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ARI · XIII ASHRAE Regional Intelligence

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Regional Newsletter Editor (2022-25): Wong Chun Sing

[email: cswong.ashrae@gmail.com

## DRC's Message

Dear Fellow Region XIII compatriots,

Since most of borders opened and travel is allowed, there have been quite a few events that have taken place:

- 1. Winter Meeting in Toronto, Canada
- 2. Our 25<sup>th</sup> Region XIII CRC in Tokyo, Japan
- 3. YEA International Leaders Training in Kuala Lumpur, Malaysia
- 4. Chapters' Annual Dinners
- 5. ASHRAE Global Summit and RAL CRC in Istanbul, Turkey

The next significant big event will no doubt be the Winter Meeting and Exposition in Atlanta, Georgia. Hope to see all of you who are going there. Please do attend our Region XIII Get-Together Dinner on Sunday, Feb 2023. The proposed venue will be confirmed at the notice board in the ASHRAE Official Book Store where you can register and inform your participation.

Recently the Society is putting much emphasis and efforts into the further development on the subject of "Decarbonization" and related topics. There have been many discussions and meetings held within the various task groups to put ASHRAE ahead in the of other organizations/bodies. One can find lots of information and advisory notes in the Society website.

There have also been much efforts put in by our current Regional Officers to engage the respective Chapter Chairs. The main objective is to ensure that the Chapters are active and will work towards fulfilling our members' expectations and to serve them better. I hope all the Regional Officers would keep up their good work and devotion to meet the Society and Regional goals set. Region XIII is truly blessed with dedicated, selfless and committed Regional Officers. Thank you all on behalf of our Region XIII members.....

We also hope to see more of our senior members taking up higher positions in ASHRAE too. We have put in our nominations and hope to hear good news very soon. Good luck to all of them during nominations.

The CoVid virus is still mutating and causing discomfort. Though not as serious as before. We must all always be vigilant and be safe. Please take good care of yourselves and I hope all of you stay healthy always.

I look forward to meeting all of you in person at our next Regional and Chapter meetings.

Thank you all. Merry Christmas and a Happy New Year 2023!!!

Yours truly,

Leong Cheng Wee Director and Regional Chair (2022-25) ASHRAE Region XIII







### ASHRAE Region XIII 2022-2023 Regional Officers, General Chairs, Committees, Chapter Delegates and Alternates

**Director and Regional Chair** Assistant Regional Chair **Region Members Council Representative** Regional Vice Chair for Chapter Technology Transfer **Regional Vice Chair for Membership Promotion Regional Vice Chair for Government Affairs Regional Vice Chair for Research Promotion Regional Vice Chair for Student Activities Regional Vice Chair for Young Engineers in ASHRAE Regional Nominating Committee Member Regional Nominating Committee Alternate Regional Nominating Committee Reserve Alternate Regional Refrigeration Committee Chair** Regional Historian / Conference Secretary **Regional Treasurer** Regional Electronic Communications Chair / Webmaster **Regional Newsletter Editor Regional Representative (China) Region XIII Internal Auditor Region XIII Internal Auditor** 

Chapters Regional Conference (CRC) General Chair 2022 Chapters Regional Conference (CRC) General Chair 2023 Chapters Regional Conference (CRC) General Chair 2024

APCBE Steering Committee Chair APCBE General Chair 2021 APCBE General Chair 2023

**Chapter Delegate Chapter Alternate Chapter Delegate Chapter Alternate**  Leong Cheng Wee Apichit Lumlertpongpana Ong Ching Loon Gadam Sivakumar Sam Hui Albert Sin Chea Suei Keong Wang Fu Jen Lam Chak Mou Jojo Castro Den Low **Tracy Pang** Ardiyansyah Yatim Ng Kah Choong Florence Chan Hsu Chia Chi Wong Chun Sing Edward Tsui Ow Chee Sheng Ng Yong Kong Rvozo Ooka Jeng Ming Shan

Ng Wen Bin Peter Chan Ng Wen Bin

Peter Chan

Yang Junjing Praveen Hassan Chandrashekar Joe Chow Peter Lam King Yeong Jin Tee Tone Vei Lin Hung Wen Gavin Chang Mark Christian E Manuel Isagani G Brugada Pidchapad Kidkirdsang Pantuda Puthipiroj Yongkie Tileno Herlin Herlianika Susumu Horikawa Junta Nakano Minki Sung Lim Jae Han WONG Seng Fat WONG Siu Hung Vincent

Singapore Chapter **Thailand Chapter** Malaysia Chapter Singapore Chapter Hong Kong Chapter Singapore Chapter Malaysia Chapter Taiwan Chapter Macao Chapter **Philippines Chapter** Malaysia Chapter Hong Kong Chapter Indonesia Chapter Malaysia Chapter Singapore Chapter **Taiwan Chapter** Hong Kong Chapter Hong Kong Chapter Malaysia Chapter Malaysia Chapter

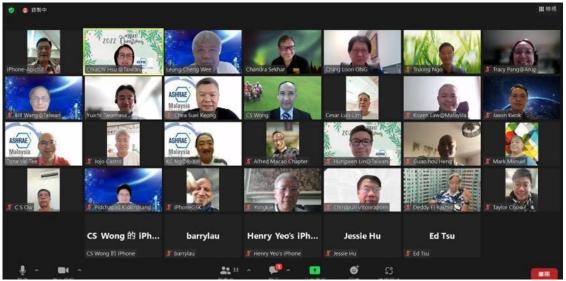
Japan Chapter Taiwan Chapter Macao Chapter

Malaysia Chapter Macao Chapter Malaysia Chapter

Singapore Chapter Singapore Chapter Hong Kong Chapter Hong Kong Chapter Malaysia Chapter Malaysia Chapter Taiwan Chapter Taiwan Chapter **Philippines Chapter Philippines Chapter Thailand Chapter** Thailand Chapter Indonesia Chapter Indonesia Chapter Japan Chapter Japan Chapter South Korea Chapter South Korea Chapter Macao Chapter Macao Chapter







