

University, Japan; Yoshio Nikawa, Kokushikan University, Japan.



Fig. 5: Conference attendees. At the rear, with dark T-shirts, some of the 25 Kyushu University students who supported the local organizers with their enthusiasm and participation.

In addition to the successful technical program, the social events, from the welcome buffet to the banquet dinner, were simply fascinating. Together with the accompanying program of visits to the surrounding area of Fukuoka, the 5 GCMEA organizers managed to showcase the various cultural aspects of the rich Kyushu Island territory, the rice fields surrounding the ITO campus where the conference was held, the climb to the mountain observatory, visits to temples, a noodle factory and a sake brewery.

A special attraction was the banquet dinner with the opening of the sake barrel by some of the presidents or delegates of the 5 associations of the MAJIC confederation (**Figure 6**) and the award giving ceremony.

The two traditional GCMEA awards: the Rustum Roy Innovator Award went to José Manuel Catala-Civera, Universidad Politecnica de Valencia, Spain, and the Ricky Metaxas Pioneer Award went to Cristina Leonelli, University of Modena and Reggio Emilia, Italy (**Figure 7**).

Probably the most significant event of this edition of the GCMEA conference is the announcement of the creation of the Association of Industrial Microwave Heating and High Frequency Applications (AIMHHA) and its affiliation to the MA²JIC, which has consequently had to change its acronym: MAJIC. The confederation agreed to hold the next GCMEA edition in India in 4 years; the exact date and venue will be finalized in the future.



Fig. 6: The Presidents of the 5 MA²JIC associations opening the sake barrel at the beginning of the Banquet dinner. From left to right: Yoshio Nikawa (Conference Chair); Parag Prakash Sutar (representing AMIHHA); Satoshi Horikoshi (President of JEMEA); Li Wu (representing CAMPA); Georgios Dimitrakis (President of AMPERE); John Gerling Jr. (representing IMPI).



Fig. 7: The winners of the two traditional GCMEA awards: José Manuel Catala-Civera, Universidad Politecnica de Valencia, Spain, (left) and Cristina Leonelli, University of Modena and Reggio Emilia, Italy (right).

Report on IMPACIE Conference 2024

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The 4th Conference on Microwave Power for Chemical Engineering Applications was successfully held in Qingdao during August 9 to 11, 2024. The conference was organized by the Institute of Microwave Power Applications for Chemical Industry and Engineering (IMPACIE, one of the CAMPA members) and hosted by Shandong University and Yantai North Microwave Technology Ltd. This conference attracted a total of 234 participants (**Figure 1**) and received 137 papers, showing the latest research results and progresses in the field of microwave power in chemical engineering applications.



Fig. 1: Group photo.

A number of well-known scholars were invited (**Figure 2**) to share their cutting-edge research results, including Prof. Tien-Chien Jen from University of Johannesburg, South Africa; Prof. Roger Ruan from University of Minnesota, USA; Prof. Tohru Yamada from Keio University, Japan; Prof. Chenggong Sun from University of Birmingham, U.K.; Prof. Kama Huang from Sichuan University, China; Prof. Tao Wu from University of Nottingham, Ningbo, China; Prof. Yong Nie from Zhejiang University of Technology, China; and Prof. Wenxiang Hu from Beijing Excalibur Tianjun Institute of Medical Science, China.

This conference also organized a roundtable forum (**Figure 3**) with the theme of "Microwave Science and Technology Innovation Enabling Industrial Development", which provided in-depth discussions and exchanges on topics such as the

current status, challenges, opportunities and the future direction of microwave power applications in industries.



Fig. 2: Plenary speakers.



Fig. 3: Roundtable forum.

16 sessions (**Figure 4**) were set up for in-depth discussions and exchanges on 11 topics of microwave power applications in chemical engineering. In addition, poster presentations and a young scientists' forum were organized.



Fig. 4: Session report.

10 exhibitors also took this opportunity to demonstrate their latest products and technologies, and had exchanges and cooperations with experts and scholars (**Figure 5**).

This conference not only demonstrated the latest progress and applications of microwave technologies in the field of chemical engineering, but

also provided a platform for participants to exchange ideas, addressing wisdom and seek cooperations.

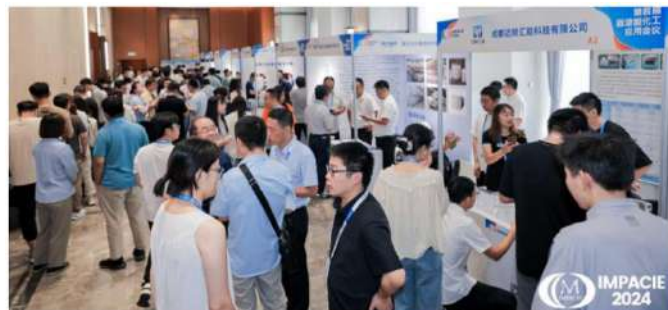


Fig. 5: Exhibitor communicating with participants.

Report on the Royal Society discussion meeting: Microwave science in sustainability

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A recent two-day scientific discussion meeting held at the Royal Society in London on the 13th and 14th of May 2024, brought together over 150 participants both in person and online to explore the role of Microwave Science in Sustainability (**Figure 1**).



Fig. 1: Social media card of the event.

The event, organised by Professor Daniel Slocombe and Professor Adrian Porch from Cardiff University, drew a diverse audience of researchers, industry professionals, and policymakers from across the world, all focused on the potential of microwave technologies to contribute to sustainable development.

The meeting was structured to encourage in-depth discussions and meaningful exchanges on the latest advancements in microwave science. Unlike traditional conferences, this event fostered a dynamic and interactive environment, with lively debates that addressed some of the most pressing challenges in the field.

The opening session set the tone for the event, focusing on how microwave technologies can enhance recycling processes and support a circular economy. The presentation highlighted the potential of microwaves to improve energy efficiency and effectiveness in material recovery, sparking a robust discussion on the practical implementation and scalability of these technologies.

Another key presentation explored the use of microwaves in green chemical processes. The discussion emphasised how microwaves can drive more sustainable chemical reactions by reducing energy consumption and minimising the use of harmful solvents. This approach offers promising avenues for advancing green chemistry, making it more environmentally friendly and efficient.