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Regional Newsletter Editor (2019-22):

Chun-Sing Wong

[email: cswong.ashrae@gmail.com]



DRC's Message

As the saying goes “Time Flies” and soon my term as your DRC will come to pass this coming 30th June 2022 and being your DRC has been the most fulfilling moment of my life. Even-though we had to endure the harsh reality and difficult moments caused by the CoVID-19 pandemic, I must say that Region XIII has never been more resilient and has emerged even stronger in bond and friendship among her members within the Region which was so clearly demonstrated in the successful staging of our Region XIII Chapters Regional Conference (CRC) in Jakarta, Indonesia.

Even-though we were not able to physically meet face-to-face because of CoVID-19, all 10 Chapters and 4 Sections of Region XIII rallied together as ONE for our 1st ever Hybrid CRC. Many thanks to Indonesia Chapter and to our CRC-2021 General Chair, Ms. Herlin Herlianika for staging a most successful CRC during this challenging times of this CoVID-19 pandemic.

This year also marks another significant milestone in ASHRAE’s long history with the grand opening of our new ASHRAE Global Headquarters. This net zero energy (NZE) building was officially opened by our current Society President, Mr. Mick Schwedler on 18th November 2021. This new NZE global headquarters of ASHRAE is a testament to ASHRAE’s leadership and commitment to sustainability and innovation towards built environment technology.



As an industry leader in research, standards and continuing education, ASHRAE was very quick to respond to the perils of CoVID-19 in the formation of several task force initiatives:

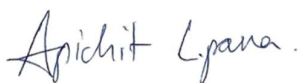
- ASHRAE Epidemic Task Force Laboratory Subcommittee Guidance
- One-Page Guidance for Re-Opening Buildings
- One-Page Guidance for Re-Opening Schools
- One-Page Guidance for Residential Buildings
- In-Room Air Cleaner Guidance for Reducing CoVID-19
- Core Recommendations for Reducing Airborne Infectious Aerosol Exposure.
- Environmental Health Emerging Issue Brief

In my last article I have mentioned and will mention here again that “mankind has proven over the history of time and time again his resilience against the inevitable and surely to rise one day in victory over this CoVID19 pandemic”. Moving forward, Region XIII has sounded the clarion call for new and fresh leaders to lead Region XIII into the future. I strongly encourage all Chapters to identify good and capable people in their respective Chapters to serve in the Region as well as Society.

In closing, I wish everyone in ASHRAE and Region XIII well and healthy always. I look forward to seeing everyone physically face-to-face in our coming Regional Planning Meeting (RPM) in June 2022 in Tainan, Taiwan and in our Chapters Regional Conference (CRC) in Tokyo, Japan in August 2022.

Stay safe and keep well.

