

海外華人環保學會(OCEESA) 紀念專刊 **Conference Landmark Cities**





1980 OCEESA Founded at Purdue Univ. in Indiana



1964 -1st CIE-USA METS & many **OCEESA's MTEPC held in Taipei**



1995 1st OCEESA co-Hosted International **Conference in San Francisco**



1992 -1st MTEPC Conference & later many SATEC & OCEESA programs were held in Shanghai



1997 2nd OCEESA Co-hosted International **Conference in Los Angeles**



1993 – 1st CIE-USA's SATEC & OCEESA Programs were held in Beijing

Left: 1999 1st OCEESA Membership Meeting & many OCEESA cohosted Conferences in Washington DC



協會會長(2005-2006) 家(Certified Fami





OCEESA 海外華人環境保護學會



Overseas Chinese Environmental Engineers and Scientists Association

A Chapter of CIE-USA

Overseas Chinese Environmental Engineers & Scientists Association is a non-profit organization incorporated in the State of Ohio in 1980, it holds tax exempt status under sec 501(c)(3) of IRS Code. OCEESA is devoted to promote academic and professional excellence and networking in environmental science. OCEESA members work and reside throughout the USA, Canada and in many countries of Asia. In 1988, OCEESA became a chapter of Chinese Institute of Engineers/USA.





2005 第十屆 海峽兩岸環境保護會議 OCEESA 會員在台中合影 前排左起 鄭永松, 禹如斌, 張守玉, 袁保強, 劉李春蘭 後排左起 鮑世燦, 鄭均華, 方漢平, 黃汝常。







May 5 to 7, 2010: OCEESA cosponsored First Global Chinese Scientists Environmental Protection Forum, May 5 to 7, 2010, Shanghai, China. May 10, 2010 OCEESA cosponsored Joint East China University of Science and Technology-OCEESA Seminar, Shanghai.

March 16, 2011: OCEESA co-sponsored Mainland-Taiwan Air Quality and Climate Workshop, Kona, Hawaii, March 16, 2011.

November 7, 2011: OCEESA sponsored CHUMT-OCEESA Seminar, held at Chung Hwa University of Medical Technology, Tainan, Taiwan.

November 2-6, 2012: 15th Mainland-Taiwan Environmental Technology Seminar, Guilin, China. It was co-sponsored by Guilin Univ. of Science & Technology, Guilin, China, Cheng Kung Univ., Tainan, Taiwan, and OCEESA.

編後記 Editor's Note

I would like to thank all OCEESA members and friends who send in their professional career highlights and articles for the special issue. The dedicated services of special issue committee are greatly appreciated.

洪永哲

首先謝謝編輯委員收集資料並努力寫稿、再多謝許多會員提供文稿供獻意見、使特刊有些價值。就廣度來說我們有來自美國東部的8位會員、中部和南部II位、西部7位;加拿大兩位、香港兩位、台灣和中國大陸各一位朋友、共32位,總共有44篇長短文稿。就深度來說:有黃汝常的 OCEESA創辦前後的過程、有黃夏平為兩岸環保交流出力出時間的努力、有楊仁泰在美國EPA主持GreaterChina項目的策劃結果,還有鄭永松和張守玉介紹中工會活動的詳情、劉成均寫了三編大作、駱尚廉和夏四清寫海峽兩岸環境保護研討會之回顧、洪永哲花許多時間收集了創建時的原始文獻和I6位老會員的資料。附錄中有溫俊山收集的環保法規和數據很值得參考。

為編輯此紀念特刊和多位老會友再次連絡上、看了 許多寄來和保存的資料及相片、使我回憶起多年來 在美中台三地參加的研討會、深感人生時鐘向東移 了,對中國,我們嚮往它的大地和古老文明,以及 它釋放的潛力;對台灣,驕傲它人民的勤奮,以及 它旺盛的生命力;對美國,沈醉它四面八方的開放 與無所不在的人性尊嚴。

