HAYABUSA2024 Symposium

12-15 Nov 2024, 2F Conference Hall, ISAS/JAXA, Sagamihara, Japan v.20241112

JST(GMT+9h)		Day1 (Nov 12)		On-line
09:00 -				
09:30 - 09:45				
09:45 - 10:00				
10:00 - 10:15		Registration Open		
10:15 - 10:30				
10:30 - 10:45				
10:45 - 11:15	S11-1	Opening (11:00~)	*T. Okada*	
		Chair: T. Yada		
11:15 - 11:30	S12-1	Status of JAXA Curation: From Hayabusa 1/2, OSIRIS-REx to MMX	T. Usui	
11:30 - 11:45	S12-2	Non-destructive observation of bulk Bennu samples in JAXA without atmospheric exposure	R. Fukai	
11:45 - 12:00	S12-3	Current Status of Martian Moons eXploration (MMX) Contamination Control and Curation Activity	H. Sugahara	
12:00 - 12:15	S12-4	The first year of Bennu samples on Earth for OSIRIS-REx curation	N. Lunning [invited]	
12:15 - 12:30	S12-5	The future National Curation Center for Extraterrestrial Matter and Returned Samples (CNME) in Paris, France.	C. Engrand [invited]	
12:30 - 13:30		Lunch		
13:30 - 14:30		Poster		
		(Lab Tour)		
		Chair: T. Usui		
14:30 - 14:45	S13-1	Canadian Bennu Curation Facility, the First Extraterrestrial Sample Curation Facility in Canada	C.-E. Morriset	
14:45 - 15:00	S13-2	The advancement of cleaning procedures for the curation of the Bennu sample at the Canadian Space Agency	P. Hill	
15:00 - 15:15	S13-3	What we learned from asteroid Ryugu samples	S. Tachibana [invited]	
15:15 - 15:30	S13-4	The Nature of Asteroids (101955) Bennu and (162173) Ryugu from the Analysis of Samples Delivered to Earth by OSIRIS-REx and Hayabusa2	H. Connolly [invited]	
15:30 - 15:45	S13-5	The nature of organic matter in samples from the carbonaceous asteroid Bennu	D. Glavin [invited]	
15:45 - 16:15		Coffee Break		
		Chair: Y. Furukawa		
16:15 - 16:30	S14-1	The fine structure of Ryugu organic matter unraveled by high spatial resolution monochromated electron energy loss spectroscopy	C. Vollmer	
16:30 - 16:45	S14-2	Aqueous Alteration Fingerprints in the Molecular Complexity of Carbonaceous Chondrites and Ryugu	F.-R. Orthous-Daunay	
16:45 - 17:00	S14-3	Identification of bio-essential sugars in samples returned from asteroid Bennu	Y. Furukawa	
17:00 - 17:15	S14-4	Detection of Purine and Pyrimidine Nucleobases in the Ryugu Sample	T. Koga [invited]	
17:15 - 17:30	S14-5	Large Polycyclic Aromatic Hydrocarbons in Ryugu Samples C0083 and A00145	H. Sabbah	*