Warmest Regards,

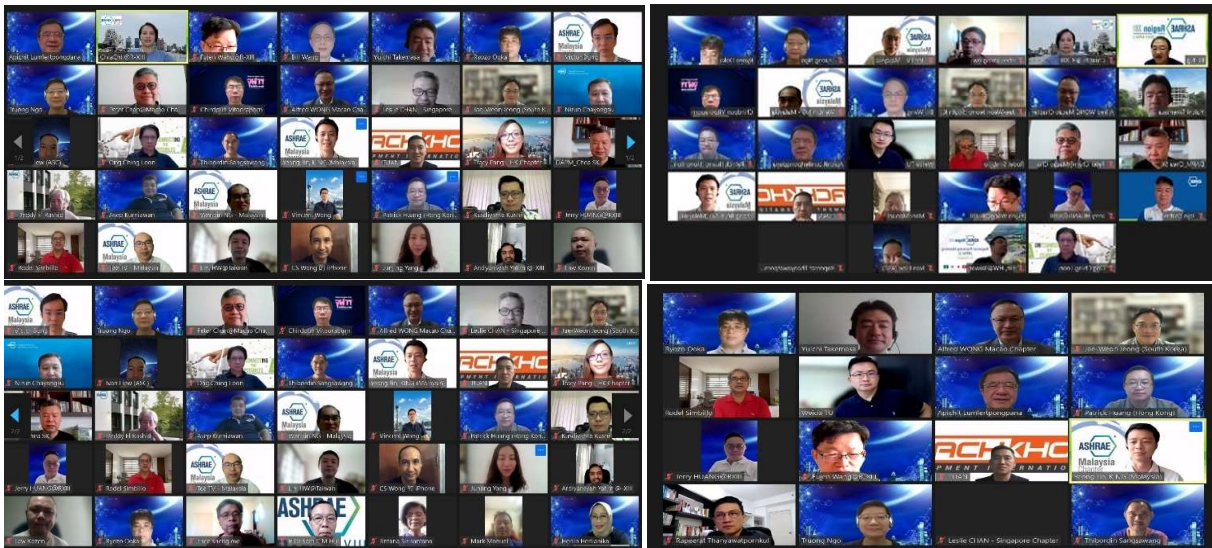


Apichit Lumlertpongpana
 Director and Regional Chair (2019-22)
 ASHRAE Region XIII

ASHRAE Region XIII 2021-2022 Regional Officers

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

Apichit Lumlertpongpana	Thailand Chapter
Cheng-Wee Leong	Singapore Chapter
Bill Wang	Taiwan Chapter
Jerry Huang	Taiwan Chapter
Sam Hui	Hong Kong Chapter
Albert Sin	Singapore Chapter
Suei-Keong Chea	Malaysia Chapter
Fu-Jen Wang	Taiwan Chapter
Kozen Law	Malaysia Chapter
Jojo Castro	Philippines Chapter
Den Low	Malaysia Chapter
Tracy Pang	Hong Kong Chapter
Ardiyansyah Yatim	Indonesia Chapter
Kah-Choong Ng	Malaysia Chapter
Jintana Sirisantana	Thailand Chapter
Chia-Chi Hsu	Taiwan Chapter
Chun-Sing Wong	Hong Kong Chapter
Edward Tsui	Hong Kong Chapter
Chee-Sheng Ow	Malaysia Chapter
Yong-Kong Ng	Malaysia Chapter



List of ASHRAE Region XIII Past Director and Regional Chairs

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

Chapter Technology Transfer Update

Reported by **Jerry R. Huang**, *Regional Vice Chair - Chapter Technology Transfer*

Review our outstanding performance of CTT in Region XIII, our CTT chairs and I completed the following tasks:

1. **Virtual DL programs**

- 1.1. 18 Aug, 2021: Speaker: Dr. Chandra Sekhar Hosted by Malaysia Chapter
- 1.2. 28 Oct, 2021: Speaker: Stephanie Taylor MD Hosted by Indonesia Chapter
- 1.3. 1 Nov, 2021: Speaker: Dr. Om Taneja Hosted by Malaysia and Singapore Chapters
- 1.4. 9 Dec, 2021: Speaker: Dr. Fabio M. Clavijo Hosted by Thailand, Indonesia and Taiwan Chapters
- 1.5. 7 Jan, 2022: Speaker: Dr. Robert Bean Hosted by Thailand Chapter

2. **2022 Technology Award Winners at Regional level**

2.1. **First Place Winner**

Project Name: DaiyaGate Ikebukuro
Entrant: Shiro Tsukami
Building Owner: Seibu Properties Inc.
Chapter: Japan
Category: Category I – Commercial Buildings, New

2.2. **Second Place Winner**

Project Name: Queensway Government Offices
Entrant: Tsz-Lung Tam
Building Owner: Electrical and Mechanical Services Department
Chapter: Hong Kong
Category: Category I – Commercial Buildings, Existing Building Commissioning

2.3. **Honorable Mention**

Project Name: Neurin Platform Implementation in Arup Hong Kong
Entrant: Hiu-Hei Chan
Building Owner: Arup
Chapter: Hong Kong
Category: Category I – Commercial Buildings, Existing

2.4. **Honorable Mention**

Project Name: Tin Shui Wai Hospital
Entrant: Suet-Fai Leung
Building Owner: Architectural Services Department
Chapter: Hong Kong
Category: Category III – Health Care Facilities, New

2.5. **Honorable Mention**

Project Name: First World Hotel, Genting Malaysia
Entrant: Vincent Ng
Building Owner: Genting Malaysia Berhad
Chapter: Malaysia
Category: Category I – Commercial Buildings, New



Our Region have nominated all the above 5 regional winners of ASHRAE Technology Awards to the Society.

