

Day 5 - 19th July 2019, Friday

Time	Program				
08:00 - 08:45	<i>Foyer</i>				
	Registration				
	<i>LT7A</i>				
	Session Chair: Prof. Oren Sadot				
09:00 - 09:45	Irvine Israel Glass Lecture: Hysteresis phenomena in the reflection of shock waves Prof. Gabi Ben-Dor Ben-Gurion University of the Negev				
09:45 - 09:50	Movement				
	Supersonic and Hypersonic Flows (7)	Shock / Boundary Layer Interaction (3)	Shock Waves in Solids / Impact and Compaction (1)	Shock Waves in Internal Flows (1)	
	<i>LT7A</i>	<i>Auditorium</i>	<i>EA-06-02</i>	<i>EA-06-03</i>	
	<i>Session Chair: Wang Chengpeng</i>	<i>Session Chair: Pan Kuo-Long</i>	<i>Session Chair: Nail' A. Inogamov</i>	<i>Session Chair: A.B.M. Toufique Hasan</i>	
09:55 - 10:15	Mach waves over a cavity in supersonic flow Friedrich Seiler (OR-24-0065) V. Sridhar, H. Kleine, S. Gai, R. Hruschka and J. Srulijes	Proper Orthogonal Decomposition of Streamwise-Velocity Fluctuations in a Compression-Corner Shock-Wave/Turbulent Boundary-Layer Interaction Muhammad Mustafa (OR-21-0473) N. J. Parziale	Effect of twinning on the dynamic behaviors of the beryllium material under shock loading Pan Hao (OR-20-0212) S.T. Wang, Z.H. Wu, X.M. Hu	Numerical Investigation and Analysis of Post-Shock Flow in Microducts Deshpande Arvind (OR-17-0260) B. Puranik	
10:15 - 10:35	Effect of Martian Atmosphere on Aerodynamic Performance of a Flexible Supersonic Parachute System Xue Xiaopeng (OR-24-0192) Wang Yi, Zhao Dangjun, Jia He, Wang Qi, Wen Chih-Yung	Mixing characteristics of the slit-shaped hydrogen jet in supersonic crossflow Toshihiro Iwasa (OR-21-0357) K. Fujimoto, D. Muto and N. Tsuboi	Effects of Shock-wave Direction and Surface Shapes Characteristic on Metal Mass Ejection Shi Yi-Na (OR-20-0406) Wang Pei, Feng Qi-Jing	Shock wave propagation in non-uniform noble gas mixture Kazuya Iwata (OR-17-0329) K. Otsuka, O. Imamura, K. Akihama, H. Yamasaki	
10:35 - 10:55	Supersonic flow fields with various deceleration levels Irshaad Mahomed (OR-24-0496) Y. Yamashita, H. Fujiwara, T. Suzuki, A. Iwakawa, A. Sasoh, H. Roohani, I.M.A Gledhill and B.W. Skews	Hypersonic Shock Impingement on a Heated Surface in the T4 Free-Piston Driven Shock Tunnel Eric Won Keun Chang (OR-21-0164) Wilson Y. K. Chan, Timothy J. McIntyre, Ananthanarayanan Veeraragavan	Equation of state and phase transitions of scandium in shock waves Konstantin Khishchenko (OR-20-0487)	Numerical Investigation of Effect of Area Ratio on Shock Attenuation in a Microduct Bhalchandra Puranik (OR-17-0353) K. C. Zende	
10:55 - 11:15	Tea Break				
	Shock Wave Reflection / Interaction (4)	Shock / Boundary Layer Interaction (5) / Shock Wave Interaction with Various Media (4)	Supersonic Jet	Shock Waves in Internal Flows (2)	
	<i>LT7A</i>	<i>Auditorium</i>	<i>EA-06-02</i>	<i>EA-06-03</i>	
	<i>Session Chair: Rho Shin Myong</i>	<i>Session Chair: Ren Zhaoxin</i>	<i>Session Chair: Takeharu Sakai</i>	<i>Session Chair: Bhalchandra Puranik</i>	
11:15 - 11:35	Observation of Unsteady Shock Motion Induced by Counterflow on a Blunt Body in Hypersonic Flow Kim Yongchan (OR-15-0348) Roh Tae-Seong, Lee Hyoung Jin	Establishment of Hypersonic Shock-Wave/Boundary-Layer Interaction over a Double Wedge Hao Jiaao (OR-21-0230) C. Y. Wen	On the stability of a supersonic free jet surrounded by an annular gas jet Friedrich Seiler (OR-25-0064) G. Patz, J. Srulijes	Effect of Geometric Modification on Flow and Performance Characteristics of a Supersonic Inlet Isolator Md. Raihan Ali Khan (OR-17-0377) A. B. M. Toufique Hasan	
11:35 - 11:55	The New Type of a Multiple Mach Reflection on a Wedge Pavel Georgievskiy (OR-15-0380) A. Maksimov	Control of Flare Induced Shock - Boundary Layer Interaction using Micro Vortex Generators T Nilavarasan (OR-21-0094) G. N. Joshi, A. Misra, C. Manisankar and S. B. Verma	DNS of Hydrogen-air Self-ignition in Supersonic Planar Shear Layer Herbert Olivier (OR-25-0085) I. Klioutchnikov	Investigation of shock wave and flame propagation induced by high pressure flammable gas within shock tube Cha Seung Won (OR-17-0395) Roh Tae-Seong, Lee Hyoung Jin	
11:55 - 12:15	Study on Normal Shock Moving over a Smooth Downward Ramp G Rajesh (OR-15-0405) I. V. Thara Reshma, P. Vinoth, G.Ben-Dor	Shock wave interaction studies on Hollow glass (H-glass) fibre reinforced epoxy matrix composites C Jayarami Reddy (OR-14-0385) B.Venkataramudu, Ranjit Kumar Singh, Rajesh Kumar, Ashish Naurarkar, V.Madhu	Experimental Study of Supersonic Multiple Jet Flow field Mohammed Faheem (OR-25-0362) Aqib Khan, Rakesh Kumar, Sher Afghan Khan	Investigation of Wall Temperature Effect on the Unsteady Behavior of a Shock Train A.B.M. Toufique Hasan (OR-17-0458) Md. Saddam Hossain Joy	
12:15 - 12:35	Modeling of Blast Wave Interaction with a Cloud of Droplets Joseph Baum (OR-15-0462) F. Togashi, O.A.Soto, M.E. Giltrud, R. Löhner		Influence of Nozzle Geometry on Mixing Enhancement of Jet in Supersonic Crossflow Kazuaki Hatanaka (OR-25-0477) T. Seguchi, M. Hirota, T. Saito, S. Rao		
12:35 - 13:55	Lunch				