Christmas Virtual Get-Together on 24<sup>th</sup> December 2022

### List of ASHRAE Region XIII Past Director and Regional Chairs

Director and Regional Chair (1998-2001) Director and Regional Chair (2001-2004) Director and Regional Chair (2004-2007) Director and Regional Chair (2007-2010) Director and Regional Chair (2010-2013) Director and Regional Chair (2013-2016) Director and Regional Chair (2016-2019) Director and Regional Chair (2019-2022) Vincent Tse Raymond Wong Ow Chee Sheng Robert Hu Wichai Laksanakorn Edward Tsui Ng Yong Kong Apichit Lumlertpongpana Hong Kong Chapter Singapore Chapter Malaysia Chapter Taiwan Chapter Thailand Chapter Hong Kong Chapter Malaysia Chapter Thailand Chapter





# 25<sup>th</sup> Chapters Regional Conference 2022 in Japan

Reported by **Ryozo Ooka** *CRC2022 General Chair* 



The year 2022 was filled with many significant incidents worldwide, but I hope you all are having a happy new year of 2023.

The 25<sup>th</sup> Chapters Regional Conference (CRC) held on 19<sup>th</sup> & 20<sup>th</sup> August 2022, was completed with smooth operation. Many members, such as regional officers, organizing committee members, and volunteers, contributed to the event in various ways. In particular, it was held in a face-to-face and remote hybrid method, the standard of with/after COVID-19. The maximum number of participants was around 360 on the second day, 50 of whom were onsite. We appreciate the organizing members and the participants for making this event successful. In addition, we are very grateful that the important society members (Farooq Mehboob / Society President, Ginger Scoggins / Society President-Elect, Dennis Knight / Society Treasure, and Mark Owen / Staff Director) visited Japan and participated in the meeting face-to-face. At the meeting, many opinions were exchanged, and valuable presentations were provided. This CRC has made significant progress in regional networking. The wonderful atmosphere of the conference is the result of the culture and friendship of all chapters.



At the beginning of the conference, "Indoor Air Quality Control After the COVID-19 Pandemic" by Professor William P. Bahnfleth was introduced as a keynote presentation, and we gained much knowledge on the topic.

At the Student Activity Workshop held on 20<sup>th</sup> August, Daiyagate Ikebukuro and Takenaka Corporation Higashikanto Branch Office, which won the ASHRAE Technology Award, were introduced. After that, a Presentation and Experience Sharing of ASHRAE, Games: Quiz Kahoot, etc. were held, and it was very successful.









At the Banquet Dinner held on the night of the 19<sup>th</sup> in the hall adjacent to the conference hall, we were able to listen to speeches of the principal members from each Chapter, including Leong Cheng Wee's address of Region XIII DRC. Finally, we were able to enjoy improvised karaoke by participants.



A party on the night of the 20<sup>th</sup> was a homely meeting held at a Japanese izakaya, surrounding the table while enjoying Japanese food such as fish and live-fresh Ise shrimp.

Not only human resources but also costs are crucial to making such an event successful. We are very grateful to Daikin Industries, Ltd., Dai-Dan Co., Ltd., Azbil Corporation, Obayashi Corporation, Takasago Thermal Engineering Co., Ltd., Toshiba Carrier Corporation, Shimizu Corporation, Kajima Corporation, Taisei Corporation, Shinryo Corporation.







Also, on 21<sup>st</sup> August, the day after CRC, ASHRAE's First Industry Round Table was held. Here, industrial members from multiple segments related to ASHRAE exchanged opinions on the current relationship with ASHRAE and what we expect from ASHRAE in the future. I thank the Round Table moderator, DRC of Region 13, Leong Cheng Wee.



This is the first CRC that the Japanese Chapter hosted. The Japan Chapter has just been established in 2014 but is rapidly learning a lot from ASHRAE and Region XIII. This CRC will be a new start for the Japan Chapter.

Lastly, I would like to thank all members of the Conference Organizing Committee. We prepared for CRC for nearly three years, and their efforts were with concentric enthusiasm.





# 16<sup>th</sup> Asia-Pacific Conference on the Built Environment in Macao



Due to the pandemic, the 16<sup>th</sup> Asia-Pacific Conference on Built Environment originally scheduled to be held in October 2021 was postponed to 7<sup>th</sup> & 8<sup>th</sup> October 2022 at the Conference Hall of Macau Studio City, Macau. The theme of this year's conference is "Net Zero Strategies for Existing Buildings". The conference focuses on energy-saving optimization of existing buildings, science and technology and management methods for carbon reduction and emission reduction, attracting participants to participate both online and offline.

Reported by **Peter Chan** APCBE 2021 General Chair





Media link: http://www.macaodaily.com/html/2022-10/11/content 1627152.htm?fbclid=lwAR1KIDung7RLTrifFq3XtwlC4oyGXZOOV0yx20bf3kuBCnEq-pxHWRTGISw

In this meeting, experts and scholars from 11 countries and regions in the Asia-Pacific region (China's Guangdong Province, Macao SAR, Hong Kong SAR, Taiwan, as well as Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, and Thailand) discussed the topic in depth and conducted technical exchanges as well as cooperation. In addition to attracting more than 30 people to participate in the event offline, more than 100 experts, scholars and engineering professionals from member countries and regions in the Region XIII also participated online simultaneously.



ASHRAE's Asia-Pacific Building Environment Conference was held for the first time in 1991 and is a biennial international conference. The Asia Pacific Conference on the Built Environment (APCBE) is also an engineering themed event recognized by the International Congress and Conference Association (ICCA) who maintains a list of top performing destinations for international association meetings. The holding of APCBE helps Macau to gain its ranking on the list which in turns strengthens Macau's standing as a world tourism, leisure, and convention center.







