

# WELCOME MESSAGE

## IEEE Consumer Technology Society President



Dear Esteemed Guests of the IEEE 2023 ICCE-Taiwan,

As the President of IEEE Consumer Technology Society (CTSoc), I am honored to extend a warm and sincere welcome to each and every guest attending the 10th IEEE International Conference on Consumer Electronics - Taiwan 2023 (IEEE 2023 ICCE-Taiwan) held in Kenting, Taiwan from July 17th to 19th, 2023. It is truly gratifying to witness the gathering of exceptional minds and experts at this conference.

I still vividly remember when the Taiwan team hosted the IEEE ISCE in 2013, which was an incredibly successful event. Subsequently, the team was invited to organize the annual conference ICCE-TW in Taiwan. However, many of my friends doubt whether IEEE CTSoc is capable of hosting an annual conference in Taiwan. How time flies! ICCE-TW has now reached its tenth edition this year, which is truly amazing. I am immensely proud of the contributions and achievements of our organizing committee members, whose dedication and expertise have propelled our society to new heights. This year, we have also achieved a record-breaking number of submissions. Let's applaud together to express our gratitude to the organizing team for their hard work in making the tenth event possible.

On behalf of CTSoc, I extend my warmest wishes to all of you, hoping that you will have a fruitful, inspiring, and memorable experience at this conference. We firmly believe that ICCE-TW will usher in the next decade.

Thank you all for joining us at the IEEE 2023 ICCE-Taiwan. Together, let us chart a path towards innovation, excellence, and collective growth.

Sincerely,

Prof. Wen-Chung Kao, IEEE Fellow

President,

*Wen-Chung Kao*

IEEE Consumer Technology Society (CTSoc)



## General Chairs

Dear Distinguished Guests,

On behalf of the organizing committee, it is our great pleasure to extend a warm welcome to all of you to the IEEE International Conference on Consumer Electronics-Taiwan 2023. As the General Chair of this prestigious conference, we are thrilled to see such a remarkable gathering of experts, professionals, and enthusiasts from the consumer electronics field.

After three years of hard work in the COVID-19 pandemic, we finally usher physical conference, meet old and new friends in person in Taiwan. We truly appreciate all of you stay with us until now.

This year, we choose our conference venue in Kenting, which is glamorous and famous location in the world. We hope that every distinguished guest will leave an impressive memory here. In addition to participating in the conference, we also hope that everyone can go sightseeing in such a fantastic city. We believe you will definitely fall in love with Taiwan again.

Apart from this, we would like to express our heartfelt gratitude to the organizing committee, our sponsors, and all the individuals who have dedicated their time and efforts to make this event possible. Your support and contributions have been invaluable in creating an enriching conference experience. We are also extremely grateful to IEEE CTSoc for their great support.

We are confident that the next few days will be filled with engaging discussions, enlightening presentations, and valuable networking opportunities. Let us embrace this opportunity to connect, learn, and shape the future of consumer electronic together. Thank you, and we wish you all a successful and enjoyable conference.



**Yen-Lin Chen**

General Chair,  
IEEE 2023 ICCE-TW

Professor, National  
Taipei University of  
Technology, Taiwan



**Yuh-Shyan Hwang**

General Chair,  
IEEE 2023 ICCE-TW

Professor, National  
Taipei University of  
Technology, Taiwan



**Wen-Huang Cheng**

General Chair,  
IEEE 2023 ICCE-TW

Professor, National  
Taiwan University,  
Taiwan

# Technical Program Chairs

Dear Friends and Colleagues,

It is with immense pleasure and excitement that we extend a warm welcome to all of you on behalf of the TPC Members. As the Technical Program Chairs, we are honored to be a part of this prestigious conference dedicated to exploring the forefront of consumer electronics field.

Our conference serves as a dynamic platform for researchers, experts, and innovators to come together and exchange ideas, advancements, and insights in this rapidly evolving field. It is a unique opportunity to delve into the latest technologies, trends, and challenges that shape the consumer electronic landscape.

Throughout the IEEE 2023 ICCE-Taiwan, we have meticulously curated a program with 4 keynote speeches, 54 oral sessions and 3 poster sessions. This year, we are grateful to receive more than 400 papers which breaks the previous records of ICCE-Taiwan. We would like to express our deepest gratitude to the organizing committee, our outstanding speakers, and all authors over the world. Their unwavering support has been instrumental in organizing an exceptional technical program and ensuring the success of this conference.

To all the participants, we encourage you to actively engage in the sessions, and networking opportunities throughout the event. Embrace this unique chance to connect with like-minded professionals, share your research findings, and ignite discussions that push the boundaries of consumer electronics.

We would also like to take a moment to acknowledge the effort and dedication of our reviewers and technical program committee members. Their expertise and meticulous review process have ensured the high quality and relevance of the papers presented at this conference.

Once again, welcome to the IEEE 2023 ICCE-Taiwan. May this gathering inspire innovation, foster collaboration, and propel our field forward. Thank you, and we wish you a truly remarkable and rewarding conference experience.

Best regards,

**Technical Program Chairs, IEEE 2023 ICCE-TW**

Tin-Yu Wu, Professor, National Pingtung University of Science and Technology, Taiwan

Chih-Hsien Hsia, National Ilan University, Taiwan

Chi-Chia Sun, National Formosa University, Taiwan

Makoto Nakashima, Oita University, Japan