	LT7A			
	<i>Session Chair: Prof. Abdellah Hadjadj</i>			
13:55 - 14:40	Plenary Lecture: Detonation: Beyond the Sonic Event Horizon Prof. Andrew Higgins McGill University			
14:40 - 14:45	Movement			
	Shock Wave Reflection / Interaction (5)	Spectroscopy (1)	Shock Waves in Liquids	Shock Waves in Internal Flows (3) / Shock Waves in Solids / Impact and Compaction (2)
	<i>LT7A</i>	<i>Auditorium</i>	<i>EA-06-02</i>	<i>EA-06-03</i>
	<i>Session Chair: Kiyonobu Ohtani</i>	<i>Session Chair: Raffaello Mariani</i>	<i>Session Chair: Nicholas Apazidis</i>	<i>Session Chair: Teo Chiang Juay</i>
14:50 - 15:10	Modeling of Mach Reflection in Axisymmetric Flows Ben Shoosmith (OR-15-0471) E. Timofeev	Measurements of Two Dimensional Temperature and H2O Concentration Using Tunable Diode Laser Absorption Tomography in Combustion Flame Jin Yi (OR-23-0223) Peng Dong, Wang Xinping, Wang Jun, Chao Zhai, Yang Jiming	Hydrodynamic Characteristics of Supercavitating Underwater Projectiles Operating at Supersonic Regimes Huang Chuang (OR-18-0079) K. Luo, K. Qin, D. Li, J. Dang	Shock waves generated from combustion in supersonic flows Jiang Zonglin (OR-17-0066) Y. Liu, C. Wang, C. Luo
15:10 - 15:30	Shock Wave Reflection off Wedges with Concave Tips – Influence of Tip Radius Federico Alzamora Previtali (OR-15-0453) H. Kleine, E. Timofeev	Dual-comb spectroscopy in shock tubes: Mid-Infrared microsecond-resolved spectrometer Markus Geiser (OR-23-0303) C. L. Strand, N. Pinkowski, Y. Ding, R. K. Hanson R. Horvath	An Experimental Study on Refracted Shocks and its Interaction with Underwater Bodies Arun Rajagopal (OR-18-0345) J. Gopalan, K. Takayama, G. Rajesh	Computational Modelling for Non-equilibrium Shock Tube Flows Khalil Bensassi (OR-17-0468) C. Jacobs, P. Marriotto, P. Jacobs
15:30 - 15:50	Experiments and GSD simulations of shock focusing behavior Benjamin Katko (OR-15-0470) Heng Liu, William Mellor and Veronica Eliasson	Expansion Fan Spectroscopy of Ionising Super Orbital Flows Rory Kelly (OR-23-0318) David E. Gildfind And Timothy J. McIntyre	Experimental Study on Effect of Microbubble Diameter Attached to Metal Thin Plate on Deformation by Underwater Explosion Forming Taketoshi Koita (OR-18-0439) T. Namihira, M. Matsuda, S. Kobayashi	Dynamic calibration of a stress wave force balance under various supports and loads using finite element analysis Ramesh Babu Pallekonda (OR-20-0292) S. Deka, M. Rahang
15:50 - 16:10	Shock detachment by local choking from curved wedges Sannu Molder (OR-15-0047) Amin Gulamhussein			Kinetics of Zr under shock-ramp wave compression Chong Tao (OR-20-0290) F. L. Tan, G. J. Wang, J. H. Zhao
16:10 - 16:30	Tea Break			