Reported by Gadam Sivakumar Regional Vice Chair Chapter Technology Transfer

# **Chapter Technology Transfer Update**

The RXIII CTTC under the leadership of Jerry R. Huang fulfilled all regional activities and managed all events as per DL quota provided by Society for year 2021-22 despite the Covid pandemic. We sincerely thank Jerry for his contribution towards RXIII CTTC activities and guiding me to take over and to manage the current year activities for the year 2022-23 smoothly.

RXIII CTTC Progress for 2022-23 are as outlined under the following four categories:

### **CTTC Chapter Committees and follow up**

- CRC CTTC workshop in Japan has been well attended by all chapter chairs and agenda, planning and action points has been distributed soon after the workshop to all chapter chairs and cochairs for further coordination and follow up.
- > CTTC committees formed for each chapter with necessary planning and execution of activities has been through CTTC group emails/WhatsApp created, including copies to each chapter president and President-Elect for the smooth coordination between all chapters.
- > RXIII CTTC chapters chairs online meeting held on 14<sup>th</sup> September 2022 to coordinate and plan various events and future activities for each chapter. Further planning and coordination took place through emails and WhatsApp messages for effective communication with all chapters.
- Planned full year program for the DLs, Tech awards and follow up with GA committees and SA committees to propagate and promote technology related events, decarbonization topics to the chapter/associate members, Governmental agencies, and student members etc.

### **DL events**

- With all chapters' coordination DL Quota allocated for the 2022-23 has been fulfilled and many DLs are coordinated to do multichapter visits to maximize the effectiveness of the program and benefit all members and relevant stakeholders.
- 10 DL events planned as below and 3 DL events has been completed successfully from Japan Chapter during CRC, Malaysia Chapter 30<sup>th</sup> September 2022 and Philippines Chapter on 1<sup>st</sup> December 2022. Appreciate Philippines Chapter to provide the virtual link to Taiwan Chapter to benefit the DL event.

S.No	Host Chapter	Date of visit	Lecturer	Co-host Chapters / other Events
1	Japan	19th Aug 22	William Bahnfleth	Onsite & Virtual
2	Malaysia	30th Sep 22	Luke Leung	Seminar
3	Philippines	1st Dec 22	Brain Monk	Taiwan
4	Singapore	13&15 Dec 22	Hoy Bohanan	Taiwan
5	Thailand	18-20 Jan 23	Ross D.Montgomery	Reg Students event
6	Singapore	17-18 Apr 23	Dru Crawley	Round table with Govt agencies
7	Hong Kong	17-21Apr 23	Terry Townsend	Singapore / Malaysia
8	Taiwan	18-22 Apr 23	Kishor Khankari	South Korea
9	Japan	29-31 Mar 23	Luke Leung	Chapter events
10	Singapore	13th Dec 22	Chandra Sekhar	Round table with Govt agencies



Japan Chapter DL for CRC2022 – William Bahnfleth

Malaysia Chapter DL event – Luke Leung



Singapore Chapter DL event – Hoy Bohanon & Chandra Sekhar on 13th Dec 2022



Singapore Chapter – Hoy Bohanon meeting with government agencies on 13th Dec 2022





### ASHRAE Technology Awards

### Regional Level Technology Awards 2022-23:

- Japan Chapter and Hong Kong Chapter participated in the regional competition.
- A big thanks to the judges for the regional awards category for providing their invaluable comments; this also helped the contestants to shape their society level submissions.
  - > Apichit Lumlertpongpana (Region XIII Immediate Past DRC/ARC),
  - Raymond Wong Yew Wah (Region XIII Past DRC),
  - Albert Sin Yew Tek (Region XIII RVC-GA 2021-2024),
  - Wang Fu Jen (Region XIII RVC-SA 2021-2024)
- Japan Chapter clinched first place and honorable mention and Hong Kong Chapter clinched second place and merit awards.

### Technology Award Winners at Regional level:

### **First Place Winner**

Project Name: Entrant: Building Owner: Chapter: Category: Shinryo Shinjo Building Hirasuga Nobuhiro Shinryo Corporation Japan Category I – Commercial Buildings, New

**Mizunami Kita Junior High School** 

### Second Place Winner

Project Name:K11 Atelier King's RoadEntrant:Chow Chi Fung TaylorBuilding Owner:New World Development Company LimitedChapter:Hong KongCategory:Category I – Commercial Buildings, New

Tanaka Hiroaki

**Mizunami City Office** 

### **Honorable Mention**

Project Name: Entrant: Building Owner: Chapter: Category:

**Merit Certificate** 

Project Name: Entrant: Building Owner: Chapter: Category: Japan Category II – Institutional Buildings, Educational Facilities, New Retro-Commissioning and Digitial Transformation of Cityplaza Mall

Yau Man Hung Raymond Swire Properties Limited Hong Kong Category I – Commercial Buildings, Existing Building Commissioning

### **Merit Certificate**

Project Name: Entrant: Building Owner: Chapter: Category: Kowloon East Regional Headquarters and Operational Base cum Divisional Police Station Yeung Chor Kee Kowloon East Regional Headquarters and Hong Kong Police Hong Kong Category II – Institutional Buildings, Other Institutional, New







### Society Level Technology Awards 2022-23:

RXIII is proud to announce and congratulate Japan Chapter and Hong Kong Chapter for participating in the Society Level Technology Awards competition and the following categories have been submitted:

	Chapter	Category	Project Name	Building Owner
1	Japan	Commercial Buildings,	Shinryo Shinjo Building	Shinryo Corporation
		New		
2	Hong Kong	Commercial Buildings,	Retro-Commissioning and Digital	Swire Properties Limited
		Existing Building	Transformation of Cityplaza Mall	
		Commissioning (EBCx)		
3	Japan	Institutional Buildings,	Mizunami Kita Junior High School	Mizunami City Office
		Educational Facilities,		
		New		
4	Hong Kong	Institutional Buildings,	Kowloon East Regional	Kowloon East Regional
		Other Institutional,	Headquarters and Operational	Headquarters and Hong
		New	Base cum Divisional Police Station	Kong Police

> Appreciate the efforts from both Japan and Hong Kong Chapters for keeping the RXIII Flag flying high in the ASHRAE Global competition; wish that other chapters follow in their footsteps and start to prepare for the next year competition.

