



# The 1st **SU - CNU Joint Symposium**

**Date: January 21, 2022**

**Venue: Online**



## **Invited Speakers**

### **Shizuoka University**

#### **Research Institute of Green Science and Technology (RIGST)**

Prof. Enoch Y. Park  
Prof. Hirofumi Hirai  
Prof. Hiroyuki Futamata  
Prof. Toshiyuki Ohnishi  
Prof. Mitsuru Kondo  
Prof. Tatsuya Kato  
Ass. Prof. Jae-Hoon Choi

### **Chungnam National University**

#### **Education and research group for convergent chemical materials in the 4th industrial revolution era (CCM4)**

Prof. Dong-Myung Kim  
Prof. Yoo Seong Choi  
Prof. Seung-Wan Song  
Prof. Kyung Jin Lee  
Prof. Jaebeom Lee  
Ass. Prof. Jaewon Lee  
Ass. Prof. Hae-Min Park

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CNU : [seo0521@cnu.ac.kr](mailto:seo0521@cnu.ac.kr)

【Sponsorship name】

Headquarters for Promotion of Interdisciplinary Domain Research, Shizuoka University  
CNU Institute of Technology, Chungnam National University

【Registration】

<https://forms.office.com/r/2SXAstxQ1y>



\*All lectures and presentations include Q &amp; A

- \* - Morning session - \* -

Chaired by **Prof. Hiroyuki Futamata**

9:30 – 9:40	10min	Opening remarks by <b>Prof. Dong-Myung Kim</b>
9:40 – 9:55		Invited Lecture 1 <b>Prof. Enoch Y. Park</b> / RIGST, Shizuoka University Importance of international joint research in “Nanotechnology-assisted virus detection”
9:55 – 10:10		Invited Lecture 2 <b>Prof. Dong-Myung Kim</b> / Department of Chemical Engineering and Applied Chemistry, CCM4, Chungnam National University Boosting the sensitivity of bioassays by cell-free synthetic biology
10:10 – 10:25		Invited Lecture 3 <b>Prof. Jaebeom Lee</b> / Department of Chemistry, Chemical Engineering, and Applied Chemistry, Chungnam National University Excitation-dependent emissive FeSe quantum dots induced by chiral interlayer expansion and their multi-color bio-imaging
10:25 – 10:40	15min	Invited Lecture 4 <b>Prof. Mitsuru Kondo</b> / RIGST, Shizuoka University Removal of perchlorate ion from aqueous solutions using coordination compounds
10:40 – 10:55		Invited Lecture 5 <b>Ass. Prof. Jaewon Lee</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Design of Narrow Bandgap Conjugated Polymers and Molecular Semiconductors for Solution-Processed Near-Infrared Photovoltaics and Photodetectors
10:55 – 11:10		Invited Lecture 6 <b>Prof. Toshiyuki Ohnishi</b> / RIGST, Shizuoka University Aroma Glycosides Contribute Plant Chemical Defense
11:10 – 11:15	5min	Break

Chaired by **Prof. Tatsuya Kato**

11:15 – 11:25		Student Presentation 1 <b>Dajeong Hwang</b> / Department of Chemistry, Chemical Engineering and Applied Chemistry, Chungnam National University Synthesis and optimization of Au@FexOy nanowires
11:25 – 11:35		Student Presentation 2 <b>Kanoko Watanabe</b> / Graduate School of Integrated Science and Technology, Department of Science, Shizuoka University Visible detection of perchlorate ion in aqueous solutions using coordination cages
11:35 – 11:45		Student Presentation 3 <b>Sejeong Park</b> / Department of Chemistry, Chemical Engineering and Applied Chemistry, Chungnam National University DNA sensing for plasmonic nematic structure using magneto-plasmonic nanoparticles
11:45 – 11:55	10min	Student Presentation 4 <b>Keita Isago</b> / Department of Applied Life Science, Faculty of Agriculture, Shizuoka University Development of Fluorescence Amplified SARS-CoV-2 detection using Duplex-Specific Nuclease
11:55 – 12:05		Student Presentation 5 <b>Hyo-Jin Kang</b> / Department of Chemistry, Chemical Engineering and Applied Chemistry, Chungnam National University One pot synthesis of FeSe quantum dots in organic phase
12:05 – 12:15		Student Presentation 6 <b>Ryoya Ojima</b> / Graduate School of Integrated Science and Technology, Department of Science, Shizuoka University New detection method of nitrate and nitrite ions in aqueous solutions using coordination compounds
12:15 – 12:25		Student Presentation 7 <b>Van Tuan Nguyen</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Super-amphiphilic surface: Preparation and application
12:25 – 13:00	35min	Lunch Break

