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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

2021-2022 PAOE Due Dates

1. Campaign Order Form
   - This form can be collected online from the ASHRAE website.
   - You can also print it out for your convenience.
   - Ensure you are familiar with the requirements before submitting.

2. Chapter Roll-Up
   - All Chapter Members must submit their Chapter Roll-Up form.
   - This form will assist in tracking the progress of each Chapter.

3. Special Event
   - Organize a special event to promote Research Promotion activities.
   - Share the details with your Chapter and encourage participation.

4. PAOE Due Dates
   - Important dates for submitting your PAOE requirements.
   - Ensure you meet the deadlines to avoid any delays.

5. Research Promotion Newsletter
   - Submit your newsletter for consideration in the ASHRAE newsletter.
   - Share any recent updates or achievements with your Chapter.

6. Manuscript Submission
   - Submit your manuscript for consideration in a reputable journal.
   - Ensure you meet the submission guidelines.

7. Scholarship
   - Apply for scholarships to support your research and education.
   - Deadlines vary, so check the application process.

2021-2022 PAOE Due Dates – New Changes

2021-2022 PAOE Due Dates

1. Continue to work on your PAOE requirements to ensure compliance.
2. Submit your PAOE forms by the deadline.
3. Participate in special events to promote Research Promotion.
4. Attend Chapter meetings to stay updated with research activities.

RP Communication

YOUR RP CAMPAIGN STAFF!

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ASHRAE CIBSE YEA Leadership Digital
Reported by Kozen Law, Regional Vice Chair - Young Engineers in ASHRAE

ASHRAE CIBSE YEA Leadership Digital (YLD) was successfully held virtually on 22nd – 24th October 2021. It was a great experience and opportunity to meet with people from US, UK, Canada, Bahrain, UAE, Egypt, Hong Kong, Malaysia, Singapore, Indonesia, etc. The leadership workshop was structured to learn through effective discussion, exploring ideas from various people and different background. The learnings are lively and refreshing. Some of the key takeaway for me about leadership during these three days: Leaders is about self-awareness, empowerment, lead by example, teamwork, manage differences and so on. Another keyword struck my mind is Balance, everything we do in life or at work has to be balanced in order to be successful.
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”.

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

Congratulations! 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=QlIdSPIAAAAJ&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 Chapter Highlights
Reported by Alfred Wong, Macao Chapter President 2020-2022

100th Anniversary of The Communist Party of China – Photo Exhibition
3 Jul 2021

Lift and Escalator Training Course
28 & 29 Aug, 4 & 11 Sep 2021

1st BoG Meeting
14 Sep 2021

Gas Training Course
30 Oct, 27 Nov & 4 & 5 Dec 2021

Student Orientation
21 Nov 2021

Huawei Headquarter Technical Visit
26 Nov 2021
Macao Consumer Council – Presentation Ceremony  
2 Dec 2021

RP Walk 2021 – Hac Sa Long Chao Kok Coastal Trail  
12 Dec 2021

Macau 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