

IEEE Hong Kong Section 2022 Report

PART A - SECTION SUMMARY

A.1 Executive Summary –

1. Section Executive Committee Member List

• Chair Kenneth K Y Wong

Vice Chair Eddy Chiu
 Secretary Jean Lai
 Treasurer Ray Cheung

Member-at-large Wan Chi Siu (Institutional Affairs)

Member-at-large
 Ray Cheung (Student Branch Coordinator)

• Woman-in-Engineering Paulina Chan

- 2. IEEE HK Section AGM Meeting Dec 17, 2022, with over 30 IEEE members in HK joined this AGM meeting, with Dr. Paulina Chan, our advisor.
- 3. IEEE HK Section ExCom Meeting: In 2022, five Section ExCom meetings were scheduled for the chapter officers / representatives. The five ExCom meetings below:
 - Jan 29, 2022 20 members
 - March 19, 2022 20 members
 - May 21, 2022 20 members
 - Aug 6, 2022 20 members
 - Oct 15, 2022 20 members
- 4. IEEE HK Section hosted TENCON2022 on 1-4 November 2022.
- 5. IEEE HK Section organized the IEEE 50th Anniversary Dinner and Prizing Ceremony on 3 November.
- 6. IEEE HK Section collaborated with Local National Organizations such as HK STEM Alliance, and Hour of Code Hong Kong to cultivate young talent education in Hong Kong.
- 7. IEEE HK Section supported events with Local National Organizations, including Hong Kong Productivity Council, and Hong Kong Baptist University.
- 8. IEEE HK Blockchain Group is formed.
- 9. The IEEE Geoscience and Remote Sensing Society (IEEE GRSS) has set up a Hong Kong Chapter.
- 10. 6 out of 10 Newly Elevated Fellow Class of 2023 are from IEEE HK Section.

IEEE HK Section ExCom Meeting has 7 Section Advisors, 23 chapters, 3 affinity, 5 Student Branches, with one newly established joint chapter, Hong Kong Section and Guangzhou Section Joint Section Chapter, IEEE IES.

Advisor: Nim CheungAdvisor: Wan-Chi SiuAdvisor: Paul CheungAdvisor: K.M. LukAdvisor: P.C. ChingAdvisor: Vincent Lau

Advisor: Paulina Chan

Total number of Chapters, WIE/YP/LM AG, SB.

AP/MTT Chapter	GRS Chapter	LMAG Affinity
CAS/COM Chapter	IE/PE/IA Chapter	WIE Affinity
CT/OE Chapter	IT Chapter	YPAG Affinity
CEDA Chapter	MAG Chapter	CityU SB
CI Chapter	PHO Chapter	CUHK SB
COMP Chapter	PSE Chapter	HKBU SB
CS/RA Chapter	SMC Chapter	HKU SB
E Chapter	SP Chapter	HKUST SB
ED/SSC Chapter	TEM Chapter	PolyU SB
EMB Chapter	VT Chapter	OUHK SB
EMC Chapter	IES Chapter	
EP Chapter		

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

• Total number of active members in the past year is 3,171 with the following breakdown:

• Associate Member: 21

• Fellow: 109

• Graduate Student Member: 594

Life Fellow: 31
Life Member: 68
Life Senior: 17
Member: 1,879
Senior Member: 356
Student Member: 96

B.2 Chapter Activities

- 1. The AP/MTT Chapter has organized the following events:
 - a. the Cross Strait Radio Science & Wireless Technology Conference 2021 in Shenzhen physically in October 2021, with over 194 papers being accepted (acceptance rate is ~88%).
 - b. a seminar by Prof. Richard Ziolkowski from the University of Technology Sydney titled Advanced meta material applications for Metaverse and smart devices applications (near 100 participants)
 - c. have an accepted proposal for a special issue of IEEE open journal of antenna and propagation tilted New technologies of small antenna in Metaverse and applications.
- 2. The Education chapter organized the following events:

- a. a MOOC student conference in August (~200 participants), TALE- CFP in progress, R10 EAC special session in TENCON. Colleagues who want to share your VTL projects progress are invited to submit to the special track (https://eteaching4u.org/tale2022/ TALE special track for HK UGC VTL projects).
- b. a R10 EAC special session in TENCON. Colleagues who want to share your VTL projects progress are invited to submit to the special track (https://eteaching4u.org/tale2022/ TALE special track for HK UGC VTL projects).
- c. take part in the IEEE Education Society Week in early April 2022. KP will be a speaker in this activity, talking about student leadership.
- 3. The CIS Chapter organized one seminar each month, the FYP competition and PG paper final presentation in August 2022.
- 4. The CT/OES Chapter organized the following events:
 - a. IEEE TENCON Young engineering conference 2022.
 - b. IEEE TENCON Pre-University Student STEM forum in 2022.
 - c. the Underwater Robotics Challenge in September 24, 2022, IEEE TENCON Young engineering conference 2022, and IEEE TENCON Student STEM forum in 2022.
- 5. The CAS/COM Chapter organized the following events:
 - a. the IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC) conference in 2022, and a talk titled "Antenna Scientists Magicians in the Era of Wireless Connectivity" by Prof. KM Luk in March 2022.
 - b. the International Conference on Field Programmable Technology (ICFTP) at HKUST in December 2022, and ICFTCC in Xian this year.
- 6. The Computer Chapter organized the following events:
 - a. an AGM in February 2022.
 - b. a research seminar about Big Data by Dr. Dickson Chiu on 24 March, 2022, and a chapter AGM in March 2022.
- 7. The CS/RA Chapter organized the following events:
 - a. a virtual seminar in February 2022.
 - b. the IEEE International Conference in Control and Automation, and Robotics and Artificial calculations etc. Distinguished lectures will be organized as well.
- 8. The ED/SSC chapter organized the following events:
 - a. an international conference in late this year or early next year, online distinguished lectures, as well as workshops for students.
 - b. the International Symposium on 3D IC and heterogeneous integration, some events to celebrating the 75th anniversary of transistors, and have around 10 distinguished lectures in this year.

