

# *July 5, Sunday    30th ISTS, 34th IEPC & 6th NSAT    Final Technical Program Overview*

**Student Session**

Room	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	Other Events
<b>3F Lobby</b>							14:00 - 17:00 Registration Start						
<b>Exhibition Hall</b>			International Space Exhibition (10:00 - 17:00) Place : Exhibition Hall No.2									Exhibition	

# July 6, Monday 30th ISTS, 34th IEPC & 6th NSAT Final Technical Program Overview

Student Session 

Room	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	Other Events
<b>Kobe International Conference Center ASTROSCALE Main Hall</b>	9:00 Opening Ceremony	10:00 Keynote Speech	10:50 World Space Highlight 1	12:30		14:30 World Space Highlight 2				18:10	18:30 - 20:30 Welcome Reception Place : Portopia Hotel South Wing 1F "Ohwada"		
<b>Exhibition Hall</b>			International Space Exhibition (10:00 - 17:00) Place : Exhibition Hall No.2										Exhibition

# July 7, Tuesday 30th ISTS, 34th IEPC & 6th NSAT Final Technical Program Overview

## Student Session

Room	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	Other Events
<b>Kobe International Conference Center ASTROSCALE Main Hall</b>	8:30 8:45 IEPC Opening	9:00 b-1-1 World EP activities	10:40	11:00 b-2-1 Overview of R&D activities	12:20	13:40 14:40 Plenary Session: World Space Highlight 3	15:00 b-3-1 EP Research Laboratories' Report	16:40	17:00 b-4-1 Ion Thruster Research Overview (1)	18:20	19:00 Cultural Night	21:00	
<b>Portopia Hotel</b>		9:00 b-1-2 Demonstration Missions with EP	10:00	11:00 b-2-2 Near-Earth Missions with EP	13:00		15:00 b-3-2 Interplanetary Flight by EP	16:40	17:00 b-4-2 Orbital Transfer with EP	18:20			
<b>Main Building "Nunobiki"</b>		9:00 b-1-3 Hall Thruster Diagnostics	10:00	11:00 b-2-3 Hall Thruster New Ideas	12:00		15:00 b-3-3 Hall Thruster Plume Interaction	16:40	17:00 b-4-3 Low Power Hall Thruster	18:40			
<b>Main Building "Kitano"</b>		9:00 b-1-4 Cathode Modelling & Simulation	10:20	11:00 b-2-4 LaB6 Cathode	12:40		15:00 b-3-4 Cathode Plume (1)	16:20	17:00 b-4-4 Cathode Plume (2)	18:40			
<b>Main Building "Kikusui"</b>		9:00 b-1-5 Pulse Plasma Thruster Research Overview	10:20	11:00 b-2-5 Pulse Plasma Thruster Performance	12:40		15:00 b-3-5 Pulse Plasma Thruster Physics (1)	16:40	17:00 b-4-5 Pulse Plasma Thruster Physics (2)	18:20			
<b>Main Building "Waraku"</b>		9:00 b-1-6 Nuclear Powered Propulsion	10:20	11:00 b-2-6 Micro-cathode/Vacuum Arc Thrusters	12:40		15:00 b-3-6 Advanced Propulsion Concept (1)	16:00	17:00 b-4-6 Advanced Propulsion Concept (2)	18:40			
