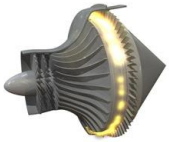

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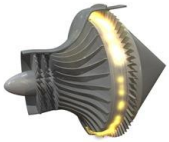
SPECIAL INTERNATIONAL WORKSHOP ON DETONATION FOR PROPULSION 2020

AGENDA

21 October 2020 (Wednesday)

13:00	13:15	15 min	Opening Ceremony Paweł Stężycki, Director of the Łukasiewicz Research Network – Institute of Aviation
13:15	14:00	45 min	Piotr Wolański “Research on Detonative Propulsion in Poland” Łukasiewicz Research Network-Institute of Aviation, Warsaw, Poland
14:00	14:15	15 min	Questions and comments
14:15 - 18:20			Session 1 - Tele presentations, questions and discussion
14:15	15:00	Slot 1.1	Anatoly Vasil’ev “Rotating detonation: History, results, problems” Lavrentyev Institute of Hydrodynamics SB RAS, Novosibirsk, Russia Novosibirsk State University, Russia
15:00	15:15	15 min	Break
15:15	15:45	Slot 1.2	Xin Huang, Taehyun Kim, Po-Hsiung Chang, Jiun-Ming Li, Chiang Juay Teo, Boo Cheong Khoo “Thermal load and wall heat flux characterizations of a pressure gain combustor in long duration tests” National University of Singapore, Singapore
15:45	16:15	Slot 1.3	Jan Kindracki, Stanisław Siatkowski, Borys Łukasik, “Influence of Inlet Flow Parameters on Rotating Detonation”, Warsaw University of Technology, Warsaw, Poland; Lukasiewicz Research Network – Institute of Aviation, Warsaw, Poland
16:15	16:45	Slot 1.4	Ruiqin Shan, Heng Kee Ngiam, Jiun-Ming Li, Chiang Juay Teo, Boo Cheong Khoo, ”Numerical Investigation of Hydrogen-Air Shuttling Transverse Combustion” National University of Singapore, Singapore
16:45	17:00	15 min	Break
17:00	17:20	Slot 1.5	Tae-Hyeong Yi*, Jing Lou**, Cary Kenny Turangan**, Piotr Wolanski*** “Numerical Study of Detonation Process in Rotating Detonation Engine and Its Propulsive Performance” *Pukyong National University, Busan, Republic of Korea **Institute of High Performance Computing, A*STAR, Singapore ***Łukasiewicz Research Network – Institute of Aviation, Warsaw, Poland
17:20	17:50	Slot 1.6	Włodzimierz Balicki et al., ”Development of the gas turbine with detonative combustion chamber” Łukasiewicz Research Network-Institute of Aviation, Warsaw, Poland
17:50	18:20	Slot 1.7	Michal Folusiak, Karol Swiderski “Numerical Modeling of the RDE” Łukasiewicz Research Network-Institute of Aviation, Warsaw, Poland



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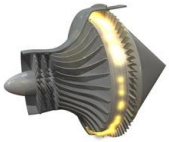
AGENDA

