

# MEE Department Students Participate in International Academic Exchange

National Chiayi University, Taiwan Partners with  
Kumamoto University, Japan to Co-Host the  
**20th ICAST 2025 International Conference**

*Photos and Text Provided by Prof. Chao-Ming Lin*

**Department of Mechanical and Energy Engineering, National Chiayi University** Undergraduate students, under the careful guidance of Professor Chao-Ming Lin, traveled to the College of Science and Engineering on November 26–27, 2025 to participate in "The 20th International Conference on Advanced Science and Technology" (ICAST 2025 Chiayi), co-hosted by National Chiayi University's College of Science and Engineering and Kumamoto University, Japan. The students engaged in cross-national academic exchange and English-language research presentations, successfully fulfilling this international exchange mission.



MEE students pose for a group photo with visiting Kumamoto University students

This conference marks the 20th year of the ICAST series since its founding in 2008, making it particularly significant. ICAST was initiated by the "Global Joint Educational Center for Science and Technology (GJEC)" under the Graduate School of Science and Technology at Kumamoto University, with the aim of fostering research and educational collaboration among overseas partner universities through student-led academic forums. Unlike conventional conferences dominated by faculty, ICAST's most distinctive feature is that conference organization, program planning, and session facilitation are all led by students—providing young scholars with real international settings to hone leadership, English communication, and cross-cultural collaboration skills. Since its inaugural edition at Kumamoto University, ICAST has expanded to over ten partner universities worldwide, including institutions in China (Peking University, Shandong University), South Korea (Seoul National University, Ewha Womans University), Turkey (Aegean University), France (Université Clermont Auvergne), Indonesia (ITS, Universitas Hasanuddin), the Philippines (De La Salle University), and Taiwan (National Kaohsiung University of Science and Technology, Taiwan Normal University). The 20th edition, held in Chiayi, Taiwan, marked the first time ICAST has been hosted at National Chiayi University—highlighting the university's growing prominence in the international academic network and creating a rare opportunity for our students to connect with the world on their own campus. This successful hosting is a concrete achievement of the university's long-term commitment to international cooperation and its proactive efforts to expand academic exchanges abroad.

**Department of Mechanical and Energy Engineering, National Chiayi University** operates under the core mission of "cultivating advanced talent in mechanical and energy-efficient systems in alignment with national industrial development." The curriculum balances theoretical depth with practical breadth: grounding students in the fundamentals of mechanical engineering and energy technology while providing hands-on experience through research projects, industry internships, and industry-academia collaboration programs, ensuring graduates are equipped to solve real engineering problems. The research achievements presented by the eight participating students at ICAST are a testament to the department's sustained commitment to teaching quality and encouraging students to engage in academic practice. Research areas span precision mechanical design, thermal and heat transfer engineering, energy technology, manufacturing and materials processing, system dynamics and control, and computer-aided engineering analysis—closely aligned with national strategies such as net-zero transition and smart manufacturing. The department actively fosters deep collaborations with industry and research institutions at home and abroad, and has long encouraged faculty and students to participate in international conferences and engineering competitions, cultivating engineers with both global perspectives and local competitive strengths.

All participating students were current undergraduates. The preparation process—spanning topic selection, experimental data collection and analysis, English presentation

writing, and repeated rehearsals—took several months to complete, all while balancing regular coursework, which tested their time management and self-discipline. Advisor Professor Chao-Ming Lin provided close academic guidance and language expression advice throughout, helping the students step onto the international stage at their best. Competing alongside students from Japan and many other countries in a fully English-language academic environment was an invaluable and unforgettable growth experience for each participant. The conference was conducted entirely in English through oral presentations, with live Q&A and discussion sessions. Within the allotted time, each student had to deliver a clear and fluent English presentation covering research motivation, literature review, experimental design, data analysis, and conclusions, while responding on the spot to questions from panel reviewers and fellow participants. For undergraduate students, this was not only a rigorous test of academic research ability, but also an important exercise in comprehensive skills including language expression, logical organization, and the ability to adapt under pressure—an experience far more challenging and rewarding than any classroom learning.