Government Affairs Update

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

Region XIII CRC Training on ASHRAE's Government Committee (GAC) was conducted virtually on 4 September 2021 with 55 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 planning discussion on held on 2 October 2021 with 19 participants. The current issues in Society's focus on "Public Policy Issue Briefs (PPIBs)" are as follow:

- Building Decarbonization
- Building Energy Benchmarking
- Climate Change and the Built Environment
- Consensus Standards- Expert Solutions to Meet Global Needs
- Environmental Tobacco Smoke
- Indoor Air Quality
- Refrigerants and Their Responsible Use
- Resiliency in the Built Environment
- STEM Education & Workforce

Region XIII RPM 1's briefing on ASHRAE's Government Committee (GAC) was conducted virtually on 16 October 2021 with 49 participants. Society's International Standards Interaction (ISI) Task force objectives are as follow:

- Harness ASHRAE technical resources to influence international standards impacting built environment
- Informing leadership of international activities
 - Provide recommendation on activities
 - Provide recommendations on policies
- Serving as a resource to maximize international impacts of ASHRAE standards and technical work
- Implementing the international aspects of the Society Strategic plan
- Coordinating interactions internally and externally
- Coordinating with the Government Affairs Committee
- Provide guidance for policy makers on relevance of ASHRAE standards and international standards

Research Promotion Update

Reported by **Suei-Keong Chea**, Regional Vice Chair - Research Promotion



**ASHRAE Region XIII:
Regional Vice Chair RP**

Chea Suei Keong
Region XIII RP Nov Report
10 Dec 2021



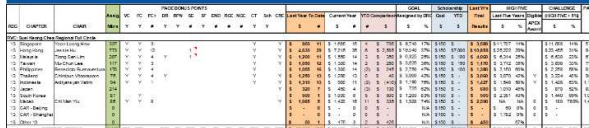
2021-2022 Term New Team Welcome Onboard



Welcome onboard Region XIII Research Promotion Team, looking forward to work together with you!





2021-2022 Term 10 Dec Results



- Region XIII achieved the Regional Full Circle Award, thank you for your contribution.
- Volunteer Committee (VC)- All Chapters achieved, except for Japan and Korea Chapters.
- Chapter Full Circle- All Chapters achieved, except for Japan Chapter.
- Donor Recognition (DR)- Malaysia and Thailand Chapters conducted events to recognize 2021-22 term donors.
- Special Event (SE)- Malaysia Chapter: Virtual Lab Tour and Hong Kong Chapter: RP Walk.
- Centralized Training (CT)- All Chapters attended the training except for Japan, Korea and Macao Chapters.
- Chapter Regional Conference (CRC)- All Chapters attended the CRC RP Training, except for Philippines and Korea Chapters.
- 30% Goal- All Chapters achieved this goal, except for Singapore Chapter and Malaysia Chapter contributed on 24 Nov but was not captured, currently cross checking with Society.
- Region XIII collected USD16,585 @ 37% of DRG Goal, thank you for your contribution towards ASHRAE Society Research Promotion.

2021-2022 PAOE Due Dates

- Campaign Order Form
 - The items on the campaign order form are free and we would be happy to send them out to you. We may be out of some items, but we will communicate that to you once we see what you would like if we are out or have low stock.
 - You can request the items without a date for the recognition event. We just ask that you hold an event - whether it is in person or virtual - to recognize last year's donors before December 31st in order to qualify for these points.
 - In order for you to receive the free items from Society and give out to recognize your last year donors in Dec during your Donor Recognition Night, you need to submit the Campaign Order Form now, as the delivery from USA to reach your respective places might take longer period during Pandemic situation.
- Hold a RP Night activity to Recognition last year donors - Due date 31 Dec
 - Malaysia and Thailand Chapters completed this event.




2021-2022 PAOE Due Dates

Option #	Points	Category	Due Date	Criteria	Due Date	Criteria
RP1	200 points	Full Circle	31 Mar 2022	100% of Goal	31 Mar 2022	100% of Goal
RP2	100 points	Chapter Full Circle	31 Mar 2022	100% of Goal	31 Mar 2022	100% of Goal
RP3	100 points	Donor Recognition	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP4	100 points	Special Event	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP5	100 points	Centralized Training	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP6	100 points	Chapter Regional Conference	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP7	100 points	30% Goal	31 Dec 2021	30% of Goal	31 Dec 2021	30% of Goal

2021-22 Term Action Plan:

- Chapter to achieve 60% of Goal by 31 Mar 2022. (New)
- Chapter to Reach Goal by 15 Jun 2022.
- To plan and host RP Promotion Night event(s).
- Meeting Scholarship Goal by 31 Mar 2022.
- Submit Succession Plan by 1 Apr 2022.