- \* - Afternoon session - \* -

Chaired by **Prof. Jaebeom Lee**

13:00 – 13:15		Invited Lecture 7 <b>Prof. Seung-Wan Song</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Control of Electrolyte and Interfaces for Outperforming High-energy Li-ion Batteries
13:15 – 13:30		Invited Lecture 8 <b>Prof. Hiroyuki Futamata</b> / RIGST, Shizuoka University Enhancement of anaerobic wastewater treatment using a biomineral
13:30 – 13:45	15min	Invited Lecture 9 <b>Prof. Kyung Jin Lee</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Charge reversal Electrojetting for anisotropic polymeric microfibers and their jet writing
13:45 – 14:00		Invited Lecture 10 <b>Ass. Prof. Jae-Hoon Choi</b> / College of Agriculture, Academic Institute, Shizuoka University Chemical studies on substances involved in the crosstalk between <i>Lepista sordida</i> and turfgrass
14:00 – 14:15		Invited Lecture 11 <b>Prof. Yoo Seong Choi</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Marine-derived biomolecules for biochemical engineering
14:15 – 14:20	5min	Break

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Chaired by **Ass. Prof. Hae-Min Park**

14:20 – 14:30	Student Presentation 8 <b>Young-Mi Kim</b> / Department of Chemistry, Chemical Engineering and Applied Chemistry, Chungnam National University Selective area coated metasurface of magnetoplasmonic na-nomaterials for Terahertz time domain spectrometric sensing
14:30 – 14:40	Student Presentation 9 <b>Masahiro Honjo</b> / Graduate School of Science and Technology, Shizuoka University The fluctuation of microbial interactions is key factor for the coexistence of three-strains in the chemostat culture
14:40 – 14:50	Student Presentation 10 <b>Eungsu Kang</b> / Department of Chemical Engineering & Applied Chemistry, Chungnam National University Chitosan/oleamide nanofluid as a significant C1-gas bioconversion medium source with enhancing gas utilization efficiency
14:50 – 15:00	10min Student Presentation 11 <b>Tatsuki Kakuta</b> / Department of Applied Life Science, Faculty of Agriculture, Shizuoka University Expression of porcine rotavirus structural proteins in silkworms
15:00 – 15:10	Student Presentation 12 <b>Jirayu Boonyakida</b> / Department of Bioscience, Graduate School of Science and Technology, Shizuoka University Decoration of GII.4 Norovirus-like Particles via SpyTag/SpyCatcher Bioconjugation System for a Modular Protein-displaying Platform
15:10 – 15:20	Student Presentation 13 <b>Junhong Wang</b> / Department of Agriculture, Graduate School of Integrated Science and Technology, Shizuoka University Search for bioactive compounds from the fruiting bodies of <i>Hypholoma fasciculare</i>
15:20 – 15:30	Student Presentation 14 <b>Hussain Sayed Sajid</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University Development of cost-effective light absorber based on black-titania/glass fiber for efficient solar desalination and solvent recovery

Chaired by **Prof. Mitsuru Kondo**

15:30 – 15:45	Invited Lecture 12 <b>Ass. Prof. Toshio Mori, Prof. Hirofumi Hirai</b> / Faculty of Agriculture, Shizuoka University Aerobic H <sub>2</sub> production in white-rot fungi relating to the formate metabolism
15:45 – 16:00	15min Invited Lecture 13 <b>Ass. Prof. Hae-Min Park</b> / Department of Chemical Engineering and Applied Chemistry, Chungnam National University A new interface for faster protein analysis
16:00 – 16:15	Invited Lecture 14 <b>Prof. Tatsuya Kato</b> / RIGST, Shizuoka University Roles of sirtuins on the riboflavin production in <i>A. gossypii</i>
16:15 – 16:25	10min Award ceremony & Closing Remarks by <b>Prof. Enoch Y. Park</b>