

Juyoung Oh

Postdoctoral Scholar

The NanoEnergy Lab
Mechanical Engineering Department
Stanford University

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Education

Ph.D. Aerospace Engineering, Seoul National University Feb. 2023

***Title:** Metal-based Energetic Materials: Experimental Investigation of the Effects of Aging and the Changes in Thermochemical Properties on Chemical Reaction Kinetics (Best Doctoral Thesis Award 2022), Thesis Advisor: Professor Jack J. Yoh*

M.S. Mechanical and Aerospace Engineering, Seoul National University Feb. 2019

B.S. Aerospace Information Engineering, Konkuk University, Seoul, South Korea Feb. 2017

Research Interests

- **Chemo-mechanics of reactive interfaces** in Li- and Na-metal batteries
- **Stress-driven failure** and thermal runaway in energy storage
- **Materials under extreme environments:** thermal abuse, hygrothermal aging, and combustion
- **Thermo-chemo-mechanical degradation** of functional and energetic materials
- **In situ/operando synchrotron diagnostics** and thermal analysis
- **Reaction kinetics and physics-based failure modeling**

Academic Appointment

Postdoctoral Scholar Jan. 2026 – Present

Mechanical Engineering Department, Stanford University

Advisor: Dr. Hai Wang

- **Research Focus:** Battery-Propellant Hybrid Systems; Thermal Runaway; Sodium Metal Anode; Solid-Liquid Interfacial Thermodynamics; Dendrite suppression
- **Project:** Battery-Propellant Hybrid Systems
- **Key Contributions:**
 - Characterize the thermal behavior of sodium–catholyte systems to identify reaction mechanisms in sodium-metal hybrid monopropellant batteries.
 - Develop strategies for dendrite suppression and interfacial stabilization using Na-K anodes and Zn cathodes.
- **Techniques:** Differential scanning calorimetry (DSC), Thermogravimetric analysis (TGA), Synchrotron X-ray diffraction (XRD), Scanning electron microscopy (SEM), X-ray photoelectron spectroscopy (XPS), Fourier-transform infrared spectroscopy (FTIR)

Postdoctoral Associate Jan. 2024 – Jan. 2026

Materials Science & Nanoengineering Department, Rice University

Advisor: Dr. Ming Tang

- **Research Focus:** Battery-Propellant Hybrid Systems; Thermal Runaway Mechanisms; Lithium Metal Anode Interfacial Chemistry; Thermite reactions
- **Project:** Battery-Propellant Hybrid Systems
- **Key Contributions:**
 - Identified reaction pathways and interfacial kinetics between lithium-metal anodes and electrolytes or cathodes under thermal abuse.
 - Discovered synergistic degradation mechanisms between lithium and carbonate

- electrolytes and developed a strategy that significantly reduces heat release.
- Performed systematic failure-mode analysis of lithium-metal battery thermal runaway triggers, establishing fundamental safety criteria for high-energy density storage.
- Visualized and quantified phase transitions at the solid-liquid interface during failure using in situ synchrotron XRD and X-ray imaging.
- **Techniques:** DSC, TGA, Synchrotron XRD, SEM, XPS, Full-Field X-ray Imaging (FXI), Submicron Resolution X-ray Spectroscopy (SRX)

Postdoctoral Associate

Mar. 2023 – Jul. 2023

Institute of Advanced Machines and Design, Seoul National University
(projects began during Ph.D.)

Advisor: Dr. Jack J. Yoh

- **Research Focus:** Combustion of Metal Particles; Chemical Reaction Kinetics; Energetic Materials; Aging Analysis; Ultrahigh-Nickel Lithium-ion Batteries; Battery Thermal Runaway
- **Project:** Unit Component-Specific Heat Generation Modeling Based on DSC Analysis
 - Established the thermal runaway mechanisms of ultrahigh-nickel lithium-ion batteries by developing component-specific heat generation.
- **Project:** Generation of Carbon-Free Renewable Energy via Diagnosis of Metal Fuels and Deep Learning Based Lifetime Prediction
 - Spearheaded a fundamental study on magnesium particles as sustainable energy carriers.
 - Quantified thermal reactivity and atmospheric sensitivity to establish a data-driven framework for long-term storage viability.
- **Techniques:** DSC, TGA, XRD, SEM, XPS

