

The 1st International Symposium
Space Science of High Quality Protein Crystallization Technology
Program

【Date】 2015年10月26日 (Monday) 10:00–17:00 (Open: 9:30)
17:30–19:30 (Party)

【Place】 Yayoi Auditorium, Ichijo Hall, The University of Tokyo

〒113-8657 1-1-1 Yayoi Bunkyo-Ku, Tokyo

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【Access】 <http://www.a.u-tokyo.ac.jp/yayoi/map.html>

Fee: Free

Apply: Please enter to the web site of <http://www.spaceprotein.com>

【Party】 Fee: ¥3000

students: ¥1000

【Contact】: awang@mail.ecc.u-tokyo.ac.jp

	10:00	Opening	
1	10:05 10:10	Opening remarks	Kazuki Sakamoto Deputy Director Space Development and Utilization Division, Research and Development Bureau, The Ministry of Education, Culture, Sports, Science and Technology (MEXT), JAPAN
2	10:10 10:20	Greeting from Project Representative	Yoshihiro Urade Professor/PI International Institute for Integrative Sleep Medicine, University of Tsukuba
3	10:20 10:30	Project concept and Achievement	Shwu-Jen Wang Project Researcher Department of Biomaterial Sciences, School of Agricultural and Life Sciences, The University of Tokyo
		Frontiers in Space Protein Crystallization	

		research	
4	10:30 11:00	Protein crystallization in microgravity by batch and counter diffusion methods	Invited Speaker 1 Valeriya Samygina Senior Scientist Russian Academy of Science Institute of Crystallography, Russia
5	11:00 11:30	X-ray and neutron crystallographic structures of inorganic pyrophosphates determined from microgravity-grown crystals	Invited Speaker 2 Joseph David Ng Professor University of Alabama, U.S.A
6	11:30 12:00	Highways, Byways, and detours in protein	Invited Speaker 3 Terese Maureen Bergfors Senior Research Engineer Uppsala University, Sweden
	12:00 13:00	Lunch Time	
7	13:00 13:30	Catalytic reaction mechanism of the O ₂ -sensitive [NiFe] hydrogenase	Invited Speaker 4 Hideaki Ogata Group Leader Max Planck Institute for Chemical Energy Conversion, Germany
8	13:30 14:00	Does microgravity improve the quality of protein crystals?	Invited Speaker 5 Katsuo Tsukamoto Professor Graduate School of Engineering, Osaka University / Graduate School of Science ,Tohoku University
9	14:00 14:30	“ Hope ” from the International Space Station	Invited Speaker 6 Satoshi Furukawa Head of Group (Astronaut) Space Biomedical Research Group, Japan Aerospace Exploration Agency
	14:30 15:00	Coffee Break	

	15:00	Research Introduction (Project members and cooperation members each person 5—10 minutes)	
10		Orphan drug development for Duchenne muscular dystrophy by protein crystallization in space	Yoshihiro Urade Professor/PI International Institute for Integrative Sleep Medicine, University of Tsukuba
11		Neutron and high-resolution X-ray structural studies of cellulase	Kiyohiko Igarashi Associate Professor Department of Biomaterial Sciences, Graduate School of Agricultural and Life Sciences, The University of Tokyo
12		Structural chemistry of [NiFe]-hydrogenase	Yoshiki Higuchi Professor Department of Life Science, University of Hyogo
13		High-precision X-ray crystallography of proteins	Atsushi Nakagawa Professor Institute for Protein Research, Osaka University / JST-CREST
14		Crystallization of membrane proteins	So Iwata Professor Graduate School of Medicine, Kyoto University
15		What occurs during the crystal growth, studied by X-ray diffraction?	Hiroaki Tanaka President Confocal Science Inc.
16	16: 00 17:00	Panel discussion (from scientific curiosity to social contribution -space protein crystallization research prospect)	
		Speakers Overseas	

		① Joseph David Ng President/iXpress Genes Inc. Domestic ② Hiroaki TANAKA President/Confocal Science Inc. ③ Midori Kamimura Senior Researcher/Teijin Institute for Bio-medical Research, Teijin Pharma Limited	
17	17:00 17:10	Closing	Yoshihiro Urade Professor/PI International Institute for Integrative Sleep Medicine, University of Tsukuba
18	17:30 19:30	Party	

*The results have been achieved by “Space Science of High Quality Protein Crystallization Technology—Research Center Initiative“, the Ministry of Education, Culture, Sports, Science and Technology (MEXT), JAPAN.

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