對年輕一代從事環保和科技界的朋友,也許我們可以引用著名經濟學家高希均教授的話「美國提供了孕育成長的氣候,台灣提供了參與的機會,大陸提供了可以發展的舞台。不論身在何處,在人才快速流動的扁平世界中,做為一個華人,中國人,台灣人,常常提醒自己要儘量能擁有:中華情,人文心,世界觀。」環保將是21世紀全球最重要的目標之一、希望藉此洛杉磯的聚會、和海內外華人朋友共勉之。

黃肇鑣 2013-8-10





紀念專刊 - 編輯委員會

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OCEESA Programs - MTEPC



CIE-USA SATEC Program















CIE-USA - METS Program



1970 孫運璿先生(左起第四位)親自到機場迎接 METS美方講員



2000 METS CIE-USA 召集人團隊拜訪孫運璿資政



METS-2000美方籌會 黃肇鑣(左三) 等人面見工研院院長李鐘熙



2010 METS 2010美方籌備委員 (左起 邱建興,方玉山,鄭永松,吳同慶, 陳錦江,林嘉孚)



CIE-USA AAEOY









海外華人環保學會三十三週年 紀念專刊 1980-2013

August 10, 2013 出刊

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會長的話

回顧和展望 Retrospect and Prospect

Jeff Kuo, 郭繼汾 Ph.D. P.E. 2013 President of OCEESA

Welcome to this special General Meeting to celebrate the achievements of Overseas Chinese Environmental Engineers & Scientists Association (OCEESA) of the past thirty-three years. The current officers and the board members would like to express our gratitude to you and the past officers for your contributions, which helped the growth of a stronger and better OCEESA.

Our work this year is a continuation of the foundation that has already been nicely laid out by you in the past, especially in the following programs and considerations:

- Strengthening OCEESA's role in the Mainland Taiwan Environmental Protection Conference (MTEPC): With your support, we are hosting the first MTEPC in the United States, under the name of 1st Symposium on Sustainable Environmental Science and Engineering at Hilton Los Angeles/San Gabriel August 8 - 15 (a joint conference with 6th Symposium on Global Emerging Environmental Challenges and Government Responses of Southern California Chinese American Environmental Protection Association (SCCAEPA)). There are more than 140 technical presentations in this conference with participants from Mainland, Taiwan, the United States and the other parts of the world. The success of this conference makes OCCESA a viable host of MTEPC on a rotational basis in the future.
- Broadening the membership basis: Building the mass of our membership is critical for the success of our organization. We will continue our effort in the introduction of an environment/science competition program to highlight OCEESA's commitment to science, technology, engineering and mathematics (STEM) education.

• Strengthening OCEESA's bond among members: We are using the international conference and this general meeting as venues to strengthen the bonds among our members. All former OCCESA



presidents were invited to share their experiences and wonderful memories and acknowledged for their valuable contributions to OCCESA. We are also promoting life-time membership amongst our members to enhance the bond and to facilitate their attendance of the conference.

• Actively participating in CIE/USA Programs:
We submitted a joint proposal, with the Southern California Chapter of CIE-USA (Chinese Institute of Engineers), to the National Council of CIE-USA for hosting 2015 AAEOY (Asian American Engineers of the Year) Award Conference in the Greater Los Angeles area. The proposal has been accepted. This is one of the most visible Award programs involving the main stream American engineering and scientific community. We look forward to your involvement and participation. This event will also help OCCESA's bottom line.

We need your continuous support and participation. Let us work together to make an even stronger OCEESA.

Sincerely,

Teff fuo

Jeff Kuo, Ph.D., P.E.

2013 President of OCEESA

www.oceesa.org



2013 OCEESA Anniversary Evening Program Saturday, August 10, 2013 San Gabriel Hilton Hotel, Los Angels

5:30 pm Registration and Networking

6:30 pm Opening

Welcome Remarks

MC: Anmin Liu & Sunny Jiang 劉安民 & 蔣晨陽 OCEESA 2103 President: Jeff Kuo 郭繼汾 CIE-NC Representative: David Fong 方玉山

6:45 pm Banquet

7:45 pm OCEESA 回顧和展望 By former Presidents

Moderator: 黃肇鑣

黃金寶 (1992), 張守玉 (1997), 黃肇鑣 (1998), 劉安民 (2002), 鄭永松 (2005), 袁保強 (2007), 潘偉平 (2010), 程 群 (2011), 蕭台戈 (2012)