2021-2022 PAOE Due Dates

Option #	Points	Category	Due Date	Criteria	Due Date	Criteria
RP8	200 points	Full Circle	31 Mar 2022	100% of Goal	31 Mar 2022	100% of Goal
RP9	100 points	Chapter Full Circle	31 Mar 2022	100% of Goal	31 Mar 2022	100% of Goal
RP10	100 points	Donor Recognition	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP11	100 points	Special Event	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP12	100 points	Centralized Training	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP13	100 points	Chapter Regional Conference	31 Dec 2021	100% of Goal	31 Dec 2021	100% of Goal
RP14	100 points	30% Goal	31 Dec 2021	30% of Goal	31 Dec 2021	30% of Goal


2021-22 Term Action Plan:

- Continue to Contribute More \$\$\$ to ASHRAE Research Promotion, you will get more PAOE points and achieve Apex or High Five Awards.
- Plan for Special Events as outlined in RP20 to earn more RP PAOE points.




2021-2022 PAOE Due Dates – New Changes

Item	Due Date	Completed?	Notes
RP Chair Action Items			
RP Chair Action Items	July 1 - June 30		Host a Special Event (50 pts)
RP Chair Action Items	October 15		Volunteer Committee (15 pts)
RP Chair Action Items	November 15		Full Circle (100 pts) Full Circle Plus (10 pts+)
RP Chair Action Items	December 1		Reaching 30% of Goal (100 pts)
RP Chair Action Items	December 31		Formal Recognition of Donors (25 pts, if ordered by Sept. 1)
RP Chair Action Items	January 1 - June 30		RP Promotional Night (50 pts)
RP Chair Action Items	March 31		Scholarship Goal (50 pts) Reaching 50% of Goal (100 pts)
RP Chair Action Items	April 1		Succession Plan (100 pts)
RP Chair Action Items	June 15		Reaching 100% of Goal (500 pts)



RP Communication



YOUR RP CAMPAIGN STAFF!


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First “Building EQ” Building in Mainland China – The Center, Shanghai

Reported by *Kelvin Chan*, Government Affairs Committee Co-Chair 2021-2022, Hong Kong Chapter

ASHRAE recently awarded its first Building EQ rating in mainland China, this is a remarkable step forward in improvement of building’s energy performance.

The first mainland China building, The Center, owned by China Pacific Insurance (Group) Company Limited (CPIC), is a grade A mixed-use office building which is located in the city center of Shanghai. It earned an In Operation Building Performance Score of 69, represents it’s building energy performance is 31% better than the world’s average performance in similar type of building with same climate zone.

The Center is a LEED Certified building from 2013, and CPIC decided to appoint a qualified third-party energy auditor, i.e. an ASHRAE certified Building Energy Assessment Professional (BEAP) to carry out the comprehensive energy audit and elaborate measures to further improve energy performance, by using Building EQ Portal. The assessment and energy management work had been done under the supervision of MASHRAE, Stephen K.H Tam and BEAP, Kelvin C.K. Chan, and It is identified that there has 21.4% saving in electricity and 1.56% saving in natural gas consumption, with the total improvement



of over 19% in site EUI of the building when comparing between the last energy audit and Building EQ Portal. “Building EQ program allows the team to keep tracking on the existing building energy performance, it is an effective tool for improvement of building energy performance”, Stephen said, and Cheng Qinglin, Executive Director of Pacific Asset Management Co., Ltd (A subsidiary of CPIC) said “We are happy to become the first ASHRAE Certified Building EQ building in mainland China, the audit result shows our building energy performance is better than the world’s average level, it also recognizes our team effort for operation sustainability and reduction of carbon emission”.

