



Source:

Tokyo Institute of Technology

Center for Public Information

For further information :

ELSI Office Staff

ENDO(Japanese), SATO(English)

Earth-Life Science Institute

Tokyo Institute of Technology

Phone: 03-5734-3414 Fax: 03-5734-3416

Email: admin_mem@elsi.jp

PRESS RELEASE

— The World Premier International Research Center Initiatives (WPI) —
**EARTH-LIFE SCIENCE INSTITUTE, OPENING CEREMONY, TOKYO
INSTITUTE OF TECHNOLOGY
AND
1ST EARTH-LIFE SCIENCE INSTITUTE INTERNATIONAL
SYMPOSIUM**

Tokyo, 21 March 2013

The Earth-Life Science Institute (ELSI) at Tokyo Institute of Technology was selected in 2012 by the World Premier International Research Center Initiative (WPI) that was launched by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan

The Opening Ceremony of ELSI and the 1st ELSI International Symposium is to be held as a first step aimed at achieving a very high research standard and providing an excellent research environment with the world's leading researchers. Please go to the following website for the details;

<http://www.elsi.jp/seminars/the-1st-elsi-international-symposium/>.

Please fill out and submit the application form by fax if you will come to cover the event. The deadline for the registration is Tuesday, March 26, 2013.

[EARTH-LIFE SCIENCE INSTITUTE,
OPENING CEREMONY, TOKYO INSTITUTE OF TECHNOLOGY]

Date: Wednesday, March 27, 2013

9:30 am - 11:30 am (Registration 9:00 am)

Location:

- Registration: Entrance, First floor of Tokyo Tech Front
- Ceremony: Kuramae Hall, First floor of Tokyo Tech Front

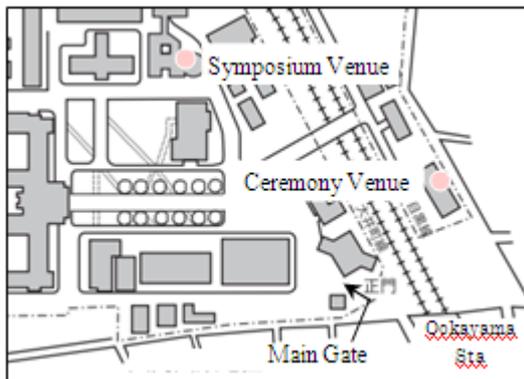
[ELSI 1st International Symposium]

Date:

- Wednesday, March 27, 2013 1:30 pm - 5:00 pm (Opening 1:00 pm)
- Thursday, March 28, 2013 9:00 am - 6:00 pm (Opening 8:30 am)
- Friday, March 29, 2013 9:00 am - 4:30 pm (Opening 8:30 am)

Location:

Tokyo Institute of Technology, Ookayama Campus
Multi-Purpose Digital Hall in West Bldg. 9



APPLICATION FORM FOR PRESS

OPENING CEREMONY OF THE EARTH-LIFE SCIENCE INSTITUTE AND EARTH-LIFE SCIENCE INSTITUTE 1ST INTERNATIONAL SYMPOSIUM

Company Name: _____

Press Registration Information

Department Name	Your Name	Title (Reporter, Photographer...etc.)	Note*

*Please write it down if you will bring your own equipment.

Please circle when you will attend.

	March 27 th , AM	Opening Ceremony of the Earth-Life Science Institute	Kuramae Hall
	March 27 th , PM	Earth-Life Science Institute 1 st International Symposium	Multi-Purpose Digital Hall
	March 28 th	Earth-Life Science Institute 1 st International Symposium	Multi-Purpose Digital Hall
	March 29 th	Earth-Life Science Institute 1 st International Symposium	Multi-Purpose Digital Hall

Please submit this form by fax to the Center for Public Information at 03-5734-3661.

The deadline is 5:00 pm on Tuesday, March 26.