### **PAOE (Presidential Award Of Excellence)**

- As Society measures the chapter level development/progress/ activities through PAOE points, chapters have been consistently following up with PAOE and the progress update for the RXIII PAOE points as of 9<sup>th</sup> December 2022 is captured below.
- Heartly congratulations to Singapore, Hong Kong, Taiwan, Indonesia, Japan Chapters for getting PAR score and Malaysia, Philippines, Thailand Chapters for exceeding the minimum score. South Korea and Macao Chapters are nearly there and request to follow up updating for the closing of half-yearly progress updates by end December 2022.

*Minimum and PAR points indicated are for 2022-2023											
Chapter code	Chapter Name	Mem Pro: Min 1000; PAR 1600	Stu Act: Min 500; PAR 800	RP: Min 800 PAR 1050	Historical: Min 100; PAR 300	Comm: Min 300; PAR 700	,	Ch Tech Tr: Min 550; PAR 1050	Govt Aff: Min 500; PAR 1000	Y A : Min 300 PAR 800	Ch PAOE Totals
142	SINGAPORE	1665	525	640	200	1020	1525	2300	1200	1100	10175
143	HONG KONG	2015	715	835	0	855	350	3000	250	950	8970
149	MALAYSIA	300	890	665	400	535	1125	900	1850	1350	8015
157	TAIWAN	1325	740	600	150	620	1130	2400	700	1355	9020
167	PHILIPPINES	1320	490	395	0	0	370	650	250	725	4200
170	THAILAND	250	120	620	0	0	1020	650	150	0	2810
183	INDONESIA	300	240	870	50	595	170	1800	450	900	5375
194	JAPAN	300	250	890	0	300	405	2000	250	375	4770
195	SOUTH KOREA	225	25	1190	0	180	40	400	0	0	2060
198	MACAO	225	70	1200	0	0	0	400	150	800	2845

REGION XIII 2022-2023 Presidential Award of Excellence (Points as of 9th Dec 2.45pm)

Appreciate all the individual chapter leaders/CTTC Chairs/Co-chairs and committee members for the progress made so far in the half year 2022-23 and request to follow up to make a successful year ahead for RXIII.







Reported by **Albert Sin Yew Tek** Regional Vice Chair Government Affairs

# **Government Affairs Update**

Region XIII CRC Training on ASHRAE's Government Committee (GAC) was conducted virtually on 22<sup>nd</sup> August 2022 with 28 participants. The GAC Mission Statement is to establish ASHRAE as a leading source for expertise in the built environment and a resource for policy makers in the development of legislation and regulations affecting the public, the HVAC&R community, and the engineering profession.

A follow-up GAC virtual meeting on held on 29<sup>th</sup> October 2022 with 12 participants. The following issues as discussed:

- ASHRAE Society's focus on "Public Policy Issue Briefs (PPIBs)"
- ASHRAE Taiwan Chapter collaboration with CityNet, ICNI and ITRI to launch online "Energy Efficiency" courses series for local government agencies in November/December 2022.



Region XIII CRC Training on ASHRAE's Government Committee (GAC) was conducted virtually on 22<sup>nd</sup> August 2022



GAC virtual meeting on held on 29th October 2022

ASHRAE RXIII RVC GA Albert Sin and RVC CTTC Sivakumar attended bilateral meeting between ASHRAE Singapore and Malaysia Chapter on 5<sup>th</sup> November 2022. Both Chapters shared their experiences during Covid pandemic during past two years in tapping hybrid of virtual and physical meetings in reaching out to ASHRAE members, local government agencies and industry players on various Technical Seminars and ASHRAE guidelines/information sharing.



Bilateral meeting between ASHRAE Singapore and Malaysia Chapters on 5th November 2022







Reported by Wang Fu Jen Regional Vice Chair Student Activities

# **Student Activities Update**

### October 2022

Oct 15 Grants- Student Travel Applications Due

### November 2022

Grants - Early-bird deadlines for Undergraduate Equipment Grant Applications Due Nov 15

### December 2022

Dec 15	Grants - Undergraduate Equipment Grant
	Applications Due
Dec 15	Undergraduate & Graduate Students – HVAC&R
	Student Paper Competition Deadline

### January 2023

Jan-18	R13 regional student virtual event
Jan-late	ASHRAE Winter Meeting & Student Program
Jan-late	Student Design Competition challenge released

### March 2023

Graduate Student Grant-in-Aid Applications Due Mar 1

### May 2023

May-early	Student Design Competition Entries Due
May 31	Student Branch Report Due
May 31	Student Branch Advisor of the Year Award Due







RXIII – CTTC & SA Regional Joint Event with Students on DECARBONIZATION















ter President, Dr. Junjing Yang promoting ASHRAE and inspiring the students



Coordinating regional students - Dr. Wang Fu Jen - Region XIII Regional Vice Chair, Student Activities

























&A and closing by all panelists

Ross D. Montgomery - P.E., FASHRAE, Life member. President, Quality Systems & Technologies Inc, USA Gadam Sivakumar - Region XIII Regional Vice Chair, Chapter Technology Transfer

Dr. Wang Fu Jen - Region XIII Regional Vice Chair, Student Activities

Dr. Junjing Yang – Singapore Chapter President

Gaurav Kumar – Singapore Chapter Student Activities Chair





# YEA Leadership International (YLI) 2022



Reported by Lam Chak Mou Regional Vice Chair Young Engineers in ASHRAE

YEA Leadership International (YLI) 2022 was held from 28<sup>th</sup> to 30<sup>th</sup> October 2022 at hotel "Grand Hyatt Kuala Lumpur" in Kuala Lumpur. A total of 22 YEA members from ten different countries and cities, including India, the United States, the United Kingdom, Indonesia, Egypt, Australia, Singapore, Malaysia, Taiwan and Macao participated in this annual event aimed at helping young engineers from different countries become more conscious and effective leaders.