8:15 pm MTEPC 回顧和展望

張守玉, 駱尚廉, 夏四清

8:30 pm Keynote Speech

Sustainable Development in the Era of Climate Change
Dr. Frank Shu 徐遐生

美國國家科學院院士(1987),中央研究院院士(1990), 國立清華大學校長(2002-2006) Dr. Frank Shu is an American astrophysicist, astronomer and author. He was professor of astronomy at the University of California, Berkeley and is currently at University of California, San Diego. In recent years, his research has focused on environmental science.

9:10 pm Award Pesentations

Jeff Kuo 郭繼汾/Jason Wen 溫俊山

Lifetime Achievement Award

Dr. Yung-Tse Hung 洪永哲

For his service as OCEESA Executive Director for 28 years

Outstanding Service Award - MTEPC, SCCAEPA, etc.

Best Paper Scholarship Award Presentations

9:30 pm Adjourn







2013 International Environmental Conference and Workshops August 8-15, 2013



A joint conference of
6th Symposium on Global Emerging Environmental Challenges
and Government Responses and
1st Symposium on Sustainable Environmental Science & Engineering



Southern California Chinese American Environmental Protection Associations (SCCAEPA) Overseas Chinese Environmental Engineers and Scientists Association (OCEESA)

Air, Water, Soil and Energy

Symposium Topics:

- Governmental Management in Environmental Protection
- Water Resources Protection and Water Treatment
- Solid Waste Management and Recycling
- US National Pollutant Discharge Elimination System(NPDES) Program
- Lake and Reservoir Management for Eutrophication
- Low Carbon Economy, Green Industry, and Alternative Energy
- Soil and Groundwater Remediation
- Brownfield Redevelopment and Land Use Management
- Wastewater Treatment & Water Reclamation
- Wastewater Sludge Treatment & Management
- Marine Environment Protection and Coastal Environment Management
- Air Quality Management and Climate Change
- Air Pollution Controls and Air Quality Monitoring

Support and Co-organizer Agencies:

U.S. EPA Region IX, Cal EPA-Los Angeles Regional Water Quality Control Board, San Diego Regional Water Quality Control Board, California State University at San Bernardino, Chinese American Environmental Professional Association (San Francisco), and Professional Association for China's Environment (PACE), Global Chinese Scientists Environmental Forum (GCSEF)

The Launching of OCEESA in 1980

Ju-Chang (Howard) Huang, 黄汝常 Professor Emeritus of Both University of Missouri-Rolla (1967-92) & Hong Kong University of Science and Technology (1993-2006) Fellow of ASCE and HKIE, P.E. OCEESA President - 1981

My good friend, Dr. John C. P. Huang, wants to challenge my memory as a senior citizen and a retired professor, and thus invites me to write a story about the establishment of OCEESA. Before you continue to read on, I must declare that the following write-up is based on my faint recollections on the event of launching this organization in 1980. If you math is good enough, I am writing the "story" which took place 34 years ago. So, if there is any disparity, you must bear with me. Fair enough?

If you are old enough (i.e., born before 1960 or even 1950), you should know that our profession was originally labeled as "sanitary engineering", which encompassed mainly water supply and sewerage engineering. In China today, this area is called "给排水工程". However, after the establishment of Environmental Protection Agency (EPA) in 1972, this profession was expanded to include air pollution, solid waste and other areas, and thus the name of sanitary engineering would no longer be appropriate. A new professional name of "environmental engineering" was evolved.

At the same time (1972), the US Congress passed a far-reaching legislation called "Federal Water Pollution Control Act Amendment of 1972" (or commonly referred to as **PL92-500**). Through this act, a large amount of federal grant was appropriated each year to step up the training of environmental engineers in the US. For example, at the University of Missouri-Rolla (now renamed as Missouri University of Science and Technology) where I taught for 25 years (1967

to 1992) and also served as the Director of Environmenta I Research Center for 17 years, we had a large grant to support nearly 40 graduate students



(called EPA trainees) each year for a total of 5 years initially, and then extended for another 5 more years. This marked the beginning of the golden era of environmental engineering expansion for the next 10 years.