The students' presentations covered core research areas including mechanical engineering design and energy system applications, employing a variety of methodologies such as computational simulation, experimental validation, and engineering optimization. Panel judges and international participants were impressed by the depth of research and the clarity of expression demonstrated by the Taiwanese students. Several faculty and students from Kumamoto University engaged actively during Q&A sessions and expressed interest in deepening academic collaboration on related research topics—fully reflecting the spirit and dedication of our department's students in international academic engagement.



3 MEE students pose with Japanese professor Masahiro Aoyagi (chaired the ICAST 2025 Conference)



Presentation by student Kuan-Chi Chen



Presentation by student Chun-Miao Lin



Presentation by student Rui-Chen Zhou



Presentation by student Guan-Lin Li



Presentation by student Shan-Wei Lai



Presentation by student Chun-Tsan Wu



Advisor: Prof. Chao-Ming Lin

On the evening of the first day, the conference held a welcome banquet for all faculty and student participants. Breaking down language barriers in a relaxed and joyful atmosphere, students from Taiwan and Japan engaged in sincere and lively exchanges. Our students welcomed their Japanese guests with the rich local cuisine of Chiayi and warm-hearted hospitality, giving the visitors a deep sense of the unique human warmth of southern Taiwan and setting a heartfelt tone for the entire conference. Over dinner, students conversed in a mix of limited Japanese and fluent English, sharing their research directions, daily campus life, and hobbies and interests. Despite differences in cultural backgrounds and lifestyles, shared enthusiasm for engineering and visions for the future quickly brought them closer, with laughter filling the tables. Several Japanese students later expressed that the banquet gave them a profound sense of Taiwanese students' genuine friendliness, leaving them with an extremely positive and memorable impression of campus life and culture in Taiwan. Many Japanese students also proactively inquired about graduate school applications and exchange student programs in Taiwan, signaling high expectations for future extended cooperation.

This Taiwan-Japan student banquet exchange was not merely a casual social gathering—it was an important opportunity for young people from both countries to deepen mutual understanding and cultural appreciation through genuine face-to-face interaction. The human connections forged beyond academic papers infused the entire international

conference with an indispensable warmth and humanistic spirit, vividly demonstrating National Chiayi University's concrete achievements and educational philosophy in its long-term promotion of internationalized education and deepening of overseas academic exchange.

As the conference drew to a close, our participating students spontaneously organized a deeply moving surprise—wanting to give their Japanese friends a piece of "Chiayi memories" to take home, the students pooled their own money to purchase the signature egg rolls from Fu-Yi-Hsuan, a century-old Chiayi institution, along with hand-shaken beverages that best represent the everyday flavors and culture of Taiwanese life, as an unexpected parting gift. Behind this gift lay more than just the deliciousness of the food itself—it carried the sincere appreciation and thoughtful care of a group of young people for cross-cultural friendship. From proposing the idea and selecting items, to personally visiting the old shop and carefully packaging everything, every step was handled entirely by the students themselves, completely voluntarily and without any prior arrangement. When the gifts were presented, the Japanese students could hardly conceal their surprise and emotion, taking photos to commemorate the moment and saying "謝謝" (thank you) in imperfect but warm-hearted Chinese, as the entire room overflowed with genuine friendship across borders



The friendship between NCYU and Kumamoto students endures

This seemingly small gesture became one of the most impressive and touching moments of the entire conference. It symbolized that the bond between Taiwanese and Japanese youth had grown from serious academic exchange to resonance in daily life and mutual appreciation at the cultural level, allowing every student present to deeply feel that true international exchange never happens only within lecture halls. The crisp, fragrant sweetness of Fu-Yi-Hsuan's egg rolls became the gentlest and most unforgettable footnote in the shared memories of students from both countries, bringing the 20th ICAST in Chiayi to a warm and perfect conclusion.

### Summary of Exchange Outcomes

Under the guidance of Professor Chao-Ming Lin, undergraduate students of our department completed full English-language oral academic presentations and engaged in in-depth exchanges with students from Japan and countries across Asia, fully demonstrating the research strength of the Department of Mechanical and Energy Engineering at National Chiayi University on the international academic stage, as well as the warmth and cultural charm of Taiwanese youth. We look forward to this exchange serving as a wonderful starting point for continued and deepening collaboration between Taiwan and Japan in the future.

