



## 1<sup>st</sup>. STACY Young Generation Symposium

On Friday 16<sup>th</sup>. December 2022  
@Kwansei Gakuin University  
Kobe Sanda Campus (KSC)



**Organized By**  
Tanaka Laboratory  
Kwansei Gakuin University (KGU)  
Japan

## STACY

### Towards Safe Storage and Transportation of Cryogenic Hydrogen

Through the development of safety technology, improving the public acceptance of liquefied hydrogen, bringing about beneficial effects on the economy and society.

### Scope of the Symposium

*Young Generation Symposium* is held as a post meeting of 1<sup>st</sup>. International Symposium. The purpose of this symposium is to provide a foothold for young engineers who will lead the future to move forward together hand in hand and expand the possibilities of society by sharing information and discussing research in various fields.

### Access to Venue

**Venue : Kwansei Gakuin University  
Kobe Sanda Campus (KGU-KSC)**

The closest station to this venue is 「[Shin Sanda Station](#)」 on JR Takarazuka line. It takes about 15 minutes by bus from the station to the venue.



### Organizing Committee

**Tanaka Laboratory, KGU, Japan**

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# Program

1st. STACY Young Generation Symposium Towards Safe Storage and Transportation of Cryogenic Hydrogen			
12:30 - 13:00	Registration		Kwansei Gakuin University Building No.8 3F 306
13:00 - 13:05	Opening Address		<b>Mr. Kei Tanaka (M1)</b> Kwansei Gakuin University (KGU), Japan
Keynote (40 min)			
13:05 - 13:45	Do materials make us happy?		<b>Prof. Dr. Hirohisa Tanaka</b> Kwansei Gakuin University (KGU), Japan
Hydrogen & Fuel Cells (15min×3)			
13:45 - 14:00	Hydrogen	O1 Research on Hydrogen Safety Catalyst for Decommissioning of Fukushima Daiichi Nuclear Power Plant	<b>Mr. Sogo Iwata (M2)</b> Kwansei Gakuin University (KGU), Japan
14:00 - 14:15		O2 Application of passive auto-catalytic recombiners for LH2 safety	<b>Ms. Shannon Krenz</b> Forschungszentrum Jülich GmbH (FZJ), Germany
14:15 - 14:30	Fuel Cell	O3 Radiation Induced Synthesis of Niobium Oxide Nanoparticle Catalyst for Polymer Electrolyte Fuel Cells : Effect of Carbon Support on Catalytic Activity	<b>Mr. Yuta Hasegawa (M1)</b> Osaka University (OU), Japan
14:30 - 14:45	Computer	O4 Programming Software for Scientists	<b>Mr. Eric Krenz</b> Forschungszentrum Jülich GmbH (FZJ), Germany
14:45 - 15:00	Break		
Hydrogen Combustions (15min×3)			
15:00 - 15:15	Hydrogen Combustion	O5 Toward efficient tools for hydrogen safety challenges	<b>Dr. Yves Balossier</b> Centre National de la Recherche Scientifique (CNRS), France
15:15 - 15:30		O6 Experimental observations of Shock-flame interactions of Hydrogen-air mixtures: New Facility at CNRS-ICARE within PHYSSA Project	<b>Dr. Anthony Oswaldo Roque Ccacya</b> Centre National de la Recherche Scientifique (CNRS), France
15:30 - 15:45		O7 Flame Combustion regimes of H2-Air-Steam mixtures in an obstacles laden closed tube, ENACCEF-II	<b>Dr. Sharath Nagaraju</b> Centre National de la Recherche Scientifique (CNRS), France
Thermoelectric Power Generation (15min×2)			
15:45 - 16:00	Energy Harvesting	O8 Effect of Ca and Sr doping on the low-temperature power generation of lead-free pyroelectric Ba(Zr Ti)O3	<b>Mr. Nguyen Chi Trung Ngo (D3) (D2)</b> Nagaoka University of Technology (NUT), Japan
16:00 - 16:15		O9 Utilizing the pulse electric fields to improve pyroelectric power generation from pyroelectric materials	<b>Mr. Buddhika Amila Kumara Sodige (D2)</b> Nagaoka University of Technology (NUT), Japan

Poster Session (60 min)				
16:30 - 17:30	Bldg.No8 3F 307	P1	Electrode Performances of Metal-Organic Frameworks with Azo Containing Ligands	<b>Mr. Ryo Matsushima (D1)</b> Kwansei Gakuin University (KGU), Japan
		P2	Battery Performances of Hydrogen-Bonded Organic Frameworks	<b>Mr. Yoshihiko Yamaguchi (M2)</b> Kwansei Gakuin University (KGU), Japan
		P3	Complex Hydride Electrolytes for All-Solid-State Batteries	<b>Mr. Shuyu Imato (M2)</b> Kwansei Gakuin University (KGU), Japan
		P4	Development of Liquid Hydrogen Cooled Superconducting Generator	<b>Mr. Shohri Ikuta (M1)</b> Kwansei Gakuin University (KGU), Japan
		P5	Ensemble Monte Carlo Simulation of nm-gate GaN-based HEMTs	<b>Mr. Kei Sakota (M1)</b> Kwansei Gakuin University (KGU), Japan
		P6	Individual Differences Analysis of Affective Traits for Chord Listening –Study of Triads–	<b>Mr. Tomonori Nishida (M2)</b> Kwansei Gakuin University (KGU), Japan
		P7	Textile-GAN : Texture Synthesis Based on Affective Evaluation with Generative Adversarial Networks	<b>Ms. Fumika Taniguchi (M1)</b> Kwansei Gakuin University (KGU), Japan
		P8	Pattern Design Bespoke System Considering Individual Differences in Affective Evaluation Using Multi-task CNN	<b>Ms. Nonomi Yamashita (M1)</b> Kwansei Gakuin University (KGU), Japan
		P9	Domain Adversarial Neural Networks Regression to Design Transferable Impression Estimation Model for Clothing Patterns	<b>Ms. J N Htoi Sann Ja (B4)</b> Kwansei Gakuin University (KGU), Japan
		P10	Individual Differences Analysis of Affective Traits for Chord Listening –Study of Tetrads–	<b>Ms. Sakura Sakamoto (B4)</b> Kwansei Gakuin University (KGU), Japan
		P11	Catalyst Evaluation Experiments at Cryogenic Temperature for Liquefied Hydrogen	<b>Mr. Ryusei Ueno (B4)</b> <b>Mr. Tomohito Nakayama (B4)</b> Kwansei Gakuin University (KGU), Japan
		P12	Activity Evaluation Test of H2-O2 Reaction of Pt-Based Catalyst under CO Poisoning Environment	<b>Mr. Shinya Uegaki (B4)</b> <b>Mr. Jun'nosuke Urano (B4)</b> Kwansei Gakuin University (KGU), Japan
		P13	Waste Heat Regeneration Technology using Ferroelectric	<b>Mr. Takanori Hiratani (B4)</b> Kwansei Gakuin University (KGU), Japan
		P14	Study of Oxygen Reduction Reaction on Fe-N-C Catalyst with Rotating Ring Disk Electrode	<b>Mr. Genki Nakamura (B4)</b> Kwansei Gakuin University (KGU), Japan
17:30 - 18:00	Closing Ceremony		<b>Mr. Takumi Ichikawa (M1)</b> Kwansei Gakuin University (KGU), Japan	
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