Georginia Lam, YEA Co-Chair of ASHRAE Macao Chapter, also attended the YLI and expressed that she enjoyed the program very much. She saw it as a great opportunity to expand the network and meet fellow industry professionals, learn from mentors and young engineers from around the world, help us to explore our vision, focus on the big picture and find our own leadership style to build a more mature team. Georginia also encouraged the young engineers to take the chance of joining the training events organized by ASHRAE to equip themselves and develop their leadership and management skills.







# **APCBE Steering Committee Update**



Reported by Ng Wen Bin APCBE Steering Committee Chair

After the 16<sup>th</sup> Asia-Pacific Conference on Built Environment successfully held in Macao on 7<sup>th</sup> & 8<sup>th</sup> October 2022, the 17th Asia-Pacific Conference on Built Environment with a theme of 'Unique Challenges & Solutions for Climate Change in HVAC&R Industry' will be held in Kuala Lumpur, Malaysia on 3<sup>rd</sup> & 4<sup>th</sup> November 2023. The important dates and deadlines of submission for authors are listed below.

	DATE	ASHRAE Malaysia
Abstract Due	15 March 2023	
Notification of Abstract Acceptance	15 April 2023	THE BUILT ENVIRONMENT, APCBE
Full Paper Submission	15 May2023	reku kendek zint ka Organisagi di ASHRAE Malaysia chag
Notification of Paper Acceptance	30 June 2023	10F82 Malapa Malapa

### The promotional flyer of the 17th Asia-Pacific Conference on Built Environment (APCBE) :-



#### Conference

Asia Pacific Conference on the Built Environment (APCBE) is a biennial event of ASHRAE Region XIII and was first launched in 1991. In response to the growing technology, the Conference scope has been expanded from HVAC&R to cover various aspects related to the built environment. This international conference provides an excellent platform for researchers and practitioners to share ideas, best practices, new technologies and future prospects.

This is a 1½ -days conference with participants from academics, architects, building owners, consultants, contractors, facilities managers, government, industries, suppliers and other parties who have an interest in the design, installation, testing, commissioning, operation and maintenance of the built environment.

#### WHO SHOULD ATTEND

ASHRAE Malaysia Chapter welcomes engineers, architects, designers, researchers, academics, property developers, professionals and practitioners involved in the wide range of disciplines associated with building design and building services engineering. The official language of the Conference is English. CONFERENCE CONTACT INFORMATION

Website: https://www.ashrae.org.my/ Email: apcbemalaysia2023@gmail.com



#### PROCEEDING PUBLICATION

All the accepted manuscripts will be published in SCOPUS-indexed conference proceedings with an additional payment of USD\$120.

#### CALL FOR ABSTRACTS

The abstract should contain the background and objectives of the study, the methodology used and key results. Interested authors are requested to submit the abstract in MS Word format to the Proceedings & Technical Committee at the approximation of the proceedings of the proceeding to the procee address 23@gmail.com Submission should include the following information:

- Title of the paper
- affiliation and contact details (email address, postal address) and phone number)
- · A body of not more than 300 words and 3 ~ 5 keywords

#### IMPORTANT DATES AND DEADLINES OF SUBMISSION FOR

	DATE
Abstract Due	15 March 2023
Notification of Abstract Acceptance	15 April 2023
Full Paper Submission	15 May 2023
Notification of Paper Acceptance	30 June 2023

#### SCHEDULE OF ACTIVITIES

2 November 2023 - Day 0 (Thursday) 3:00 PM Registration 6:00 PM Welcome Party

3 November 2023 - Day 1 (Friday) 8:00 AM Continuation of Registration 9:00 AM Opening of Plenary Session (Strictly Formal Attire: Coat & Tie) 12:00 PM Lunch 1:00 PM Parallel Session 5:00 PM End of Day 1 Session

6:30 PM Banquet Dinner 4 November 2023 - Day 2 (Saturday) 8:00 AM Parallel Ses

12:00 PM End of Day 2 Session \* Activities are subject to change



#### **Registration and Payment**

Registration Packages		Early Bird		Nor	mal	
Full Board		USD	USD 315		USD 365	
Day 1 only		USD 265			USD 295	
Day 2 only		USD 160			USD 180	
Banquet Dinner		USD 105			USD 105	
Meal 🛛 🖸 🕅		ieneral 🔲 Vege		rian	🛛 Halal	
IOP Proceeding (Sconus)- Ontional						

\*Early registration Due: 3 September 2023

**REMARKS:** 

1. Full board package included 11/2 days conference with 3 tea breaks,1 lunch and 1 banquet dinner.

2. Day 1 only package included 1-day conference with 2 tea breaks,1 lunch and 1 banquet dinner on 3 Nov 2023.

3. Day 2 only package included half-day conference with 1 tea break on 4 Nov 2023.

4. Seats will only be reserved when payment is received for good.

5. The deadline of Early Bird registration is 3 September 2023.

6. The successful registration will be confirmed by e-mail no later than 15 September 2023. If no confirmation e-mail is received by 20 September 2023, the registration is assumed not successful; or one may check with the Conference Secretariat.