Hong Kong Chapter Highlights

Reported by *Patrick Huang, Hong Kong Chapter President 2021-2022*

- Hong Kong Joint Symposium 2021

Edited by *Jason Kwok, Membership Promotion Committee Chair 2021-2022, Hong Kong Chapter*



The **Hong Kong Joint Symposium 2021** was successfully held on 17 November 2021. The main theme of this year was **‘New Generation and Technology Application for Future Engineering Challenge’**. There were 8 papers presented by various professionals from the Hong Kong Government, higher educational institution, consultant and contracting firms in this Symposium. Honorably, the Symposium invited **Mr. Alfred Sit Wing-hang, JP**, Secretary for Innovation and Technology, **Mr. Kevin Mitchell**, President-Elect of CIBSE UK and **Mr. Mick Schwedler**, President of ASHRAE to deliver the keynote speeches.

Due to the pandemic of Covid-19, the Symposium was conducted by virtual live broadcasting via Zoom. Even though, there were over 100 participants joined this Symposium live. During the Q&A session, the participants actively raised their questions to the speakers to enjoy the interactive section with them.



- *RP Walk 2021 - Yuen Tsuen Ancient Trail*

Edited by *Jessie Hu*, Research Promotion Committee Chair 2021-2022, Hong Kong Chapter

Research Promotion (RP) Committee of ASHRAE Hong Kong Chapter held the RP Walk for our members since 2010. The aims of RP Walk are not only to raise funding for ASHRAE research and student scholarship, but also to have opportunities to gather with our members and their families, friends and colleagues to enjoy the beautiful nature in Hong Kong.



The RP Walk 2021 was held on 27 November 2021 to visit the **Yuen Tsuen Ancient Trail** (First half), walking from Tsuen Wan to Sham Tseng. Despite COVID-19 pandemic situation, we still had total **13 participants** including kids and professionals to join this RP Walk. Our honorable past Chapter President, **Dr. Roger Chu** and his daughter also attended to support this event.

On the day we started walking at 10:00am from the Hong Kong Adventist Hospital, the starting point of this ancient trail, to experience the travelling between two major towns for villages trading their necessities before. During the walk, the aerial view of Tsing Ma Bridge and Ting Kau Bridge, the quiet and beautiful forest, clear mountain stream and waterfall, all of these make us feel relax and pleasant. We arrived Sham Tseng at 1:30pm, all participants experienced a wonderful and memorable country walk.

We would like to thank all the participants and donors to support and contribute to ASHRAE Research, we raised **USD4,150** through this event.



- *Louise and Bill Holladay Distinguished Fellow Award*

Edited by **Patrick Huang**, Hong Kong Chapter President 2021-2022

Congratulation! Professor Li Yuguo received Louise and Bill Holladay Distinguished Fellow Award.

Professor Li Yuguo, Fellow of ASHRAE, Chair Professor of Building Environment, Department of Mechanical Engineering received the Louise and Bill Holladay Distinguished Fellow Award 2021 by ASHRAE in recognition of his contributions to continuous preeminence in engineering or research work. Professor Li was the only ASHRAE Fellow from ASEAN who received the award.

The Louise and Bill Holladay Distinguished Award honors Fellows of the Society for continuing preeminence in engineering or research work, and only one ASHRAE Fellow around the World will be awarded each year. The honor was initiated in 1979 by Presidential Member Bill Holladay.



Professor Li is an expert in ventilation of indoor environments with a focus on environmental transmission of diseases. During the SARS outbreak in 2003, Professor Li and a group of mechanical engineering experts at HKU developed an advanced mechanistic airflow model with computational fluid dynamics simulations and detailed thermo-fluid analyses to track and explain the main infection pattern and characteristics of the outbreak at Amoy Gardens and at Ward 8A of Princess of Wales Hospital. In early 2020, Professor Li in collaboration with the Guangdong CDC, Jiangsu CDC Hunan CDC, Sun Yat-Sen University and Southeast University, conducted a series of epidemiological and environmental studies on three important Covid-19 outbreak cases in Mainland China and Tokyo, and revealed that poor air ventilation plays a key role in its spread in indoor environments.

Taiwan Chapter Highlights

Reported by **Wei-Da TU**, Taiwan Chapter President 2020-2022

- Local Energy Governance Rating System (LEGRS) Guidelines



ASHRAE Taiwan Chapter cooperates with ITRI and ICLEI-KCC on International Guideline publication for local governments.

ASHRAE Taiwan Chapter has been working with ITRI, ICLEI-KCC, and ICDI on Local Energy Governance Rating System (LEGRS) guidelines to support local energy transition policies and programs since January 2021.

