



Space Frontier Working Group

APRSAF-29, Jakarta, Indonesia

- **Date & Time:** September 19, 2023 @ 9:00 – 15:40 (Jakarta time)
September 20, 2023 @ 9:00 – 15:30 (Jakarta time)

- **Location:** BRIN Headquarters Room “INOVASI”
Gedung BJ Habibie, Jl. M.H. Thamrin No.8, RW.1, Kb. Sirih, Kec. Menteng,
Kota Jakarta Pusat, Daerah Khusus Ibukota Jakarta 10340, Indonesia

- **Co-Chairs:** Dr. Emanuel Sungging (BRIN)
Dr. Masaki Shirakawa (JAXA)

■ Schedule

9/19 (Tue) DAY 1

| Time (Jakarta) | Title | Speaker |
|---|--|---|
| 1. Opening | | |
| 9:00 | Opening Remarks | Dr. Emanuel Sungging (BRIN) Dr. Masaki Shirakawa (JAXA) |
| 2. SFWG Activity Overview | | |
| 9:10 | Activity overview of SFWG and Kibo-ABC initiative in 2022-2023 | Mr. Fumiaki Tanigaki (JAXA) |
| 3. Kibo-ABC activities for STEM education and SDGs contribution in the Asia-Pacific region | | |
| 9:20 | Kibo-RPC Introduction | Mr. Katsura Nagase (JAXA) |
| 9:30 | Introduction of the Kibo-RPC UN team Kibo-RPC - ORION TEAM | Ms. Sofie Aulia Salsabilla (Universitas Negeri Yogyakarta, Indonesia) |
| 9:40 | Asian Try Zero-G Introduction | Ms. Yayoi Miyagawa Mr. Kyoichi Arakane (JAXA) |
| 9:55 | Asian Harb in Space Introduction | Mr. Kyoichi Arakane (JAXA) |

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| 10:10 | Break (10 min) |
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| 4. Country/Region Report - Space program and ISS utilization activity - #1 | | |
| 10:20 | Australia | Ms. Tori Tasker (ASA) @ 12:50 (ACST), 13:20 (AEST) |
| 10:30 | Bangladesh | Ms. Saba Chowdhury @ 23:26 (EDT) |
| 10:40 | Indonesia | Dr. Emanuel Sungging (BRIN) |
| 10:50 | Japan | Dr. Masaki Shirakawa (JAXA) |
| 5. Opportunities for launch and deployment of microsatellites from Kibo/J-SSOD | | |
| 11:00 | Introduction and activity overview of the CubeSat program in JAXA | Dr. Izumi Yoshizaki (JAXA) @ 13:00 (JST) |



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| 11:15 | KiboCUBE; Opportunities under the United Nations “Access to Space for All initiative” | Ms. Hazuki Mori (UNOOSA) |
| 11:25 | Indonesia Surya Satellite-1 (Kibo-CUBE) | Mr. Afiq Herdika Sulistya (Indonesia) |
| 11:35 | Introduction of J-CUBE program | Mr. Tatsuhito Fujita (JAXA) @ 13:35 (JST) |
| 11:45 | International Collaborations based on University-Oriented Micro/Nano-satellites | Mr. Tetsuhito Fuse (Kyutech, Japan) |
| 11:55 | J-SSOD services introduction | Mr. Yosuke Hoshino (SpaceBD, Japan) @ 13:55 (JST) |
| 12:05 | Satellite One Stop Service with J-SSOD | Mr. Tsuyoshi Tenda (MBA, Japan) @ 14:05 (JST) |

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| 12:15 | Lunch Break (1 hour 15 min) | |
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6. Experimental equipment on Kibo’s Exposed Facility

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| 13:30 | Introduction of i-SEEP/ SPySE/ ExBAS | Mr. Yuichiro Yamada (SpaceBD) @15:30 (JST) |
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7. Microgravity science experiments using Kibo’s Pressurized Module and other opportunities