Due to the rapid expansion of the environmental engineering field since 1972, there was a significant influx of Chinese people entering this area, mostly being from Taiwan and Hong Kong because at that time the number of graduate students from Chinese mainland was quite limited. In early 1980 (in late February or early March?), there was an International Conference on Using Biofilm for Wastewater Treatment, organized by

Professor Yun-Chen Wu (吴永成) of University of Pittsburg.

The conference was held in a Pittsburg suburban Ski Resort (name not remembered). Some 15 to 20 Chinese people attended that conference. Being confined in a snow-ski resort without much to do in the 3-day conference, we had frequent social gatherings in coffee shop or restaurant to exchange our professional experiences. Then someone came up with an idea of forming an association to group the Chinese environmental engineers together.

After some lengthy group discussion, it was agreed to name this organization as "Overseas Chinese Environmental Engineering Association" (or OCEEA). I might also clarify here that at that time, very few universities offered "environmental science" program, and thus the number of environmental scientists was quite limited. I





was asked to take the initiative of launching this organization with two specific tasks:

海外華人環保學會(1980 –2013) - Celebrating OCEESA 33rd Anniversary

- 1) to compile the list of Chinese professionals and graduate students in this field to the best of my knowledge, including their addresses and contact phones (there were no email yet at that time); fortunately I had a personal secretary to handle this chore.
- 2) To publicize the news of forming such an organization with an intention of its official launching in May at the 1980 Annual Purdue Industrial Waste Conference, which was normally attended by a significant number of Chinese professionals.

Then in May 1980, about 30 Chinese professionals attended the 3-day Purdue Conference. The launching meeting was held on the second day. The group was excited and very supportive of forming such an organization and an agreement was reached to call it "OCEEA".

The annual membership due was set at \$10 for graduate students and \$20 for those already working. At the meeting through my nomination Dr. Xi-lin Hou (候希临), a wellrespected senior environmental engineering professional at Eli Lilly Company near Purdue University, was elected as the President and Dr. Ju-Chang Huang (from University of Missouri-Rolla) as the Vice President while



Dr. Yung-Tse Hung (洪永哲) (from University of North Dakota at that time, and now at Cleveland State University) as the Secretary. I might also mention that Dr. Hung was made a Permanent Secretary at a subsequent-year annual meeting because of his enthusiasm and generosity in donating his time to this young and growing organization.

After the official launching, the name of the organization was quickly spread out. More and more people joined the organization in subsequent years. Dr. Hou was also generous enough to donate some fund to establish both scholarships and awards for thesis competition. Unfortunately, he passed away a few years later, but his dedication, enthusiasm, and contribution to this organization will be long remembered by many "old" (like myself and Dr. Hung, etc.) OCEEA members. The name of OCEEA was renamed as OCEESA in later years to include members from the science field.



Photo on the left was taken when Howard Huang attended SATEC 1997 in Beijing, China

OCEESA Jointed CIE-USA in 1988

John C P Huang, Ph.D. OCEESA President - 1998

Found in 1917, Chinese Institute of Engineers -USA (CIE-USA) is a non-profit professional organization of Chinese-American engineers, scientists and other professionals. The objectives of CIE-USA are to promote Science, Engineering, Technology and Mathematics (STEM) in all communities across United States and provide recognitions at the national level.

In view of the active National and International programs organized CIE/USA, OCEESA decided to apply to join. During the annual CIE/USA National Council meeting at Newark International Airport Marriot Hotel in New Jersey on Nov. 5, 1988, Don Tsye-Lang Tang 唐次朗, then OCEESA Secretary-Treasurer presented the request and CIE/USA approved.. Later, 唐次 朗 and 王抗曝 (OCEESA VP) were appointed by 應維琪 (OCEESA President) as two representatives to National Council.

For the past 24 years, OCEESA presidents, officers and members at large have actively participated and took leadership in many projects, particularly in environmental related programs organized by CIE/USA. It is worthy for intellectual stimulation and professional networks.