Publications

In preparation

8. Luke Di Liddo, Naomi Lutz, **Juyoung Oh**, Mehdi Salakhi, Haoyang Li, Francisco Cepeda, Hai Wang, Murray J. Thomson, “Scalable Production of Carbon-Coated Silicon Batteries via Fluidized Bed Microwave-driven Methane Pyrolysis”
7. Luke Di Liddo, Naomi Lutz, **Juyoung Oh**, Lauren Kramer, Victor Deng, Francisco Cepeda, Hai Wang, Murray J. Thomson, “Single-Step Growth of Nanowire-Reinforced Silicon Anodes via Microwave Methane Pyrolysis”
6. Seung-gyo Jang, **Juyoung Oh**, Heeseong Hwang, Myunggeun Ahn, “Transient Conductive Species During Zirconium-Potassium Perchlorate Ignition in Pyrotechnic Initiators”
5. **Juyoung Oh**, Evelyn Krystal Tecpa Flores, Caroline Toft Overgaard, Dorthe Ravnsbæk, Ming Tang, “Synergistic Reaction Cascades Govern Thermal Reactivity of Lithium Metal–Carbonate Electrolytes”
4. **Juyoung Oh**, Evelyn Tecpa, and Ming Tang, “FEC-Induced Modulation of Thermochemical Behavior in Lithium-Metal Batteries”
3. **Juyoung Oh**, Evelyn Krystal Tecpa Flores, Caroline Toft Overgaard, Dorthe Ravnsbæk, Ming Tang, “Unveiling the Hidden Role of Carbonate Electrolytes in Lithium Metal Battery Thermal Runaway Trigger”
2. **Juyoung Oh**, Evelyn Tecpa, Zhaoshun Wang, and Ming Tang, “Thermite Reactions Between Lithium and Pristine NMC Cathodes”
1. **Juyoung Oh**, Evelyn Tecpa, Zhaoshun Wang, and Ming Tang, “Investigation of Crystalline Structures Determining Li-NMC Thermite Reactions”