<b>Meeting Room 501</b>	8:40	d-1 Attitude Control of Spacecraft (1)	10:40	11:00 d-2 Attitude Control of Spacecraft (2)	12:40		15:00 d-3 Motion Estimation of Spacecraft	16:20	17:00 d-4 Mission System Design	18:20			
<b>Meeting Room 502</b>		9:00 q-1 Space Power Systems (1)	10:30	11:00 q-2 Space Power Systems (2)	12:40		15:00 q-3 Space Power Systems (3)	16:40	17:00 q-4 Space Power Systems (4)	18:40			
<b>Meeting Room 503</b>		9:00 e-1 Aerodynamics of Atomospheric Entry Systems (1)	10:40	11:00 e-2 Aerodynamics of Atomospheric Entry Systems (2)	12:20		15:00 e-3 Aerodynamics of Atomospheric Entry Systems (3)	16:20	17:00 e-4 Plasma Flows	18:20			8:30 - 17:00 Social Tour No. 1 Rokko & Arima Day-Time Tour
<b>Meeting Room 504</b>		9:00 o-2-1 Launch Vehicle Acoustics (1)	10:40	11:00 o-2-2 Launch Vehicle Acoustics (2)	12:40		15:00 o-2-3 Launch Vehicle Acoustics (3)	16:40					
<b>Meeting Room 505</b>		9:00 r-1 Observation	10:40	11:00 r-2 Rotation, In-situ measurement	12:40		15:00 r-3 Modelling	16:40	17:00 r-4 Protection	18:40			
<b>Meeting Room 401</b>		9:00 g-1 Space Transportation System Concept	10:40	11:00 g-2 Epsilon Launch Vehicle (1)	12:40		15:00 g-3 Epsilon Launch Vehicle (2)	16:40	17:00 g-4 Epsilon Launch Vehicle (3) & RBCC TSTO (1)	18:40			
<b>Meeting Room 402</b>		9:00 k-1 Near Earth Missions and Technologies (1) : Balloons to LEO	10:20	11:00 Panel 1 Human Voyage: Exploring Our Body and Outer World	12:40		15:00 k-2 Near Earth Missions and Technologies (2) : LEO to the Lagrange Points	16:25	17:00 k-3 From the Lagrange Points to Outer Planets	18:40			
<b>Meeting Room 403</b>		9:00 a-1 Solid Rocket (1)	10:40	11:00 a-2 Solid Rocket (2)	12:40		15:00 a-3 Hybrid Rocket (1)	16:40	17:00 a-4 Hybrid Rocket (2)	18:40			
<b>Meeting Room 404</b>		9:00 v-1 International Law, Policy and Cooperation in Space Utilization (1)	10:30	11:00 v-2 International Law, Policy and Cooperation in Space Utilization (2)	12:15		15:00 p-1 Space Medicine and Physiology (1)	16:40	17:00 p-2 Space Medicine and Physiology (2)	18:20			
<b>Meeting Room 405</b>													
<b>Meeting Room 406</b>		9:40 h-1 Plasma, Colloid, and Emulsion	10:20	11:00 h-2 Crystal Growth, Fluid, and Thermophysical Properties	12:20		15:00 h-3 Future Plans and Facilities	16:20	17:00 h-4 Combustion	18:40			
<b>International Conference Room 301</b>		9:00 f-1 Small Satellite Systems (1)	10:20	11:00 f-2 Small Satellite Systems (2)	12:40		15:00 f-3 Small Satellite Projects (1)	16:40	17:00 f-4 Small Satellite Projects (2)	18:40			
<b>Exhibition Hall</b>		International Space Exhibition (10:00 - 17:00) Place : Exhibition Hall No.2										Exhibition	