Currently, CIE-USA has 7 regional chapters in the US with about 10,000 members; they are as follows:

- Dallas-Fort Worth (CIE-DFW)
- Great New-York (CIE-(GNY)
- New Mexico (CIE-NM)
- Oversea Chinese Environmental Engineers and Scientists Association (CIE-OCEESA)
- San Francisco Bay Area (CIE-SFB)
- Seattle (CIE-SEA)
- 7. Southern California (CIE-SOCAL)

Regional Chapters activities include the following:

- Technical and Science Seminars
- Professional Career **Development Seminars**
- Leadership Seminars
- Asian American Youth Science, Engineering and Technical Scholarship awards
- Asian American Youth MATH contests and Science Fun (there are over a thousand kids participated every year).

At the US national level, in conjunction with National E-week, CIE-USA hosts the renowned annual **Asian** American Engineering of the Year Award (AAEOY). AAEOY creates a meaningful platform to recognize outstanding Asian American professionals in the areas of STEM and leaderships, and they are nominated from the corporations, academics, government and national renowned institutions. Many of their achievements represent monumental breakthroughs in their respective fields and their impacts are global and everlasting.

At the international level, the first co-hosted bi-annual event is the Modern Engineering and Technology Seminars (METS). Founded in 1966 between the CIE-NY and CIE-ROC chapters, this event is in collaboration with the Taiwan's CIE/ROC and Taiwan industrial institutes. The second co-hosted bi-annual event is Sino-American Technology and Engineering Conference (SATEC). This event was first held in 1993 and organized in collaboration with the Chinese State Council of People's Republic of China.





美洲中國工程師學會百年史

Chinese Institute of Engineers -2000 Flash Back

鄭國賓 Benjamin K. Cheng

美洲中國工程師學會 (中工會) 創建於 1917 於紐約. 在美國和中國辦過多次研討會, 經過多年演變和遷移、因為兩次世界大戰而中止活動、直到 1953 年中工會再在紐約重新註冊正式立案成為學會、本文由紐約分會鄭國賓所著、原文甚長茲將摘要發表於此。今年離 2016 百年慶已不遠、也可稱此文為美洲中國工程師學會早期部份之百年史。

Benjamin K. Cheng is CEO of ABC Digital Electronics, Inc. Ben was the 1969/1972/1973 CIE President and served as a member of the CIE-USA/GNYC board for many years. This is a condensed version; the complete version is in

www.cie-usa.org/2011History.html 編者記

Brief History

Prior to 1905, there were no Chinese engineers in China! All of the major projects were done by foreign engineers. The first engineering project designed and managed by Chinese engineers was in 1905, when American educated Zhan Tien-You 詹天佑 headed the building of Jing-Zhang railroad 京張鐵路 connecting Peking 北京 (now Beijing) and Chang-Jar-Ko 張家口 (now Zhang-Jia-Kou).

Recognizing the need for engineers to help modernize China, more students were sent abroad to study science and engineering. In 1917, the Chinese Institute of Engineers (CIE) was founded in US by a group of able, dedicated and far-sighted Chinese engineers. These charter members were graduate students from American colleges and/or were receiving practical training in American railroads and industries. Early membership totaled about 80. When the majority of these members returned home to serve their country, the main organization moved to

8

China with them, and their remaining counterparts in America became a chapter. This status remained through two world wars until 1949.

During 1917-1923, the CIE headquarters was located in Shanghai, while chapters in Beijing and Tianjin were established. The first convention was held in Shanghai on 1923. Membership by then grew to 350. Membership growth reached 1500 in 1930.

The Chinese Institute of Engineers merged with Chung-Hwa Engineers (founded in 1910) in August 1931, at a combined engineering convention held in Nanking. The headquarters was then relocated to Nanking, the national capital. The post-merger enrollment reached 2,169 members.

The organization remained active during the Second World War in Chungking, reestablished the convention in 1938, and formed chapters in Kuming, Chengdu, Kweiyang, Lanchow, Kweilin and Chungking. During the period of Japanese invasion of China, the engineers provided the needed technical services to the government to defend China.