International Peer-Reviewed Journals

17. Rajendra Rajak, Daehong Lim, **Juyoung Oh**, Gnanaprakash Kanagaraj, and Jack J. Yoh "External voltage driven linear burning rates for improving propulsion efficiency and control in space applications" *Aerospace Science and Technology*, Vol. 164, pp. 110413, (2025). [\[PDF\]](#)
16. **Juyoung Oh**, Seung-gyo Jang, and Jack J. Yoh "On the pyrolysis mechanism of Magnesium-Teflon-Viton (MTV) igniters subjected to seasonal aging" *Fuel*, Vol.389, pp.134604, (2025). [\[PDF\]](#)
15. Yejun Lee, **Juyoung Oh**, and Jack J. Yoh "Effect of hygrothermal aging on the pyrolysis of magnesium and its mixture" *Fuel*, Vol. 387, pp. 134424, (2025). [\[PDF\]](#)
14. Ayushi Mehrotra, Pragya Berwal Singh, **Juyoung Oh**, Yejun Lee, and Jack J. Yoh "From micro-explosion to full-scale fire: predicting thermal runaway in ultra-high nickel lithium-ion batteries with layering effect" *Energy*, Vol. 320, pp. 135502, (2025). [\[PDF\]](#)
13. **Juyoung Oh** and Jack J. Yoh "Exploration of altered reaction pathways in aging pyrotechnic compositions under seasonal cycles" *Combustion and Flame*, Vol. 269, pp.113721, (2024). [\[PDF\]](#)
12. **Juyoung Oh**, Ayushi Mehrotra, Yejun Lee, Bohoon Kim, and Jack J. Yoh "Thermal runaway aspect of ultrahigh-nickel cathode based lithium-ion batteries at increasing charge states" *Journal of Energy Storage*, Vol. 76, pp.109887, (2024). [\[PDF\]](#)
11. Yejun Lee, **Juyoung Oh**, and Jack J. Yoh "Aging effects on Magnesium–Teflon–Viton related to magnesium hydroxide formation and the weakened bond of polytetrafluoroethylene" *Journal of Thermal Analysis and Calorimetry*, Vol.149, pp.2189-2197, (2024). [\[PDF\]](#)
10. Upasana Priyadarshani Padhi, **Juyoung Oh**, Ayushi Mehrotra, Yejun Lee, and Jack J. Yoh "A predictive theory on thermal runaway of ultrahigh capacity lithium-ion batteries" *Combustion and Flame*, Vol. 258, pp.113116, (2023). [\[PDF\]](#)
9. Jun-ho Yang, Yejun Lee, **Juyoung Oh**, Bohoon Kim, and Jack J. Yoh "A Real-Time Monitoring of Pre-overcharging in High-Nickel Lithium Ion Batteries Via Plasma Emission Spectroscopy" *Journal of Energy Storage*, Vol. 72, pp. 108634, (2023). [\[PDF\]](#)
8. **Juyoung Oh** and Jack J. Yoh "Understanding how metal oxidation and oxidizer decomposition affect the thermal degradation of aging pyrotechnic compositions" *Combustion and Flame*, Vol. 257, pp.113038, (2023). [\[PDF\]](#)
7. **Juyoung Oh**, Yejun Lee, and Jack J. Yoh "On the oxidation kinetics of aging magnesium particles" *Combustion and Flame*, Vol. 249, pp.112597, (2023). [\[PDF\]](#)
6. Yejun Lee, **Juyoung Oh**, and Jack J. Yoh "Understanding the reactivity of magnesium powder subjected to various aging conditions." *Journal of Environmental Chemical Engineering*, Vol. 10, No. 5, pp. 108535, (2022). [\[PDF\]](#)
5. **Juyoung Oh**, Haewoong Jung, and Jack J. Yoh "Observation of gunpowder-like thermochemical responses of a thermal energy storage system based on KNO₃/NaNO₃/Graphite exposed to a heat transfer fluid." *Applied Thermal Engineering*, Vol. 207, pp. 118215, (2022). [\[PDF\]](#)
4. **Juyoung Oh** and Jack J. Yoh "Insights into aging mechanism of Ti-metal based pyrotechnics and changes in thermo-kinetic characteristics." *Proceedings of the Combustion Institute*, Vol. 38, No. 3, pp. 4441-4449, (2021). [\[PDF\]](#)
3. **Juyoung Oh** and Jack J. Yoh "Critical changes in the ignition and combustion characteristics of aged titanium based initiators." *Combustion and Flame*, Vol. 221, pp. 74-85, (2020). [\[PDF\]](#)
2. **Juyoung Oh**, Seung-gyo Jang, and Jack J. Yoh "Towards understanding the effects of heat and humidity on ageing of a NASA standard pyrotechnic igniter." *Scientific Reports*, Vol. 9, No. 1, pp. 1-12, (2019). [\[PDF\]](#)
1. **Juyoung Oh**, Anirudha Ambekar, and Jack J. Yoh "The hygrothermal aging effects of titanium

hydride potassium perchlorate for pyrotechnic combustion." *Thermochimica Acta*, Vol. 665, pp. 102-110, (2018). [\[PDF\]](#)

Peer-Reviewed Journals (Korea)

7. Yejun Lee, **Juyoung Oh**, and Jai-ick Yoh, "Investigating the Effect of Hygrothermal Aging and Oxygen Flow Rate on the Thermochemical Properties of Magnesium Powder" *Journal of the Korean Society of Propulsion Engineers*, Vol. 27, No. 6, pp. 32-40, (2023).
6. **Juyoung Oh**, and Jai-ick Yoh. "Key factors that can affect the chemical reaction kinetics of aged metals/KClO₄-based energetic materials." *Journal of the Korean Society of Propulsion Engineers*, Vol. 26, No. 4, pp. 28-43, (2022).
5. **Juyoung Oh** and Jai-ick Yoh. "Investigation of Thermal/hygrothermal Aging Effects on the Ignition Characteristics of Ti Metal-based Pyrotechnics and Construction of the Aging Models." *Journal of the Korean Society of Propulsion Engineers*, Vol. 25, No. 3, pp. 26-41, (2021).
4. **Juyoung Oh** and Jai-ick Yoh. "Establishment of hygrothermal aging mechanism via thermal analysis and extraction of reaction kinetics of Ti metal-based pyrotechnic material." *Journal of the Korean Society for Aeronautical and Space Sciences*, Vol. 49, No. 9, pp. 759-769, (2021).
3. **Juyoung Oh** and Jai-ick Yoh. "Critical effects of temperature and relative humidity on thermal performance on aging of NASA standard pyrotechnic initiator 'ZPP'." *Journal of the Korean Society of Combustion*, Vol. 26, No. 2, pp. 23-39, (2021).
2. Byunghoon Han, Jihoon Ryu, Junho Yang, **Juyoung Oh**, K. Gnanaprakash, and Jai-ick Yoh. "Aging of Solid Fuels Composed of Zr and ZrNi Part 1: Thermal/Chemical/Spectroscopic Analysis" *Journal of the Korean Society of Propulsion Engineers*, Vol. 24, No. 2, pp. 1-13, (2020).
1. **Juyoung Oh** and Jai-ick Yoh. "The analysis on the effects of hygrothermal aging to THPP using DSC and XPS." *Journal of the Korean Society of Propulsion Engineers*, Vol. 23, No. 1, pp. 79-92, (2019).