22 October 2020 (Thursday)

13:00 – 18:30			Session 2 - Tele presentations, questions and discussion
13:00	13:30	Slot 2.1	Po-Hsiung Chang, Shao Bo Pei, Xin Huang, Jiun-Ming Li, Chiang Juay Teo, Boo Cheong Khoo “Application of TDLAS Technique to Pre-vaporized Jet A1/Air Pressure Gain Combustion” National University of Singapore, Singapore
13:30	14:00	Slot 2.2	Majie Zhao and Huangwei Zhang, ”Two-dimensional detonation propagation in partially prevaporized n-heptane sprays” National University of Singapore, Singapore
14:00	14:30	Slot 2.3	Qingyang Meng and Huangwei Zhang ”Eulerian-Lagrangian modelling of rotating detonative combustion in partially pre-vaporized n-heptane sprays” National University of Singapore, Singapore College of Power and Energy Engineering, Harbin Engineering University, Harbin, China
14:30	14:45	15 min	Break
14:45	15:15	Slot 2.4	Michał Kawalec et al., ”Development of rocket engines with a detonation combustion chamber” Lukasiewicz Research Network-Institute of Aviation, Warsaw, Poland
15:15	15:45	Slot 2.5	A. Koichi Hayashi*, Makoto Asahara**, Nobuyuki Tsuboi***, Edyta Dzieminska**** “Role of Non-Reacted Pockets in Unstable Detonation” * Aoyama Gakuin University, Japan, ** Gifu University, Japan, ***Kyushu Institute of Technology, Japan, ****Sophia University, Japan
15:45	16:15	Slot 2.6	Takuma Sato, Supraj Prakash, Venkat Raman “Understanding Wave Features in Rotating Detonation Engines” University of Michigan, USA
16:15	16:30	15 min.	Break
16:30	17:00	Slot 2.7	Stanisław Siatkowski, Krzysztof Wacko, Jan Kindracki „Research on the detonation cell size of biogas-oxidizer mixtures in the context of rotating detonation” Warsaw University of Technology, Warsaw, Poland
17:00	17:30	Slot 2.8	Ashish Vashishtha, Dean Callaghan and Cathal Nolan “Numerical Investigation of Detonation Wave Propagation through Small Orifice Holes” Department of Aerospace, Mechanical and Electronic Engineering, Institute of Technology Carlow, Ireland
17:30	18:00	Slot 2.9	Ratiba Zitoun, Pierre Vidal, Vincent Rodriguez “A review of detonation studies applied to propulsion at Institute Pprime" Institute Pprime, UPR3346 CNRS, Fluid, Thermal and Combustion Dpt., ENSMA, Futuroscope-Chasseneuil, France



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AGENDA

23 October 2020 (Friday)

13:00 - 17:45			Session 3 - Tele presentations, questions and discussion
13:00	13:30	Slot 3.1	Nobuyuki Tsuboi “Three-dimensional Numerical Simulation on Deflagration to Detonation Transition in a Tube with Repeated Obstacles: Simulation on Experimental Scale by Artificial Thickening Flame Method” Kyushu Institute of Technology, Japan
13:30	14:00	Slot 3.2	Bing Wang, Haocheng Wen, Qiaofeng Xie “Experimental Study of Perforated-Wall Rotating Detonation Combustors” School of Aerospace Engineering, Tsinghua University, China
14:00	14:30	Slot 3.3	Bing Wang, Haocheng Wen, Qiaofeng Xie “Propagation behavior of rotating detonation in an obround combustor” School of Aerospace Engineering, Tsinghua University, China
14:30	14:45	15 min.	Break
14:45	15:15	Slot 3.4	M. Chang, S. Redhal, J. Burr, and K.H. Yu “Rotating Detonation Engine Research at the University of Maryland” Department of Aerospace Engineering, University of Maryland, College Park, MD 20742, USA
15:15	15:45	Slot 3.5	Zhicheng Wang, Ke Wang, Wei Fan “Effects of the Combustor Structure on Propagation Characteristics of Rotating Detonation Waves Utilizing Liquid Kerosene” School of Power and Energy, Northwestern Polytechnical University, Xi'an, P. R. China
15:45	16:00		Break
16:00	16:30	Slot 3.6	Alexander Feleo, Fabian Chacon, and Mirko Gamba “Evaluation of EAP in a Rotating Detonation Combustor” University of Michigan, Ann Arbor, MI 48109, USA
16:30	17:00	Slot 3.7	Xiang-Yang Liu, Yan-Liang Chen, Zhi-Jie Xia, Jian-Ping Wang “Flow-field Analysis and Pressure Gain Estimation ofRotating Detonation Engine with Kerosene/air Mixture”, College of Engineering, Peking University, Beijing
17:00	17:30	Slot 3.8	Witold Perkowski at al., “Experimental investigation of the continuously rotating detonation in cylindrical chamber for liquid fuels-air mixtures”, Lukasiewicz Research Network-Institute of Aviation, Warsaw, Poland
17:30	17:45		Closing remarks Piotr Wolański