mostovykh** The flow unevennesses in the vicinity of shock waves and tangential discontinuities

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Session 8, Chair – A. Sasoh

1. **Y. Kikuchi, N. Ohnishi, K. Ohtani** Experimental demonstration of bow-shock in stability and its numerical analysis
2. **O. Azarova** Supersonic flow control via combining energy sources
3. **K. Takayama, H. Yamamoto, A Abe** Shock Standoff Distance over Blunt Bodies Projected at Supersonic Speed into Air, Water and Sand Layer
4. **E. Pushkar, A. Korolev** Impact of the interplanetary magnetic field on collision of solar wind and Earth's bow shocks
5. **S. Berger, O. Sadot, G. Ben-Dor** Numerical Investigation of Shock-Wave Attenuation by Dynamic Barriers

Thursday, 16:00 - 18:00

Session 9, Chair – B.Skews

1. **M. Geva, O. Ram and O. Sadot** Examination of parameters influencing the non-stationary hysteresis reflection phenomenon
2. **Round-table discussion**

Friday, 9:00 – 13:00

Session 10, Chair – K. Takayama

1. **Shi Qiu, V. Eliasson** Numerical simulations of shock wave amplification using multiple munitions
2. **A. Gerasimov, S. Pashkov** Modelling of shock and explosive destruction of constructional element: three-dimensional statement and probabilistic approach
3. **R. Cayzac, E. Carette, T. Alziary de Roquefort** Gun muzzle blast waves: computations and experimental validations
4. **S. Sembian, N. Tillmark, N. Apazidis** Shock Generation and Propagation in Water by Exploding Wire Technique
5. **M. Silnikov, M. Chernyshov, A. Mikhaylin** Incident and reflected blast wave parameters at the diminished ambient pressure according to ICAO regulations

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Session 11, Chair – N. Apazidis

1. **M.G. Omang, J.K. Trulsen** Shock interactions with reacting and non-reacting particles
2. **D.I. Zavershinskiy, N.E. Molevich** The formation of a magnetoacoustic self-sustained shock pulses in a thermally unstable medium
3. **H. Otsu, T. Abe** Thermochemical non-equilibrium phenomenon behind the strong bow shock for reentry vehicles
4. **S.N. Martyushov** Numerical simulation of reactive gas mixes flows in the detonation engine
5. **O. Kunova, E. Nagnibeda, I. Sharafutdinov** Vibrational-chemical coupling in air flows behind shock waves

Friday, 14:30-15:30

Session 12, Chair – A.Podlaskin

1. **M. Onofri, R. Paciorri, A. Bonfiglioli** An unsteady Shock-fitting technique for unstructured grids
2. **Z.Jiang, Z. Hu** Investigating into high-temperature flows behind strong shocks
3. **O. Penyazkov, N. Fomin, N. Bazylev** Turbulence diagnostics with shocks by speckle tomography
4. **A. Hadjadj.** Closing remarks