The Center for Public Information
Tokyo Institute of Technology
FAX: 03-5734-3661

Earth-Life Science Institute , Tokyo Institute of Technology Opening Ceremony

Date & Time: 27 March 2013, 9:30 am - 11:30 am (Registration 9:00 am)

Venue: Kuramae Hall, Tokyo Institute of Technology, Ookayama Campus

1. Opening Address

Yoshinao Mishima, President, Tokyo Institute of Technology

2. Guest Speech

① Koichi Morimoto, Deputy Director-General, Research Promotion Bureau, Ministry of Education, Culture, Sports and Technology

② Makoto Asajima, Executive Director, Japan Society for the Promotion of Science

③ Masuo Aizawa, Advisor, Japan Science and Technology Agency

④ Yasunobu Yanagisawa, President, Ehime University

⑤ Masato Nakamura, Research Director, Institute of Space and Astronautical Science/
Japan Aerospace Exploration Agency

⑥ Hiroshi Kitazato, Director, Institute of Biogeosciences, Japan Agency for
Marine-Earth Science and Technology

3. Keynote Speech 1

The Big Questions

Piet Hut, Associate Director, Earth-Life Science Institute/ Institute for Advanced Study

4. Keynote Speech 2

Perspectives of ELSI Projects

Kei Hirose, Director, Earth-Life Science Institute

5. Closing

Takashi Tatsumi, Executive Vice President for Research, Tokyo Institute of Technology

1st ELSI International Symposium Program

Mar 27(Wed)

KURAMAE Hall 09:30-11:30

9:00	Registration		
09:30	Opening address	Y. Mishima	Tokyo Tech
	Guest speech	K. Morimoto	MEXT
	Guest speech	M. Asashima	JSPS
	Guest speech	M. Aizawa	JST
	Guest speech	Y. Yanagisawa	Ehime Univ.
	Guest speech	M. Nakamura	JAXA
	Guest speech	H. Kitazato	JAMSTEC
	Opening speech "The Big Questions" Presentation	P. Hut	IAS/ ELSI
	Opening speech "Perspectives of ELSI projects" Presentation	K. Hirose	ELSI
12:00-13:45	Lunch		
DIGITAL Hall			
Session 1: Theory of planetary formation		(Chair: C. Ormel)	
13:45-14:10	Keynote (20+5mins) "Origin and early evolution of the Earth"	S. Ida	ELSI
14:10-14:25	"Origin of Earth's ocean"	H. Genda	U. Tokyo/ ELSI
14:25-14:45	"From planetary embryos to planetary systems: integrated models of planet formation"	Y. Alibert	Bern U.
14:45-15:05	"On the chemical composition of protoplanetary disks, stars and planets"	T. Guillot	Obs. Cote d'Azur
15:05-15:20	Break		
Session 2: Role of solid Earth and surface environment of primordial Earth		(Chair: H. Genda)	
15:20-15:45	Keynote "Birth of the Geodynamo" (20+5mins)	J. Hernlund	UCB/ ELSI
15:45-16:00	"Divergence of Earth and Venus: Coupling climate, tectonics, and thermal history"	P. Driscoll	Yale U.
16:00-16:15	"Laboratory approaches to composition, origin, and evolution of the solid Earth"	T. Irifune	Ehime U. / ELSI
16:15-16:35	"True Polar Wander and Life?"	J. Kirschvink	Caltech/ELSI
16:35-16:50	"Porphyrin, a key molecular group for chemical evolution and early Earth"	N. Ohkouchi	JAMSTEC/ELSI

Updated 21 March 2013

1st ELSI International Symposium Program

16:50-17:10	Discussion for sessions 1 & 2	(Chair: K. Hirose)	ELSI
	Dinner		

Mar 28(Thu)