The Taiwan CIE-ROC was re-established in March 1950. On the occasion of the 50th anniversary in 1960, (adopted the founding date of Jan 1910 of the Chung-Hwa Engineers) membership count was more than 3000.

The CIE-NY was re-activated as an independent entity in July 1953 in New York City by a number of accomplished engineers in the U.S. Subsequently the institute was registered in the State of New York in 1963 as the Chinese Institute of Engineers, New York, Inc., a tax-exempt non-profit organization. The CIE-NY and CIE-ROC co-founded the Modern Engineering and Technology Seminar (METS) in 1966. The cooperation among the engineers in ROC and USA successfully helped the country in establishing the infrastructure for industrialization, promoting industrial research and development of advanced technologies. Over the years, the METS has introduced many advanced

technologies to the ROC and set up the stage for the Taiwan microelectronics miracles.

The CIE/USA National Council, a federation organization of CIE/USA, was established in 1986 with the Greater New York and San Francisco Bay Area Chapters as its founding chapters. In the following years, the National Council was expanded to include Seattle, OCEESA, Dallas-Fort Worth and New Mexico. (Editor's note: Southern California jointed in 2011).

In light of the success of the METS, in 1993 the CIE/USA established another bi-annual seminar series, SATEC (Sino-American Technology and Engineering Conference), with the People's Republic of China, with the same objectives as METS. In 1993, the first SATEC conferences were successful and well received. SATEC is held once every two years continued to this day.

Objectives

CIE/USA is a scientific and educational organization. The objective of CIE/USA is to promote communication among engineers and scientists who are interested in the wellbeing of the Chinese engineering community in the U.S. and the industrialization of China."

The 1970 CIE/ROC Handbook also listed eight guiding principles which have been observed by many great engineers and scientists before us. These principles, as translated in the following, together with the Institute objectives, very well reflects the CIE organization in the 20th Century.

中國工程師信條 - The excerpts of the original Guiding Principles:

- Maintain professional dignity and work ethics; work hard for a good course, neither for personal recognition nor for financial gain. 不慕虛名,不為物誘,維持職業尊嚴 ,遵守服務道德。
- Be practical, and creative; pursue excellence and appreciate accomplishments as a team.

實事求是,精益求精·努力獨立創造,注 重集體成就。

- Have courage in taking responsibilities, be loyal to your job, and sincerely give full cooperation to your colleagues. 勇於任事, 忠於職守, 更須有互切互磋親愛精誠之合作精神。
- Be critical to oneself but forgiving to the other; try to live a simple, efficient, orderly and practical life style. 嚴以律己, 恕以待人並養成整齊樸素,迅速確實之生活習慣。

First Superstar

9

At the turn of the century, the downfall of the last feudalistic empire - Ching Dynasty had begun; the society was on the verge of corruption. Learning from the heartbreaking experiences of defeat from the various conflicts with the foreign powers (particularly the Opium War); the government realized that China had a lot of catch-up to do with respect to the western technology in order to survive. They sent a large group of young precollege students to the U.S. (because the American government was more friendly and sincere to the Chinese) to learn the language and then enroll in the colleges for science and technology. Next, the Ministry of Commerce was established to oversee the development of railroads, telegraph, postal services and ship building as well as shipping. Two technical colleges were founded in 1896, the Nanyang College in Shanghai and the Beiyang college in Beijing. The funding of the Nanyang schools was shared by the Shanghai-Peking Railroad and the Shanghai Telegraph Office. The Beiyang College was likewise supported by mining and ship building agencies for the training of technical supporting personnel.