July 8, Wednesday 30th ISTS, 34th IEPC & 6th NSAT Final Technical Program Overview

Student Session

Room	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	Other Events		
<b>Kobe International Conference Center ASTROSCALE Main Hall</b>	9:00	b-5-1 Thrusters for Microsatellites: FEFP & Colloid Thrusters	10:40	11:00	b-6-1 Thrusters for Microsatellites: Electro Spray Thruster (1)	12:20	13:00	14:50	15:00	b-7-1 Thrusters for Microsatellites: Electro Spray Thruster (2)	16:20	17:00	b-8-1 Thrusters for Microsatellites: Pulse Plasma Thruster	18:20	
<b>Main Building "Ikuta"</b>	9:00	b-5-2 Hall Thruster Characterization (1)	10:40	11:00	b-6-2 Hall Thruster Characterization (2)	12:40			15:00	b-7-2 Hall Thruster Characterization (3)	16:20	17:00	b-8-2 Hall Thruster Characterization (4)	19:00	
<b>Main Building "Nunobiki"</b>	9:00	b-5-3 Ion Thruster Research Overview (2)	10:40	11:00	b-6-3 Ion Thruster Interactions	13:00			15:00	b-7-3 Ion Thruster Grid System (1)	16:20	17:00	b-8-3 Ion Thruster Grid System (2)	19:00	
<b>Main Building "Kitano"</b>	9:00	b-5-4 Measurement in Cathode	10:20	11:00	b-6-4 Cathode Development (1)	12:20			15:00	b-7-4 Cathode Development (2)	16:40	17:00	b-8-4 Propellant and Power Controllers	18:20	
<b>Main Building "Kikusui"</b>	9:00	b-5-5 Pulse Plasma Thruster Propellant	10:20	11:00	b-6-5 Applied Field MPD Thruster	12:40			15:00	b-7-5 MPD Thruster	16:40	17:00	b-8-5 Electrothermal Thruster	19:00	
<b>Main Building "Waraku"</b>	9:00	b-5-6 Propulsion Powered by Onboard Lasers	10:40	11:00	b-6-6 Energy Beaming Propulsion	12:40			15:00	b-7-6 Numerical Simulation Method	16:00	17:00	b-8-6 Diagnostics	18:40	
<b>Meeting Room 501</b>	9:00	d-5 Spacecraft Dynamics	10:40	11:00	d-6 Near Asteroid Dynamics	12:20			15:00	d-7 Orbit around Lagrange Point	16:40	17:00	d-8 Simulator Design, Calibration, and Design Concept	18:40	
<b>Meeting Room 502</b>	9:00	j-1 Satellite Navigation and Geodesy	10:40	11:00	j-2 Broadcast and Communication Systems	12:40			15:00	j-3 Experimental Results	16:20	17:00	j-4 Advanced Technologies for space communications	18:40	
<b>Meeting Room 503</b>	9:00	o-6-1 Space Port (1)	10:40	11:00	o-6-2 Space Port (2)	12:40			15:00	e-7 Advanced Flow Physics (1)	16:40	17:00	e-8 Advanced Flow Physics (2)	18:20	19:30 - 21:30 Technical Tour No.1 Exchange Meeting at Kobe Univ. (Student Only)
<b>Meeting Room 504</b>	9:00	o-4-1 Remote Sensing & Geographical Information System (1)	10:20	11:00	o-4-2 Remote Sensing & Geographical Information System (2)	12:40	Poster Session Exhibition Hall No.2		15:00	Panel 2 Space Technology and Disaster Management	16:40	17:00	n-1 SAR & Remote Sensing Applications (1)	18:20	19:30 - 21:30 IEPC Banquets (IEPC Participant Only) Portopia Hotel South Wing 1F "Ohwada"
<b>Meeting Room 505</b>	9:00	r-5 Protection, Mitigation, Economics	10:20	11:00	r-6 Active Debris Removal (1)	12:40			15:00	r-7 Active Debris Removal (2)	16:40	17:00	r-8 Active Debris Removal (3)	18:40	
<b>Meeting Room 401</b>		9:40	g-5 RBCC TSTO (2)	10:40	11:00	g-6 Technology for Future Space Transportation System	12:20		15:00	g-7 Experiment and Demonstration for Space Transportation System	16:40	17:00	o-3 Next Flagship Launch System	18:15	
<b>Meeting Room 402</b>	9:00	k-4 Mercury and Moon (1) - Science and Instrumentation	10:40	11:00	k-5 Moon (2) - Surface Exploration and Utilization-1	12:40			15:00	k-6 Moon (3) - Utilization-2 and UZUME-1	16:40	17:00	k-7 Moon (4) - UZUME-2 and volcano tubes	18:40	
<b>Meeting Room 403</b>	9:00	a-5 Hybrid Rocket (3)	10:40	11:00	a-6 Detonation Engine (1)	12:20			15:00	a-7 Detonation Engine (2)	16:40	17:00	a-8 Cryogenic Fuel	18:40	
<b>Meeting Room 404</b>															
<b>Meeting Room 405</b>	9:00	e-5 Rarefied Aerodynamics / Thermal Protection Systems (1)	10:40	11:00	e-6 Thermal Protection Systems (2)	12:40									
<b>Meeting Room 406</b>	9:00	c-1 Material Degradation and Lubrication	10:40	11:00	c-2 Material Synthesis and Treatment	12:20			15:00	c-3 Design and Fabrication	16:40	17:00	c-4 Small Satellites	18:20	
<b>International Conference Room 301</b>	9:00	f-5 Small Satellite Projects (3)	10:40	11:00	f-6 Small Satellite Concepts	13:00			15:00	f-7 Small Satellite Launch, Orbit and Attitude Control (1)	16:20	17:00	f-8 Small Satellite Launch, Orbit and Attitude Control (2)	18:00	
<b>Exhibition Hall</b>					Poster Session (13:00-14:50) / International Space Exhibition (10:00 - 16:00) Place : Exhibition Hall No.2										Exhibition