The main purpose of LEGRS is to encourage the local authorities and governments to incorporate international standards and guidelines, such as ASHRAE standard 90.1, ASHRAE standard 211, ISO 50001 and IPMVP, and so on with local energy policies and programs.

The local and regional government are vital stakeholder for ASHRAE. Many local governments in Taiwan have made their local laws and regulations on building energy efficiency and renewable energy toward sustainable energy systems at the regional level since about a decade ago. However, only few local policymakers and lawmakers have the concept of adopting international standards into their local laws, regulations, and policies.

Therefore, there is a significant knowledge gap between local government and industry on energy efficiency and renewable practices. Leading and promoting ASHRAE standards and guidelines to local governments is a streamlining strategy to reduce the unawareness and misunderstanding of energy management practices for local governments. It is going to require more training courses and education programs for public servants and their policy consultants, with local and regional governments playing a critical role to manage energy and net-zero transition.

In November 2021, the GAC chair from ASHRAE Taiwan Chapter introduced the ASHRAE standards to five Director-general from Taipei, New Taipei, Taoyuan, Tainan, and Kaohsiung City Governments in 4th GCSF (Global Corporate Sustainability Forum).

ASHRAE Taiwan Chapter is excited to enable local governments to accelerate the energy transition, industry development on energy service, and enhance energy governance capacity through international partnership programs.

Organizations:

- ICLEI-Kaohsiung Capacity Center
- ITRI (Industrial Technology Institute)
- ICDI (International Climate Development Institute)
- Department of Environmental Protection, Taipei City Government
- Environmental Protection Department, New Taipei City Government
- Department of Environmental Protection, Taoyuan City Government
- Environmental Protection Bureau, Tainan City Government
- Environmental Protection Bureau, Kaohsiung City Government

Date: November 18, 2021

Time: 13:00~16:30

ASHRAE representatives: Sun, Ting-Jui (GAC Chair, Taiwan Chapter)



- *Special Honor and Awards to Prof. Chi-Chuan Wang, PhD -*
 Interviewed by **WD Tu** and **Jerry Huang**, Taiwan Chapter

Prof. CC Wang won the honor of “Outstanding Research Award from Ministry of Science & Technology” by Taiwan Government in 2020. It is the 2nd time for him to receive this award (the 1st time is in 2017). Dr. Wang devoted himself entirely to research activity in a very wide scope from electronic cooling, HVAC&R, thermal management in datacenter, smart management of energy system and the like. He is an ASHRAE fellow member since 2006 and is also an elected ASME fellow since 2009.

Dr. Wang jointed Industrial Technology Research Institute (ITRI) after earning his PhD in National Chiao Tung University from 1989. He then worker at ITRI for years before joining National Yang Ming Chiao Tung University (NYCU) as a professor in 2010. He is currently a chair professor and owns a huge team in 6 labs more than 35 graduate students and 4 post-docs. He focuses on energy management of datacenter, cooling of electronics, cooling of autonomous cars and electrical vehicles, thermofluids characteristics of LGWP liquid and natural refrigerant, and other HVAC&R topics. Most of his efforts are funded by the industry and his research is application oriented.

Dr. Wang had accumulated more than 4000 international journal articles with more than 40 patents (7 US patents). His google citations are more than 17700 with a h-Index of 66 (https://scholar.google.com/citations?hl=zh-TW&user=QIIdSPIAAAAJ&view_op=list_works). His endeavor in researches is not just of purely academic value but is also materialized in some products in the market. Finally, Dr. Wang shares his philosophy for our ASHRAE members and especially YEAs and student members, “Actions speak louder than words.” He is truly an activist in turning research into possible products.



(From left to right):

Dr. WD Tu, Taiwan Chapter President; Prof. CC Wang, ASHRAE Fellow; Mr. Jerry Huang, R-XIII RVC for CTT

Macao Consumer Council – Presentation Ceremony

2 Dec 2021



RP Walk 2021 – Hac Sa Long Chao Kok Coastal Trail

12 Dec 2021



Macao Smart City Engineering and Construction Technical Seminar

14 Dec 2021



Young Engineer and Student Technical Visit – CTM TELECENTRO (CTM 5G Network Building, Digital Macau and Smart City Development)

17 Dec 2021