Our first superstar is Zhan Tian-you 詹天佑, one of the young teenagers from the first group of exchange students. At the age of twelve, he attained the Seaside Institute for



Boys in West Haven, Connecticut in 1872, and attended Hillhouse High School in West Haven. He was admitted to the Yale University in 1878 and graduated with a degree in railroad/civil engineering in 1881. He returned to China after graduation and work for seven years in the Bureau of Ships, taking the responsibility to train technicians and mapping of the Chinese Sea Coasts. In 1888 he began to work as railroad engineer in a number of small railroad constructions and established a reputation to earn an honor as member of the Royal Academy of Engineers in England. In 1905, while Russia and England were having a dispute as to who had the 'right' to fund and build the railroad connecting Peking 北京 and

Chang-Jar-Kou 張家口; the Ching government decided to build it without having to borrow money from foreign country and keep the expected operating profit at home. Mr. Zhan was appointed as chief engineer in 1905 to head the construction of the railroad, he was appointed as General Director for the project as well in the following year. It was the first railroad built by a Chinese Engineering team. The road spanned 202 kilometers (350 miles) on a hilly terrain. It required four tunnels; the longest one is thirty five hundred feet under the Great Wall. He successfully completed the road in less than four years and within budget. The original budget was seven million two hundred twenty nine thousand (Chinese) ounces of silver, the actual expenditure was only six million ninety three thousand ounces.

Mr. Zhan founded the Chung-Hwa Engineers 中華工程師會 in 1911, the year that Republic of China was found. In 1913, he merged the Chung Hwa Engineers with the Railroad Engineers Union 路工同人共濟會 and Chung-Hwa Engineering Society 中華工學會. A convention was held in Hankow, Hupei. The key members of the Associations were: 詹天佑 ZHAN Tian-You 顏德慶 YEN Teh-Cheng, 徐文涓 HSU Wen-Journ 吳 健 WU Jin. The

organization moved to Peking in 1914 and change the name to Chung-Hwa Institute of Engineers 中華工程師學會. Mr. Zhan served as chairman of the organization since its founding until 1918. He died in April 24, 1919 on the job as the superintendent (Minister) of Communication, at the age of 59.

The Other Superstars -

限制志 CHEN Te-Cheng President & 張貽志 CHANG E. G. Vice President; 1918 First Convention at Cornell University: 吳承洛 WU Chen-Lor & 侯德榜 HOU Tek-Bong; 1919 Second Convention at Rennselaer Polytechnic Institute 周琦 CHOU Chi; 1920 Third Convention at Princeton University:劉錫祺 LIU Shih-Chi & 楊承訓 YANG Cheng Shuen; 1921 Fourth Convention at Lake-Village School:李熙謀 LEE Shee-Mou; 1922 Fifth Convention at Cornell University:周明衡 CHOU Ming-Hun; 1923 Sixth Convention (first in Shanghai):徐佩璜 HSU Pei-Huang; 1924 Conventions & 1927 in Shanghai: 胡庶華

HU Shu-Hua; 1931 Convention in Nanking - Merger of Chinese Institute of Engineers & Chung Hwa Inst of Engineers.

From 1931 to 1936, annual conventions were held every year. The convention sites rotated every year to facilitate the participation of the local chapters, in the following orders: Nanking, Tientsin, Wuhan, Chi-nan, Nanning, Hangchow.

The Sino-Japanese war broke out in July 1937, the original scheduled convention in Tai-yuen was canceled, instead, a general membership meeting was held at Chungking on October 8, 1938. The general meeting set-up the priority of the national engineering projects and established many more chapters in the interior western Chinese cities such as Kunming, Chengdu, Kweiyang, Lanchow, Kweiling and Hangyang to coordinate those projects.

CIE - World War II

The Sino-Japanese War lasted for eight years. Those were the darkest days in this century for the people in China in general and the engineers in particular. Engineers are trained to build for the improvement of the society. War destroyed that in the name of strategy in order to advance and win. The most heart breaking example was the first long bridge designed and built by Chinese engineers, the Qiantang River Bridge 錢塘江大橋 in Zhejiang province. The 1,453 meter bridge project started in August 1933, with a budget of 5.1 million silver dollars and construction schedule of 30 months. December 23rd, Dr. Mao received an order to destroy the bridge thoroughly so that the Japanese army could not use it to advance their army. The bridge was flatten to the water bed by the men who spent four years of their life to build it. The three short months of bridge utilization time for a project of such magnitude was probably a world record. Dr. Mao carried the engineering design and data with him to Kweiyang and then Chungking throughout the war years, hoping that one day, they will return and build it again. (Their prayers were answered; they did rebuild the bridge after the war).