Session 3: Origin of life		(Chair: D. Kiga)	
9:00-9:25	Keynote "Birth place of life on the Hadean Earth" (20+5mins)	S. Maruyama	ELSI
9:25-9:40	"Experimental Challenges to Connect the Dots Looking Backwards"	M. Hara	Tokyo Tech/ELSI
9:40-10:00	"RNA, Minerals and the Origin of Life"	S. Benner	U. Florida
10:00-10:20	"Laboratory simulation of formation and alteration of high molecular weight organics in space"	K. Kobayashi	Yokohama National U.
10:20-10:40	"RNA fitness landscapes"	I. Chen	UCSB
10:40-10:55	Break		
10:55-11:15	"Comparative genomics and early cell evolution: inklings of life before DNA"	A. Lazcano	UNAM
11:15-11:35	"Asymmetric Autocatalysis and the Origin of Homochirality of Biomolecules"	K. Soai	Tokyo Univ. of Sci
11:35-11:50	"Where did the most ancient, ancestral ecosystem originate?"	K. Takai	JAMSTEC/ELSI
11:50-12:05	"Molecular Complexity and the Origin of Life"	J. Cleaves	ELSI
12:05-12:25	"A Formal Framework for Autocatalytic Sets"	W. Hordijk	SmartAnalytiX.com
12:25-14:00	Lunch under SAKURA		
Session 4: Synthetic experiment of life and evolution of genome		(Chair: K. Kurokawa)	
14:00-14:25	Keynote (20+5mins)	D. Kiga	ELSI
14:25-14:45	"Experimental evolution of RNA-protein cell model"	T. Yomo	Osaka U.
14:45-15:05	"Are Planets in Habitable Zones Habited?"	G. Cody	Carnegie Inst.
15:05-15:20	"Principles of ancient genome evolution from <i>Oxytricha</i> "	L. Landweber	Princeton U.
15:20-15:35	Break		
15:35-15:50	"Ancient metabolic pathways within the modern protein repertoire"	A. Goldman	Princeton U.
15:50-16:10	"Evolutionary Genomics and the Origin of Life: Insights and Constraint"	G. Fournier	MIT

1st ELSI International Symposium Program

16:10-16:30	"Self-organization and phoretic motions for the origin of life"	Y. Maeda	Kyoto U.
16:30-16:50	Discussion for sessions 3 & 4	(chair: J. Cleaves)	
16:50-17:10	Message from WPI program director Missions of WPI Program - Toward internationally opened and globally visible institutes	T. Kuroki	JSPS
18:00-	Banquet in TSUNOBUE ¥5,000 per person to be paid at the registration desk, thank you!		

Mar 29(Fri)

Session 5: Evolution of Earth life		(Chair: S. Maruyama)	
09:00-09:25	Keynote (20+5mins) "Origin and early evolution of life; constraints from the Earth's records"	Y. Ueno & N. Yoshida	ELSI
09:25-09:40	"Origin of cyanobacteria, and its role for evolution of life"	S. Masuda & H. Ohta	Tokyo Tech/ELSI
09:40-09:55	"Deciphering ancient ecosystems with environmental genomics and "Earth-Life DB""	K. Kurokawa & Y. Hongo	ELSI/ Tokyo Tech
09:55-10:10	"Molecular Simulation of formation for dimer of RNA substance and membrane"	K. Yasuoka	Keio U.
10:10-10:25	Break		
Session 6: Exploration of planets and satellite of Solar system		(Chair: S. Ida)	
10:25-10:50	Keynote "Geochemistry and astrobiology on icy satellites in the solar system"	Y. Sekine	U. Tokyo
10:50-11:05	"Icy moons: why do we care?"	M. Fujimoto	JAXA/ELSI
11:05-11:20	"Asteroid Sample Returns by Hayabusa and Hayabusa2"	H. Kuninaka	JAXA/ELSI
11:20-11:40	"Organic Compounds in Meteorites, Comets, and Cosmic Dusts: Building Blocks of Planets and Life"	H. Yabuta	Osaka U.
11:40-11:55	Invited talk	J. Dohm	ELSI

1st ELSI International Symposium Program

11:55-12:15	Discussion for sessions 5 & 6	(chair: M. Fujimoto)	
12:15-13:45	Lunch		
Session 7: Exoplanets and towards astrobiology		(Chair: K. Takai)	
13:45-14:10	Keynote "Observation of biomarker"	L. Kaltenegger	Max Planck/Harvard
14:10-14:30	Invited talk	D. Lin	UCSC
14:30-14:50	"Paleomineralogy of the Hadean Eon: What minerals are available for origins of life on terrestrial planets?"	R. Hazen	Carnegie Institution of Washington
14:50-15:05	"A Wide Variety of Habitable Planets"	T. Sasaki	Tokyo Tech
15:05-15:20	"Characterizing surface environment of Earth-like exoplanets via disk-integrated scattered light"	Y. Fujii	U. Tokyo/ELSI
15:20-15:35	Galactic environment	J. Makino	ELSI
15:35-15:55	General discussion	(chair: P. Hut)	
Adjourn			
16:30----	Advisory board meeting	Chaired by M. Aizawa	