9. The EMB chapter organized the following events:

- a. a small-scale robotic workshop in 25 October 2021, and the 7th HKSMSS Student conference on Sports Medicine, Rehabilitation and Exercise Science 2021 cum AFSM Scientific Symposium 2021 (Innovations in SportsTech) on 4-5 December 2021. The conference attracted over 300 participants.
- b. co-organized the international Conference on Smart Health Technology 2022 in 25-26 March 2022 with HKMO.
- 10. The EMC Chapter organized the EMC distinguished lecture series.
- 11. The EP chapter organized the following events:
 - a. a third-generation of semiconductor packaging workshop. The workshop may engaged pre-university students.
 - b. the 2022 International symposium on 3D IC and Heterogeneous Integration with HKUST in end April 2022. It keeps on promoting student participations in different universities.

12. The IT Chapter organized the following events:

- a. a mixed-mode seminar by Prof. Raymond Yeung on December 29, 2021, with around 100 participants.
- b. invite speakers to speak on behalf of the chapter in TENCON.
- c. "Huawei IEEE ITSoc HK Joint Workshop on Semantic Information Theory 2022" on 25-26 May, 2022.

13. The MAG Chapter organized the following events:

- a. two distinguished lectures Spins in low-dimensional materials systems: Transport, Gate control and Conversion by Prof. Masashi Shiraishi on November 17, 2021, and Antiferromagnetic Insulatronics: Spiontronics without magnetic fields by Prof. Mathias Kläui on December 14, 2021.
- b. A magnetic levitation competition was held in HKUST in July to August 2021, with 28 participating secondary schools.

14. The PHO Chapter organized the following events:

- a. the 21st Postgraduate Conference 2021 in HKU on 18 December, 2021, with over 30 presentations & 70 graduate students participating in Hong Kong.
- b. some lectures and distinguished lectures and prepare TENCON2022.

15. The PSE Chapter organized the following events:

- a. some seminars on toy safety, and IoT security standards etc with HKMU and CityU.
- b. the IEEE International Symposium on Product Compliance Engineering-Asia (ISPCE) 2022 in Guangzhou Province, China, 4-6 November, 2022.

16. The VT/IES Chapter organized the following events:

- a. some seminars during this period.
- b. a workshop given by three distinguish lecturers/speakers on emerging electric machine devices for electric vehicles. IES chapter organized workshop in

coming June/July. Now, it is under discussion with the local universities in Greater Bay areas.

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

B.4 Students Activities

- 1. IEEE HK Section CityU Student Branch organized an Outreach talk/events to engage students to join its SB.
- 2. IEEE HK Section HKU and MU Student Branch are ready to kick-start their Outreach programme.

B.5 Affinity Group Activities

- 1. LMAG in HK Section organized the Deep Learning workshop in TENCON 2022 in November 2022.
- 2. The WIE Hong Kong cooperates with ComSoc WICE to run two panels in forthcoming ICC in Seoul in May 2022. WIE will set up a panel in TENCON.
- 3. The WIE Hong Kong participated two sessions International Conference of Communications (ICC), Flagship conference of ComSoc, in Seoul, Korea in 19 May, 2022. Topics are: How to become a fellow, and Technology empowers leadership and management.
- 4. The WIE Hong Kong (Paulina) served as a speaker in CUHK on the topic of "Innovative technologies transform industry / IEEE as your professional home" organized by Tan Lee.

B.6 Awards & Recognition Activities

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
 - Δ No
- Home Page of the Section (give the URL and how often it is updated)
 - ♦ https://r10.ieee.org/hk/ (regular update)
- Other means of contacts with Section members including social media
 - ♦ Facebook

B.8 Industry Relations

- Membership growth and retention
 - ♦ No.
- Activities for/with industrial members

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
 - ♦ No
- SIGHT Activities
 - ♦ No

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)"
- For the Family oriented event, IEEE HK Section co-organized the family coding learning activities with local national partners and industry partners such as HK STEM Education Alliance and Hour of Code Hong Kong.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
 - No
- Funding secured from the IEEE and external sources including sponsorships
 - No

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
 - No
- Details of joint activities
 - No
- Benefit to IEEE members (for example discounts, access to technical information etc.)
 - No
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
 - No

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
 - No
- Joint activities with any other Section
 - No

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organising technical, educational and professional activities
 - Collaborate with other chapters as outlined in the Executive Summary
- Joint activities for membership development
 - No
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section
 - No
- C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)
- C.6 Problems anticipated and suggestions for solutions, if any No

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans
No

D.2 Goals and Future Plans

5 Foci in 2022/23

- Embrace the new Norm
- Recruit, Retain, Reinstate ("3 Rs") + Member Engagement
- Advocate Tech-Biz knowledge
- Maintain Center of Excellence in technologies
- Collaborate with external parties
- D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

To be discussed in the ExCom brainstorming sessions.

D.4 Business Plan for Sustainable Growth and Financial Stability.