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| 13:45 | Science and Education Portfolio for UAE Long-Duration Astronaut Mission 2023 | Ms. Fatma Lootah (MBRSC, UAE) @ 10:45 (GST) |
| 14:00 | Introduction of the JAXA PCG project - Space Protein Crystallization Experiments for Health | Mr. Masato Akutsu (JAXA) @ 16:00 (JST) |
| 14:15 | Introduction of ISS Utilization Business focusing on Protein Crystal Growth Experimental Service | Mr. Tomohiro Kawano (SpaceBD, Japan) @ 16:15 (JST) |
| 14:25 | Nanoparticle - Seeded crystallization in microgravity of furin protein. | Ms. Salma Syed (Khalifa University, UAE) |
| 14:35 | Break (10 min) | |
| 14:45 | Space experiment using Electrostatic Levitation Furnace in International Space Station (ISS-ELF) | Dr. Rina Shimonishi (JAXA) @ 16:45 (JST) |
| 15:00 | Asian Kibo Utilization - Asian Try Zero-G - From the Perspective of Payload Flight Controller | Mr. So Uezu (JAMSS, Japan) |
| 15:10 | A Trial Run of Passive Radiation Monitoring using Fabricated Germanium-doped Silica Optical Fibres Personal Dosimeter Badge (SOFPeD) among Astronauts In ISS | Dr. Noramaliza Binti Mohd Noor (Universiti Putra Malaysia) @ 16:10 (MYT) |
| 15:20 | Cell Ark for Space Travel | Prof. Lance Chang (China Medical University, Taiwan) @ 16:25 (CST) |



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| 8. Closing Remarks | | |
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| 15:30 | Closing Remarks | Co-Chairs: Dr. Emanuel Sungging (BRIN) Masaki Shirakawa (JAXA) |

15:40 Adjourn

9/20 (Wed) DAY 2

| Time (Jakarta) | Title | Speaker |
|---|---|--|
| 1. Opening | | |
| 9:00 | Opening Remarks | Co-Chairs: Dr. Emanuel Sungging (BRIN) Dr. Masaki Shirakawa (JAXA) |
| 2. ISS as a technical demonstration platform for Lunar and Mars exploration missions | | |
| 9:10 | Kibo Rodent Missions: Zero-G and Moon-G | Dr. Dai Shiba (JAXA) @11:10 (JST) |
| 9:25 | Understanding the roles of mechanosensitive ion channels and proteins in microgravity | Prof. Narattaphol Charoenphandhu (Mahidol University, Thailand) |
| 9:40 | Break (15 min) | |
| 3. Country/Region Report - Space program and ISS utilization activity - #2 | | |
| 10:00 | Nepal | Mr. Dhruba Adhikary (NESARC) @ 8:45 (NPT) |
| 10:20 | Philippines | Dr. Dominic P. Guana (PhilSA) |
| 10:30 | Singapore | Ms. Gillian Chin (SSTL) |
| 10:40 | Taiwan | Ms. Chao-Ming(Judy) Liu (TASA) |
| 10:50 | Thailand | Ms. Raksina Lekthanoo (GISTDA) |
| 11:00 | UAE | TBA (UAESA) |
| 11:10 | Vietnam | TBA |
| 4. New Project to drive forward | | |
| 11:20 | Summary of Kibo-ABC discussion | Mr. Fumiaki Tanigaki (JAXA) |

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| 11:40 | Lunch Break (1 hour 40 min) | |
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| 5. Status of International Space Exploration Moderator: Fuki Taniguchi (JAXA) | | |
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| 13:00 | JAXA Space Exploration Activities | Mr. Kota Tanabe (JAXA) @15:00 (JST) |
| 13:15 | ISRO Space Exploration Activities | Dr. Shyama Narendranath (ISRO) |
| 13:30 | Korea's Space Exploration Activities and Strategies | Dr. Yee Jin Cheon (KARI) |
| 13:45 | Towards Indonesian Space Programs and Explorations | Dr. Yazdi Ibrahim Jenie (BRIN/ITB) |



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| 14:00 | Round Table | All panelists |
| 14:30 | Q&A | All panelists |
| 14:40 | Break (10 min) | |
| 6. Summary | | |
| 14:50 | Statement Coordination and Wrap up | Secretariat |
| 7. Closing Remarks | | |
| 15:20 | Closing Remarks | Co-Chairs: Dr. Emanuel Sungging (BRIN) Dr. Masaki Shirakawa (JAXA) |

15:30 Adjourn