JST(GMT+9h)		Day2 (Nov 13)		On-line
09:00 -		Registration		
		Chair: T. Yokoyama		
09:30 - 09:45	S21-1	Introduction to Ryugu Reference Project	T. Yokoyama	
09:45 - 10:00	S21-2	Ryugu Samples: Promising Potential Proxies For Solar System Elemental Abundances	K. Lodders [invited]	*
10:00 - 10:15	S21-3	Noble gases in gas and solid samples from Ryugu: Preliminary results and potential research perspectives for the Ryugu Reference Project	G. Avice	
10:15 - 10:30	S21-4	Small-scale elemental abundance variations in Ryugu grains from touchdown 1	K. Lopez Garcia	
10:30 - 10:45	S21-5	HAMP (Hydrated Ammonium-Magnesium-Phosphorous-rich) grains in Ryugu samples with major biochemical potential	J.-P. Bibring	*
10:45 - 11:15		Coffee Break		
		Chair: H. Connolly		
11:15 - 11:30	S22-1	Small-scale Cr-Ti isotopic heterogeneity in Ryugu samples induced by aqueous alteration	T. Yokoyama	
11:30 - 11:45	S22-2	53Mn-53Cr ages of dolomite in Ryugu samples and the thermal history of the Ryugu parent body	W. Fujiya	
11:45 - 12:00	S22-3	Comparison of Oxygen Isotopic Compositions and Mineralogical Characteristics of Carbonates in Ryugu Samples	K. Tsutsui	
12:00 - 12:15	S22-4	~~Moderately volatile element variations among asteroid Ryugu and CI chondrites~~ (canceled)	T. Kleine	
12:15 - 12:30	S22-5	Carbon chemistry of a Bennu sample	Z. Gainsforth	
12:30 - 13:30		Group photo		
		Lunch		
13:30 - 14:30		Poster (Core time)		
		Chair: H. Sugahara		
14:30 - 14:45	S23-1	Evolution of the isotope signature of the Insoluble Organic Matter of the Orgueil meteorite under reducing conditions: comparison with the IOM of Ryugu samples.	L. Remusat	
14:45 - 15:00	S23-2	Coevolution of insoluble organic matter and silicates on the parent body of carbonaceous chondrites driven by cosmo-electrochemistry	Y. Li	
15:00 - 15:15	S23-3	First characterizations of Bennu samples by the NIR hyperspectral microscope MicrOmega at the ISAS Curation Center and comparison with Ryugu samples	C. Pilorget	
15:15 - 15:30	S23-4	NIR spectral heterogeneity of Ryugu samples due to space weathering. ~ Only natural evidence of short timescale space weathering by solar UV radiation ~	S. Furukawa	
15:30 - 15:45	S23-5	Molecular dynamics simulation for dehydration of phyllosilicate of Ryugu	D. Shoji	*
15:45 - 16:15		Coffee Break		
		Chair: M. Abe		
16:15 - 16:30	S24-1	Mechanical properties of asteroids from surface morphological analysis	A. Lucchetti [invited]	*
16:30 - 16:45	S24-2	Spectral evolution of Ryugu and Bennu inferred from variations in visible spectra of returned samples	K. Yumoto [invited]	*
16:45 - 17:00	S24-3	Morphological and Spectroscopic effect of space weathering on a C-type asteroid, documented by the microcraters on a Ryugu Grain A0112	A. Van den Neucker	*
17:00 - 17:15	S24-4	Effects of porosity and space-weathering on the spectro-photometric properties of primitive dark asteroid surfaces	A. Wargnier	*
17:15 - 17:30	S24-5	Innovative Sample Handling for Surface Analysis of Ryugu: A Focus on Space Weathering	M. Angrisani	*

JST(GMT+9h)		Day3 (Nov 14)		On-line
09:00 -		Registration		
		Chair: M. Zolensky		
09:30 - 09:45	S31-1	Carbon-bearing Grains of Asteroids to Form Organic Life Systems on Active Water-Planet Earth	Y. Miura	*
09:45 - 10:00	S31-2	Sulfur isotopic anomaly in a Ryugu sulfate	M. Bose	*
10:00 - 10:15	S31-3	P, S, and K as Tracers of Aqueous Processing on Ryugu	G. Flynn	*
10:15 - 10:30	S31-4	Trace Oxygen Measurements of Asteroid Sample Storage Desiccators	M. Montoya	
10:30 - 10:45	S31-5	Fine Particles and their origin in the Hayabusa2 clean chamber of the Extraterrestrial Sample Curation Center at JAXA	Y. Enokido	
10:45 - 11:15		Coffee Break		
		Chair: Y. Enokido		
11:15 - 11:30	S32-1	Terrestrial Alteration and Contamination on Previously Allocated Ryugu Samples	R. Kanemaru	
11:30 - 11:45	S32-2	The terrestrial weathering processes of Ryugu grains	M. Miyahara	*
11:45 - 12:00	S32-3	Analysis of Ryugu Fluid Inclusions: An Update	M. Zolensky	
12:00 - 12:15	S32-4	The Mineralogy of Asteroid Bennu from X-ray Diffraction Analysis	A, King	*
12:15 - 12:30	S32-5	Constraining the Temperature-pH Space of Aqueous Fluids on Bennu's Parent Asteroid Based on the Major Mineralogy of the OSIRIS-REx Returned Samples	V. Manga	
12:30 - 13:30		Lunch		
13:30 - 14:30		Poster		
		(Lab Tour)		
		Chair: R. Kanemaru		
14:30 - 14:45	S33-1	Shock metamorphic effects in the Ryugu carbonates	E. Dobrica	
14:45 - 15:00	S33-2	Why is the asteroid Ryugu darker than CI chondrites? - Consideration based on heating experiments of CI chondrites	S. Ishida	
15:00 - 15:15	S33-3	Io Sample Return: A Critical Missing Link in Planetary Science	R. Ogliore	
15:15 - 15:30	S33-4	Thermophysical Properties of Aseroid Bolders in Hayabusa2, Hera, and Future Missions	T. Okada	
15:30 - 15:45	S33-5	The Next Generation small body Sample Return mission: a concept study of a comet sample return	Y. Shimaki [invited]	
15:45 - 16:15		Coffee Break		
		Chair: T. Okada		
16:15 - 16:30	S34-1	Could Some of the Existing Asteroid Taxonomic Classes be Explained as Space Weathered Samples of Other Classes?	X.-D. Zou	
16:30 - 16:45	S34-2	Exploring the diversity of near-Earth asteroids: what's next?	D. Perna	
16:45 - 17:00	S34-3	Ground-based characterization of (98943) 2001 CC21, the target of Hayabusa2# space mission	M. Popescu	*
17:00 - 17:15	S34-4	Asteroidal Treasure Hunt: Probing Prebiotic precursors in C-Type Asteroids	O. Prieto-Ballesteros	*
17:15 - 17:30	S34-5	Small body missions: report on the ESA Hera mission launch and ESA RAMSES	P. Michel [invited]	*
18:00 - 20:00		Banquet		