# July 10, Friday 30th ISTS, 34th IEPC & 6th NSAT Final Technical Program Overview

## Student Session

Room	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	Other Events
Kobe International Conference Center ASTROSCALE Main Hall		9:00 b-13-1 Plenary Session "Hayabusa"	10:30	11:00 b-14-1 Thrusters for Microsatellites: Advanced Concept	12:20	14:00 b-15-1 Miniatured Propellant Feed System	15:40	16:00 b-16-1 Thrusters for Microsatellites: System Analysis	17:20	18:30	20:30		
Main Building "Ikuta"				11:00 b-14-2 Hall Thruster Near-Wall Physics	12:40	14:00 b-15-2 Hall Thruster Electron Transport (1)	15:40	16:00 b-16-2 Hall Thruster Electron Transport (2)	18:00				
Main Building "Nunobiki"				11:00 b-14-3 HEMP Thruster Qualification	12:20	14:00 b-15-3 Cusped Field Thruster (1)	15:40	16:00 b-16-3 Cusped Field Thruster (2)	17:40				
Main Building "Kitano"				11:00 b-14-4 Spectroscopic Measurement	12:40	14:00 b-15-4 Ion Thruster Advanced Concept	15:20	16:00 b-16-4 Ion Thruster Simulation	17:20				
Main Building "Kikusui"				11:00 b-14-5 Magnetic Nozzle for Plasma Thruster	13:00	14:00 b-15-5 Helicon Thruster Performance (1)	15:40	16:00 b-16-5 Helicon Thruster Performance (2)	17:20				
Main Building "Waraku"				11:00 b-14-6 Test Facility Effect	12:20	14:00 b-15-6 EP Test Facility	15:20	16:00 b-16-6 Thruster Plume Modeling & Diagnostics	18:00				
Meeting Room 501	8:40	d-13 Orbit Determination and Modelling	10:40	11:00 d-14 Formation Flying	12:20	14:00 Spacecraft Control System Design Contest	16:00						
Meeting Room 502	9:00	e-13 Advanced Flow Physics (4)	10:40	11:00 e-14 Advanced Flow Physics (5)	12:00	14:00 Panel 3 Space Innovations and Applications	15:40						
Meeting Room 503	9:00	w-1 Safety and Mission Assurance (1)	10:40	11:20 w-2 Safety and Mission Assurance (2)	12:40	14:00 w-3 Safety and Mission Assurance (3)	15:40						
Meeting Room 504	9:00	n-6 GCOM-C, EarthCARE & Earth Observations (2)	10:40	11:00 n-7 GCOM-W & Ocean Remote Sensing (1)	12:40	14:00 n-8 GCOM-W & Ocean Remote Sensing (2)	15:20	16:00 n-9 GOSAT series & Earth Observations	17:40				
Meeting Room 505	9:00	r-13 Materials characterization, Charging simulation	10:20	11:00 i-1 Thermal Control Hardware (1)	12:40	14:00 i-2 Thermal Control Hardware (2)	15:00	16:00 i-3 Spacecraft Thermal Control	17:40				
Meeting Room 401	9:00	t-2 Systems Approach to management and ilities	10:20	11:00 t-3 Control and Dynamic System	12:20	14:00 t-4 System Concept Development and SE Education	15:40	16:00 t-5 Communication and Power System	17:20				
Meeting Room 402	9:40	k-12 Mars (5) - Robotics and Human Missions	10:40	11:00 k-13 Small Bodies (1) - Hayabusa-2	12:40	14:00 k-14 Small Bodies (2) - Hayabusa-2 & MASCOT and Asteroid Science	15:40	16:00 k-15 Small Bodies (3) - Mission Design and Enabling Technologies	17:20				
Meeting Room 403	9:00	a-13 RAM and SCRAM Jet	10:40	11:00 a-14 Thruster and Propellants (1)	12:40	14:00 a-15 Thruster and Propellants (2)	15:40	16:00 a-16 Thruster and Propellants (3)	17:20				
Meeting Room 404				11:00 u-1 Space Education and Outreach for Students	12:30	14:00 u-2 Space Tourism and Culture	15:40	16:00 u-3 Capacity Building	17:40				
Meeting Room 405													
Meeting Room 406	9:00	c-9 Sensing and Measuring	10:40	11:00 c-10 Ground and In-Orbit Experiments	12:40	14:00 c-11 Thermal Deformation and Design	15:00						
International Conference Room 301	9:00	f-13 Small Satellite Thermal and Structure System	10:20	11:00 f-14 Small Satellite On-orbit Contrl and Equipment	12:40	14:00 f-15 Small Satellite Sensors and Equipment	15:40	16:00 f-16 Small Satellite Communication System	17:20				
Exhibition Hall													

18:30 - 20:30  
Commendation & Closing  
Ceremony  
Place : Portopia Hotel Main  
Building B1 "Kairaku"

13:00 - 18:00  
Technical Tour  
No.4  
Mitsubishi  
Electric &  
Sumitomo  
Precision  
Products