Teaching and Mentoring Experience

Teaching Experience

Head Teaching Assistant, Seoul National University

Spr. 2022

Course: Aerospace Engineering Experiment I

- Compiled and managed grade records from multiple teaching assistants
- Prepared laboratory materials and equipment for weekly experiments
- Graded assignments and tests for 60 undergraduate students
- Led a weekly experiment session for a subset of 20 students
- Interacted with students during office hours

Teaching Assistant, Seoul National University

Course: Aerospace Engineering Experiment I

Spr. 2021, 2020, 2018

- Graded assignments and tests for 60 undergraduate students
- Led a weekly experiment session for a subset of 20 students
- Interacted with students during office hours

Course: Engineering Research Ethics and Writing Skills, *Seoul National University*

Spr. 2019

- Graded assignments and tests for 100 graduate students
- Interacted with students during office hours

Mentoring Experience

Assistant Manager, Shared Equipment Authority (SEA) at Rice University 2024-2025

- Trained users on the Mettler Toledo DSC 5+
- Taught analytical science and reliable technical methods
- Provided consultation and technical guidance
- Maintained and troubleshoot laboratory equipment

Mentor, Rice University Summer 2025

Program: Dr. Ming Tang Summer Lab

- Led a summer lab, "Hands-On Laboratory in Battery Fabrication and Testing"
- Guided a mentee (Matthew Wei) through weekly meetings on the experiment status, offering critical feedback
- Led experiment sessions on how to make battery coin cells & do battery tests
- Guided mentees through lab tours and supervised equipment use to enhance their practical laboratory experience

Program: The Summer Undergraduate Research Fellowship (SURF), *Rice University* Summer 2025

- Led a summer session, "How to Design an Experiment in Engineering"
- Guided a mentee (Johnpaul Rodriguez) through weekly meetings on the research project, offering critical feedback
- Led experiment sessions on how to make battery coin cells & do battery tests
- Led an experiment session on how to perform DSC tests using battery electrodes
- Guided mentees through lab tours and supervised equipment use to enhance their practical laboratory experience

Fellowships, Awards, and Honors

Young Scientist Scholarship (\$1,000) 2025
Korean-American Women in Science and Engineering (KWise)

Outstanding Doctoral Dissertation Award, 2023
2023 Korean Society of Propulsion Engineers Fall Conference

Best Doctoral Thesis Award, Seoul National University 2023

Aerospace Excellence Research Award, Brain Korea (\$25,087) 2019-2021
Seoul National University

Best Paper Award, 2021 Korean Society of Combustion Fall Conference 2021

Outstanding Doctoral Dissertation Award, 2021
2021 Korean Society of Combustion Fall Conference

Best Presentation Paper Award, 2020
The Korean Society of Propulsion Engineers Fall Conference

Superior Presentation Award, 2020
The Korean Society for Aeronautical & Space Sciences Fall Conference

Top 100 National Research and Development Excellence in 2020, 2020
Ministry of Science and ICT, South Korea

Scholarship from Transformative Training Program (\$5,256) 2017 – 2018
for Creative Core Engineers in Space Engineering, Seoul National University

Honors Scholarship, Konkuk University 2014 – 2015

Research Projects and Funding

Research Grants

National Research Foundation of Korea 2020 – 2023

- Title: Generation of Carbon-Free Renewable Energy via Diagnosis of Metal Fuels and Deep Learning Based Lifetime Prediction
- Role: Lead Researcher (PI: Prof. Jack J. Yoh)
- Amount: ₩137,500,000 (approx. US\$102K)