JST(GMT+9h)		Day4 (Nov 15)		On-line
09:00 -		Registration		
		Chair: O. Barnouin		*
09:30 - 09:45	S41-1	Primordial Rock Aggregates of Asteroids to Active Water-Planet Earth	Y. Miura	*
09:45 - 10:00	S41-2	Updates on the Search for Dirac Magnetic Monopoles within Returned Ryugu Samples	J. Kirschvink	
10:00 - 10:15	S41-3	Bridging the gap between the physical properties of asteroids inferred from remote sensing, surface interactions and samples retrieved	O. Barmouin	*
10:15 - 10:30	S41-4	Thermal Analysis of Rolling Boulders on Asteroid Ryugu	M. Kanamaru	
10:30 - 10:45	S41-5	Linking physical and thermal analysis of Bennu samples to remote observations by OSIRIS-REx	R. Ballouz [invited]	*
10:45 - 11:15		Coffee Break		
		Chair: T. Ishizaki		
11:15 - 11:30	S42-1	Planning and Implementation of Data Archiving for Sample Return Missions: Lessons Learned from OSIRIS-REx	P. Haenecour [invited]	*
11:30 - 11:45	S42-2	Enhancing Visibility of Hayabusa2 mission data	E. Tatsumi	
11:45 - 12:00	S42-3	Machine Learning Data Analyses for Asteroid and Micrometeorite Samples: Correlating Features of Asteroid Ryugu and Unmelted Micrometeorites	L. Pinault	
12:00 - 12:15	S42-4	Chondrule-like objects in Ryugu: Evidence for accretion of Ryugu in the vicinity of the Outer Solar System chondrule factory	M. Genge	
12:15 - 12:30	S42-5	Publication strategy for a sample return mission: Takeaways from OSIRIS-REx	C. Wolner [invited]	
12:30 - 13:30		Lunch		
13:30 - 14:30		Poster		
	S42-E	Societal Engagement and Impact with Sample Return Missions (on-site only)	T. Heenatigala	
		Chair: R. Fukai		
14:30 - 14:45	S43-1	Noble gases of 4 aggregate samples allocated as the 4th AO Ryugu samples collected by the Hayabusa2 spacecraft	K. Nagao	
14:45 - 15:00	S43-2	Noble gases in a single grain from Ryugu: Investigating the origin of gas-rich asteroidal material	B. Marty	
15:00 - 15:15	S43-3	Meteorite-asteroid connections and some lessons from Hayabusa2	P. Beck [invited]	*
15:15 - 15:30	S43-4	Fireball observations in relation to the asteroid-meteorite connection	P. Jenniskens [invited]	
15:30 - 15:45	S43-5	Fourier-Transform Infrared Spectroscopy Analysis of Ryugu to Explore its Link to Micrometeorites	M. Van Ginneken	*
15:45 - 16:15	S44-1	Closing Remarks	*T. Usui*	
16:15 -		Group photo		

Poster Session

	Title	Name
P-1	In-situ Resource Utilization (ISRU) of Asteroid Materials – Concepts and Challenges	Dennis Harries
P-2	Preparation of Ryugu Aggregate Samples for SIMS Oxygen Isotope Analysis	Noriko T. Kita
P-3	Distribution of U, Th and Pb in Ryugu rocks – preliminary results of a SIMS study	Keewook Yi
P-4	Labile organic molecules detected from a Ryugu A0535 grain	Yukako Matsumoto
P-5	Consideration of the interlayer spacing of saponite in Ryugu samples observed under transmission electron microscopy	Takashi Mikouchi
P-6	Speciation of Divalent Transition Metal Ions in Ryugu Samples: Implications for Elemental Solubility in Sulfide-Dominated Ancient Oceans	Ayu Takemoto
P-7	Redox environment estimation of Ryugu’s parent body by analysing valence of multiple redox-sensitive elements	Tomohiro Ohno
P-8	Simultaneous Public Exhibition of Itokawa and Ryugu samples	Tomoko Ojima
P-9	Implementation of the environmental assessments of metal element abundances at the JAXA curation facility	Arisa Nakano