PAYMENT METHOD **Online** payment PayPal

# Asia-Pacific Conference on the Built Environment (APCBE) Steering Committee

APCBE Steering Committee Chair (2020-2023) APCBE Steering Committee Secretary (2021-2024) APCBE Steering Committee Member (2020-2023) APCBE Steering Committee Member (2020-2023) APCBE Steering Committee Member (2020-2024) APCBE Steering Committee Member (2021-2024) APCBE Steering Committee Member (2022-2025) APCBE Steering Committee Member (2022-2025) APCBE Steering Committee Member (2022-2025)

Ng Wen Bin Peter Chan Yang Junjing Ari Darmawan Pasek Michael Sung Akio Miyara Chang Chih Chang Thosaporn Katejanekarn Young II Kim

Malaysia Chapter Macao Chapter Singapore Chapter Indonesia Chapter Hong Kong Chapter Japan Chapter **Taiwan Chapter Thailand Chapter** South Korea Chapter



# **Singapore Chapter Highlights**

Reported by Yang Junjing, Singapore Chapter President 2022-2023



ASC 40<sup>th</sup> Anniversary Dinner



33<sup>rd</sup> Bilateral Meeting between Singapore Chapter and Malaysia Chapter and Site Visit



Technical Site Visit to NTU Passive Displacement Cooling on 22<sup>nd</sup> November 2022







ASC signed MOU with SIFMA



ASC-IBPSA SG Joint Webinar on ZEB Buildings



Student Branch Engagement with NUS



Advocacy Engagement Initiatives with Government Agencies



RP-MP Night on 7<sup>th</sup> October 2022



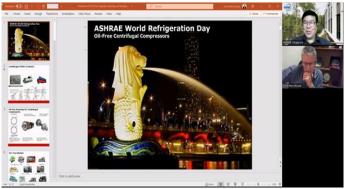




Meeting with Mumbai Chapter



ASC Booth at IBEW to Promote Membership



World Refrigeration Day Webinar on 26<sup>th</sup> June 2022



ASC and IBPSA SG Joint Webinar on 11<sup>th</sup> August 2022



ASC Booth at ABS to Promote Membership





Engineering has often been cast as a male-dominated profession. But the truth is, engineering is for everyone. In general, women pay attention to detail, analyse situations and solve problems. All these interpersonal skills in combination with technical skills can help Built Environment industry as a whole. As such, we see the benefits of having more women to join the industry.

However, there are also challenges. That is the reason why it is particularly important for us to always support each other and reshape the industry. Dr. Yang Junjing



ASHRAE Singapore chapter president 2022-2023 i Joined ASHRAE during my PHD and the Great resources a Professional connections of ASHRAE have been supporting career development for the past 8 years!

#### Ms Farizan d'Avezac de Mora

Membership Promotion Committee Chair 2022-2023 ASHRAE has been my go-to HVAC knowledge and resource . Working on sustainability development beyond tropical climate requires a firm grasp of trusted engineering dat. ASHRAE provided me with the support I need



Chapter Technology Transfer Committee Chair 2022-2023 Looking at my amazing female fellows in ASHRAE inspired me to treach out to more young female professionals in this field and make sure they know that there is a group of women in Built Environment industry who have similar experiences and could resonate with

#### Ms Florence Chan Member of Board of Governors

(Past President 2019-202 and first Lady President of ASC) Historically women are often under-represented in engineering but joining ASHRAE has allow women to unlimited challenges and paw way for future generations of female engineers. Women in ASHRAE are a trendsetter encouraging more women to take up interest in engineering fields and to celebrate the accomplishments of female engineers.

Interview with Women in ASHRAE





# Hong Kong Chapter Highlights

Reported by Joe Chow, Hong Kong Chapter President 2022-2023





### WIA Forum: Women in ASHRAE and Engineering Industry

We had a fruitful evening on 22<sup>nd</sup> September 2022 at the WIA Forum – Women in ASHRAE and Engineering Industry. Having 5 female speakers, Eagle Mo (1<sup>st</sup> Woman Chapter President), Tracy Pang (2<sup>nd</sup> Woman Chapter President), Jessie Hu (Membership Committee Chair), Jacqueline So (Reception Committee Chair) and Rowena Chan (YEA Committee), sharing their working experiences and highly

involved participants, we understand what gender issues females might face and how they could overcome that. Beyond the gender discussion, we also came across the current situation of brain drain. Peers in the field should uphold a high working standard of engineering and consider alternative operating modes to maintain our competitiveness.





### Joint Technical Conference 2022 -"Towards Climate Action Plan 2050: Carbon Neutrality Strategies on Water Engineering"

Upon the journey towards a carbon-neutral Hong Kong, water engineering plays a significant role. ASHRAE Hong Kong Chapter & the Chartered Institute of Plumbing and Heating Engineering (CIPHE) Hong Kong Branch coorganized a Technical Seminar 2022, themed "Towards Climate Action Plan 2050: Carbon Neutrality Strategies on Water Engineering" on 3<sup>rd</sup> November 2022, to share how engineers in the field devote in developing sustainability features & the latest technologies followed by the HKSAR Government's roadmap to carbon neutrality.









### Hong Kong Joint Symposium 2022: "City for future – Journey to Carbon Neutral Building"

The iconic Hong Kong Joint Symposium 2022 was successfully held on 23<sup>rd</sup> November 2022. Jointly organised by ASHRAE Hong Kong Chapter, The Hong Kong Institution of Engineers (HKIE) – Building Services Division, the Chartered Institution of Building Services Engineers (CIBSE) Hong Kong Region and Department of Building Environment and Energy Engineering of The Hong Kong Polytechnic University, it has been years that we work together to provide a platform for engineers in the field to share innovative ideas and exchange practical experiences regarding building services and design.



