

## OS4: Flow Dynamics and Combustion Technology of Hybrid Rocket Propulsion, 12th Edition

October 28, 2020  
ROOM4 (Zoom Webinar)

- OS4-1      **Entrainment Effect of Liquefying Fuels on Hybrid Rocket Combustion**  
13:30-14:00    Jina Kim, Changjin Lee (Konkuk University, Korea)
- OS4-2      **Accuracy of Reconstruction Techniques for Determination  $O/F$  in Hybrid  
Rockets**  
14:00-14:30    Yuji Saito (Tohoku University, Japan), Landon Kamps, Ayumu Tsuji,  
Harunori Nagata (Hokkaido University, Japan)
- OS4-3      **Numerical Analysis of Internal Flow of Hybrid Rocket Using TCUP Method**  
14:30-15:00    Akito Takeshita, Toru Shimada (Japan Aerospace Exploration Agency,  
Japan)
- OS4-4      **Regenerative Cooling Concept for Thermal Management of Graphite Nozzle  
Throat**  
15:20-15:50    Landon Kamps, Seiji Ito, Harunori Nagata (Hokkaido University, Japan)
- OS4-5      **Development of Experimental System to Measure Heat Transfer  
Characteristics of LOX**  
15:50-16:20    Koki Kitagawa (Kyushu Institute of Technology / Japan Aerospace  
Exploration Agency, Japan), Genya Naka (The University of Tokyo, Japan),  
Toru Shimada (Japan Aerospace Exploration Agency, Japan)
- OS4-6      **Evaluation of Axial Fuel Regression Rate in Hybrid Rocket Fuels Using 3D  
Scanner**  
16:20-16:50    Terutaka Okuda, Landon Kamps, Seiji Ito, Lisa Kageyama, Hanako Ikeda,  
Masashi Wakita, Harunori Nagata (Hokkaido University, Japan)
- OS4-7      **The Fragmentation Test Results for Hybrid Rocket Fuels (Polypropylene)**  
17:10-17:40    Akiyo Takahashi (Nihon University, Japan)
- 17:40-18:10    **Wrap-up**  
Toru Shimada