Sponsored Research Projects

Samsung SDI 2022 – 2024

- Title: Unit Component-Specific Heat Generation Modeling Based on DSC Analysis
- Role: Lead Researcher (PI: Prof. Jack J. Yoh)
- Amount: ₩200,000,000 (approx. US\$148K)

Agency for Defense Development, Korea 2022

- Title: Magnesium/Teflon/Viton (MTV) Aging Lifespan Prediction and Optimization
- Role: Lead Researcher (PI: Prof. Jack J. Yoh)
- Amount: ₩39,700,000 (approx. US\$30K)

Synchrotron Beamtime

National Synchrotron Light Source (NSLS)-II, Brookhaven National Laboratory Apr. 2026

- Proposal: Probing direct reactions between lithium metal and NMC cathode under thermal runaway conditions
- Role: Lead Researcher (PI: Prof. Ming Tang)
- Beamline: 28-ID-2 (XPD), 18-ID (FXI)

NSLS-II, Brookhaven National Laboratory Dec. 2025

- Proposal: Revealing Universal Charge/Discharge Asymmetry of Reaction Distribution in Thick Battery Electrodes
- Role: Participant (PI: Prof. Ming Tang)
- Beamline: 5-ID (SRX), 18-ID (FXI)

NSLS-II, Brookhaven National Laboratory Jul. 2025

- Proposal: Understanding the reactions between lithium metal and electrolytes at elevated temperatures
- Role: Lead Researcher (PI: Prof. Ming Tang)
- Beamline: 28-ID-2 (XPD)

Professional Service

Committee Member

Women in Combustion Advisory Committee (WiCAC) of the Combustion Institute 2024 – Present

Board Member

Young Editorial Board Member (YEBM) for the journal FirePhysChem 2025 – Present

Manuscript Reviewer

Combustion and Flame

Journal of the Korean Society for Aeronautical and Space Sciences

Advanced Powder Technology

Combustion Science and Technology

FirePhysChem

Conference Session Chair

30th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS) 2025

14th Asia Pacific Conference on Combustion (ASPACC) 2023

Professional Associations

Member of the Electrochemical Society (ECS) 2026 – Present

Member of the Materials Research Society (MRS) 2025 – Present

Member of Korean-American Scientists and Engineers Association (KSEA) 2025 – Present

Member of Korean-American Women in Science & Engineering (KWise) 2023 – Present

Presentations

Conference

20. Juyoung Oh and Ming Tang “Bridging Experiment and Simulation: Advancing Thermal Runaway Understanding in Lithium Metal Batteries” 2025 International Conference on Numerical Combustion (ICNC), Oct. 14-17, 2025, Rome, Italy.

19. Juyoung Oh and Ming Tang “Exploration of Chemical Reactions Between Lithium and Carbonate Electrolytes for Aerospace Propulsion Systems” 38th annual US-Korea Conference (UKC 2025), August 6-9, 2025, Atlanta, GA, USA.

18. Juyoung Oh and Ming Tang “Understanding the Thermochemical Reactions of Lithium and Carbonate Electrolytes at Elevated Temperatures” 30th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 27-August 1, 2025, Ottawa, Canada.

17. Juyoung Oh and Ming Tang “A Deep Look into the Thermochemical Reactions Between Lithium and Carbonate Electrolytes at Elevated Temperature” 2025 MRS Spring Meeting & Exhibit, April 07-11, 2025, Seattle, WA, USA.

16. Yejun Lee, Juyoung Oh, and Jack J. Yoh “Reaction kinetics of magnesium subjected to hygrothermal aging at oxygen-rich conditions.” 29th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 23-28, 2023, SNU Siheung, South Korea.

15. Rajendra Rajak, Daehong Lim, Gnanaprakash Kanagaraj, Juyoung Oh, and Jack J. Yoh “Thermal Analysis of Electrically Controlled Solid Propellant with Different Metal Additives.” 29th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 23-28, 2023, SNU Siheung, South Korea.

14. Rajendra Rajak, Daehong Lim, Gnanaprakash Kanagaraj, Juyoung Oh, and Jack J. Yoh “Peculiar Burning Characteristics of Electrically Controlled Solid Propellants.” 29th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 23-28, 2023, SNU Siheung, South Korea.