With our theme "City for Future – Journey to Carbon Neutral Building" this year, we were privileged to have Ms. Winnie Ho

Wing-yin, JP, Secretary for Housing joined us as the Guest of Honor and delivered a refreshing speech to kick off the Symposium. Subthemes included "Codes & Guidance". "Design & Research", "Operation and Application" and "Maintenance and Performance", which had been enriched by 17 speakers throughout the day. We are grateful for the contribution from all the speakers & authors who spare no effort to drive the advancement in green buildings, sustainable solutions and effective management systems etc. Let's find a right path for our city's future.





### 2022 ASHRAE HVAC Design Competition

Congratulations to the first place winner of 2022 ASHRAE HVAC Design Competition - The University of Hong Kong (HKU)! A group of final year students of HKU won first place of HVAC design competition 2022.

The 2022 ASHRAE Student Design Competition recognises outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their knowledge of practical design with using ASHRAE standards. This competition focuses on a new building on a higher education campus in Sydney, New South Wales, Australia.

With the supports from both universities and ASHRAE Hong Kong Chapter, we wish to continue the great performance of HVAC design competition every year and encourage the Hong Kong students to have more practical experiences of HVAC profession and join the international competition.







### Research Promotion (RP) Walk 2022

ASHRAE Research Promotion (RP) Walk 2022 was successfully held by Research Promotion Committee on 26<sup>th</sup> November 2022. ASHRAE develops massive standards & guidelines as well as offers a lot of training to the practitioners every year. This event aims not only to promote the value of ASHRAE research, raise funds for continuously supporting research projects, education, young engineer programs that empower the industry, also arouse the importance of "Staying Healthy" to our valuable members.



ASHRAE RP Walk has been organized for 12 years since 2010. This year, the walk took place at Tsing Yi Nature Trails on Tsing Yi Island in the New Territories of Hong Kong. More than 20 members joined and completed the full route. During the walk, participants could not only explore the beauty of natural, but also the architectural sights along the hiking trail, including Ting

Kau Bridge, Tsing Ma Bridge on Ma Wan Channel and stunning Chinese-style curved-pavilions. The 4-kilo metre route starting from south entrance to the Tsing Yi Nature Trails at Tsing Yi Road West, passing through Kam Chuk Kok and Shek Wan, and finally ending at Tsing Yi Promenade.



We would like to thank all the participants and donors to support and contribute to ASHRAE Research, we raised USD8,835 through this event.





# Taiwan Chapter Highlights

Reported by Lin Hung Wen, Taiwan Chapter President 2022-2024

In March 2022, Taiwan officially published "Taiwan's Pathway to Net-Zero Emissions in 2050", which provides the action pathway to achieve "2050 Net-Zero Emissions". This blueprint aims to promote technology R&D and innovation in key areas, guide the green transition of industry, and drive a new wave of economic growth.

Taiwan's 2050 net-zero emissions pathway is supported by 12 Key Strategies. All these strategies will be going through a series of stake holder dialogues before they are officially announced. Thus, on 21<sup>st</sup> September 2022, ASHRAE Taiwan Chapter, like other leading opinion leaders, was invited to the dialogue for the strategy number 5 -Energy Saving & Efficiency.



The dialogue was chaired by the Deputy Minister, Ministry of Economic Affairs. The Bureau of Energy presented the draft of the strategy number 5 -Energy Saving & Efficiency. According to the presentation, 35 TWh will be conserved by 2030. Six strategies are: 1. Education and promotion, 2. Equipment energy efficiency, 3. Building energy efficiency rating scheme, 4. Incorporate ESCO business model, 5. Major consumer responsibility, and 6. RD&D.

ASHRAE Taiwan Chapter Immediate Past President, Dr. Tu Wei Da was appointed by the President, Dr. Lin Hung Wen to provide comments and feedbacks. Dr. Tu emphasized the data transparency and the use of open data to better connect policies and measures with each other. Past President, Dr. Yang Bing Chwen (representing TAESCO) as well as Past President, Mr. Chao Hung Yao (representing TESA) were also invited to the event for sharing experience in ESCO industry.

The draft will be finalized soon after the dialogue. ASHRAE Taiwan Chapter will keep close communication with government and share information with members to address the strategy and the 2050 Net-Zero Emissions Policy.



Regional



# **Macao Chapter Highlights**

Reported by Alfred Wong, Macao Chapter President 2022-2024



ASHRAE Macao Chapter

### ASHRAE Macao Chapter Scholarship Awarded at the University of Macau Scholarship Awards Ceremony

ASHRAE Macao Chapter Scholarship was awarded by Professor Alfred Wong, President of ASHRAE Macao Chapter, at the University of Macau Scholarship Presentation Ceremony on 30<sup>th</sup> November 2022. The students who were awarded the ASHRAE Macao Scholarship this year include Wong Chon Nok, Fung Hoi Io, Lam Hei Lok, Lao Chio Long, Lei Seng Chit, Li Boyang, Liu Judong, Sun Jianzhang, Tyron Cyrill Saavedra Tagulao. Congratulations to the above students who successfully receiving the scholarship.



Media link: https://fb.watch/inlptt\_fiW/

ASHRAE Macao Chapter is proud to recognize scholarship recipients for providing positive value and achievements to outstanding students. ASHRAE Macao Chapter offered a scholarship of MOP30,000 to 9 UM students for encouraging students to strive for excellence and expecting students to be motivated by positive praise. Secretary of ASHRAE Macao Chapter Ir Dickson Yeung, Treasurer Leo Chou, Membership Promotion Committee Chair Lin Bin, Co-Chair Alex Fong, Student Activities Committee Chair Samson Cheong, and Activity Assistant Riley Cheong attended the event to honor the students who received the scholarship.

### New refrigerant and R32 Air Conditioning Equipment Installation and Maintenance Workshop

New refrigerant and R32 air conditioning equipment installation and maintenance workshop were held on 1<sup>st</sup>, 2<sup>nd</sup> and 5<sup>th</sup> December 2022. The workshop was co-organized by Environmental Protection Bureau and Labour Affairs Bureau – Macao SAR, organized by ASHRAE Macao Chapter, and supporting organized by Ou Mun Tin Ip Cong Vui, Macau Air-Conditioning & Refrigeration Chamber of Commerce, Macau Electrical & Mechanical Professionals Association. Thirty local air conditioning engineering practitioners participated in this workshop.

Macau is phasing down the import of hydrofluorocarbons (HFCs). Due to 18 HFCs with high global warming potential (GWP) added in the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer. Macau Chief Executive's Instruction No. 45/2022 included these HFCs in Decree No. 62/95/M for regulation. The Chief Executive's Instruction No. 46/2022 stipulates the import quota system and annual import quota of HFCs. The above two instructions came into force on April 1, 2022. Transition to new, climate-friendly alternative refrigerants that will help to reduce the greenhouse gas emissions responsible for climate change, preserve the ozone layer, lower the effects of global warming, and minimizing the overall environmental footprint.

R32 refrigerant, also known as difluoromethane, has a chemical formula of CH2F2. R32 is mildly flammable and has a low global warming potential (GWP). As a result of the Montreal Protocol to phase out ozone-depleting gases, R-32 is a next-generation refrigerant that efficiently carries heat with lower environmental impact.

This workshop introduced the Properties and Characteristics of R32 refrigerant, taught the techniques which they can then use in their work, including the safety requirements and precautions when installing, maintaining and repairing R-32 air conditioning equipment, recycling R-32 refrigerant, and lets the participants conduct the practical exercises.



Media link: https://news.shimindaily.net/news/article?id=5393eb95-e5fd-4171-8b7b-acef6497d341&fbclid=IwAR2iA1C1\_TyCZ4SsDx-lqsYMkcu3VbWzSb\_DXuuv3ePKIy71rP3pf0z6SAU





# Macao International Environmental Co-operation Forum & Exhibition (MIECF) – Sharing the Topic of District Cooling and Hydrogen Economy

ASHRAE Macao was invited to participate in the Macao International Environmental Co-operation Forum & Exhibition (MIECF) and participated in the technical seminar on "Technology Options for the Dual Carbon Goals" at the Venetian Macao Cotai Expo on 11<sup>th</sup> December 2022. Initiated and actively led by the Government of the Macao Special Administrative Region (Macao SAR), MIECF is strategically positioned to nurture business, technology and information exchanges and co-operation between the Pan-Pearl River Delta Region in southern China and the international markets.

This seminar "Technology Options for the Dual Carbon Goals" is the finale seminar on the last day of MIECF 2022. Thematic sharing and technical discussions on the topics of district cooling, decarbonization and hydrogen economy.

District cooling is an energy efficient cooling solution, delivers chilled water to buildings that require cooling, such as offices and factories. It takes full advantage of economies of scale, diversity in cooling demand for different buildings. District cooling has the advantages of cost saving, energy saving, greenhouse gas emission reduction, refrigerant usage reduction, plant room area saving, and improve reliability and flexibility of cooling system.



The hydrogen economy is using hydrogen to decarbonize the economic sectors which is widely used of hydrogen as an energy carrier. Hydrogen can be generated from water through renewable sources such as wind and solar energy. The only product of its combustion is water rather than carbon dioxide or other greenhouse gases and particulates. Offering an environmental friendly and inexhaustible energy supply for the future. However, hydrogen as a fuel source has several challenges including hydrogen storage issues, the infrastructure required, safety and environmental concerns. These technical issues are worthy attention and discussion.

Professor Alfred Wong looks forward to attracting the attention of relevant topics through the discussion and sharing on the seminar, looking for environmental protection application and solution suitable for the development of Macao and the Guangdong - Hong Kong - Macao Greater Bay Area.



Media link: https://fb.watch/inllimeWIt/





# Research Promotion (RP) Walk 2022

The RP Walk fundraising event organized by ASHRAE Macao Chapter was successfully held on 11<sup>th</sup> December 2022 at Taipa Grande Trail, to raise funds for research and scholarship.

This RP walk was held at Taipa Grande Trail in the Taipa Grande Natural Park on the eastern side of Taipa Island and features a broad trail on walker friendly slopes. About 40 participants set foot on the trail and enjoyed the beauty of the trail in cool calm weather. Walk along the stairway to the peak at an altitude of about 159.2 meters, which is the highest point in Taipa. ASHRAE Macao is deeply grateful for the immense support given by the participants and donors. Many thanks to Dr. Yiu Chi Man, Jacob, for calling this RP walk.

ASHRAE has sponsored research studies at universities and firms. The results of these studies have been used to prepare in handbooks, publications; develop standards, train university students, and spread the knowledge to those who service in the HVAC&R industry. ASHRAE serves humanity by advancing the science of heating, ventilation, air conditioning, refrigeration and related fields to build a healthy and sustainable environment for all.



Media link: https://fb.watch/inleCntYKd/



# 2022 "Best Certified Shop" and "Excellent Certified Shop" Award Ceremony

The Macao SAR Government Consumer Council held the award ceremony of the "Best Certified Shop" and "Excellent Certified Shop" Award Ceremony was held by the Macao SAR Government Consumer Council on 13<sup>th</sup> December 2022. To thank for the continuous support and praise the efforts of ASHRAE Macao Chapter to offer quality arbitration service, ASHRAE Macao Chapter was invited to attend the award ceremony.

The Consumer Council organized the "Adherent" scheme to safeguard consumer rights, businesses joining the "Adherent" scheme are obliged

to resolve consumer disputes and this obligation gives confidence to consumers. In order to promote honest business practices of the "Adherents", "Certified Shop" was launched as a mechanism termed. "Adherents" that have good business records, abide to the relative "Code of Practice", and pass the annual assessment.