13. Juyoung Oh, Ayushi Mehrotra, Yejun Lee, and Jack J. Yoh “The Significant Hazards of Thermal Runaway of Ultra-high-nickel Lithium-ion Batteries during Charging.” 29th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 23-28, 2023,

SNU Siheung, South Korea.

12. Yejun Lee, **Juyoung Oh**, and Jack J. Yoh "Peculiar characteristics of magnesium subjected to hygrothermal aging." 14th Asia Pacific Conference on Combustion (ASPACC), May 14-18, 2023, Kaohsiung, Taiwan.
11. **Juyoung Oh**, Yejun Lee, and Jack J. Yoh "Hygrothermal aging of magnesium particles on the performance of metal-fluorocarbon pyrolants." 14th Asia Pacific Conference on Combustion (ASPACC), May 14-18, 2023, Kaohsiung, Taiwan.
10. **Juyoung Oh**, Yejun Lee, Seung-gyo Jang, and Jack J. Yoh "Understanding the combustion process for MTV igniter under nitrogen atmosphere and hygrothermal aging effects on its combustion process." 11th Asian Joint Conference on Propulsion and Power (AJCPP), March 15-18, 2023, Kanazawa Cultural Hall, Ishikawa, Japan.
9. **Juyoung Oh** and Jack J. Yoh "Changes in the thermodynamic/statistical characteristics of Mg metal fuel by aging and O₂ flow rate." 28th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), June 19-24, 2022, University of Naples Federico II – Engineering Campus, Italy.
8. **Juyoung Oh** and Jack J. Yoh "Thermal Runaway in the Thermal Energy Storage System." 13th Asia Pacific Conference on Combustion (ASPACC), December 5-9, 2021, Abu Dhabi National Exhibition Centre (ADNEC), United Arab Emirates.
7. **Juyoung Oh** and Jack J. Yoh "Prediction of lifetime and stability for titanium-based pyrotechnics based on chemical kinetic mechanisms of combustion." 10th Asian Joint Conference on Propulsion and Power (AJCPP), March 3-6, 2021, Jeju ICC, South Korea.
6. **Juyoung Oh** and Jack J. Yoh "Insights into aging mechanism of Ti-metal based pyrotechnics and changes in thermo-kinetic characteristics." 38th International Symposium on Combustion, January 24-29, 2021, Adelaide, Australia. (virtual)
5. **Juyoung Oh** and Jack J. Yoh "On a new correlation between reaction mechanism and ignition delay time for the NASA standard initiator exposed to various aging conditions" AIAA Propulsion and Energy 2020 Forum, August 24-26, 2020. (virtual)
4. **Juyoung Oh**, Yoonsik Park, and Jack J. Yoh "The changes of thermodynamic reactions of a NASA standard initiator due to hygrothermal aging." 27th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 28- August 02, 2019, Peking University, Beijing, China.
3. **Juyoung Oh**, Yoonsik Park, and Jack J. Yoh "Investigation of temperature and humidity effects on the reaction performance of a NASA standard initiator" 12th Asia Pacific Conference on Combustion (ASPACC), July 01-05, 2019, Fukuoka International Congress Center, Fukuoka, Japan.
2. **Juyoung Oh** and Jack J. Yoh "Understanding the hygrothermal aging effects and lifetime prediction on a NASA standard initiator" 21st Biennial Conference on Shock Compression of Condensed Matter, June 16-21, 2019, Hilton Portland Downtown, Portland, USA.
1. **Juyoung Oh**, Anirudha Ambekar, Yoocheon Kim, and Jack J. Yoh "Effects of humidity on the aging of the pyrotechnic combustions ZPP and THPP." 11th Asia Pacific Conference on Combustion (ASPACC), December 10-14, 2017, The University of Sydney, Australia.

International Workshop

1. The Asian Dean's Forum-The Rising Stars Women in Engineering Workshop, 2023 Selected Participants (**Juyoung Oh**), Nov. 20-22, 2023, The University of Tokyo, Japan.
(https://risingstarsasia.org/2023/participants_detail.php?id=143)

Seminar

1. **Juyoung Oh** “A Deep Dive into the Thermochemical Reactions of Lithium Metal Batteries at Elevated Temperatures for Propulsion Systems” BK21 FOUR Special Seminar Series, February 26, 2025, Seoul National University, Seoul, South Korea. [\[Link\]](#)