In 1938, the Japanese troops occupied almost all of the coastal cities in China. Supplies from the Allies can only be transported by air, by flying over the Camels' Hump through the Himalayas. A highway connecting between Burma and Yunnan Province was urgently needed. The road was being built, but under the constant bombing by the Japanese Air Force, and the adverse working condition of this construction through forests and jungles. Many engineers and workers gave their life to the project.

Dr. Hung-Hsun Ling 淩鴻勛, being a railroad man, drew the assignment to complete a railroad from Kweilin through Liu-Chow to Nan-ning and then crossed the border to Indo-China, a move to connect China to the outside world even the harbors were occupied by the

Japanese Army. By focusing on the northern sections, the Hangyang to Kweiling to Liuchow connections were made on December of 1939. Started from January 1938, after two full years of constructions, and mobilization of over 600,000 workers, the railroad was finally completed.

CIE Post WWII

After the V-J day (victorious against Japan) in 1945, China was in the period of post war consolidations, no CIE annual convention was organized until 1948. The first post war convention was held in Taipei and well attended, CIE chairman that year was the model engineer/professor Dr. Yi-Sheng Mao 茅以昇, with Dr. Y. H. Ku 顧毓琇 and F. J.

Sah 薩福鈞 as vice chairmen. A good number of engineers and technical management team drew the assignment working in Taiwan, taking over the Japanese government owned industries and utilities. It was unfortunate that immediately after the World War II ended, the civil conflict in China developed into a full scale civil war. In 1949, the government of the Republic of China (ROC) and her army retreated to Taiwan

The activity of Chinese Institute of Engineers in mainland China was suspended after 1949, however, the engineers continued to contribute in the courses of rebuilding the infrastructure under the leadership of the government of the Peoples' Republic of China. Over the years, there have been ups and downs in the rebuilding progress, influenced by many other factors such as manmade and natural disasters; but the end results in the long run were still good. Railroad network was greatly expanded. Communication systems advanced. Wuhan Bridge was built to connect the North and South China. The Qiantang River Bridge and the Yellow River Railroad Bridge were re-built. Electrical power generation was catching up to the demand of new industrial development, etc.





我與 OCEESA 的緣 -

海峽兩岸環境保護研討會(MTEPC)創會始末

黃夏平

James S. Whang, Ph.D., P.E. OCEESA President - 1994

*前言:*今年七月初,老友黃肇鑣博士來電... 我正巧在美國阿拉斯加州 (Alaska) 的郵輪 上旅遊,電話費太貴,沒多聊。回家後再連 絡,才知道他榮任此次 OCEESA Journal— Special Issue 的主編. 所有文章將在今年八 月八日由「海外華人環保學會 (OCEESA)」 與「南加州美籍華人環保學會(SCCAEPA)」 共同主辦的「環保科技研討會」發表,更鼓 勵有關 OCCESA 創會三十幾年來重要事蹟 回顧的文獻與著作。他知悉我與「海峽兩岸 環境保護研討會(Mainland-Taiwan Environmental Protection Conference or MTEPC) 創會有特殊關係,特別客氣地邀請我撰寫一 篇有關該會的創會始末,以誌其事。其盛情 難卻,況且本段歷史專屬「海外華人環保學 會」所有, 忒有意義, 遂提筆胡謅成一文如 下,還請前輩、摯友與新朋等諸君,多多指 正為盼![註:「海峽兩岸環保研討會」第一 屆的英文名稱為 Mainland-Taiwan Environmental Technology Seminar (MTETS) 後來改成 Mainland-Taiwan Environmental Protection Conference (MTEPC),沿用之今。]

我與「海外華人環保學會」的緣起:「海外華人環保學會」在 Purdue University 籌備成立的那一年,我特地買了一趟來回機票希望參與它的創會之舉。 飛機到了支加哥要轉乘 Air

Wisconsin 的區間飛機 到 Purdue University, Indiana。 但航空公司 碰上了罷工而停飛,知情 而反應快的旅客們馬上 搶 位 置 轉 搭 Indiana



Airway。排到我前面兩三位客人時,該班機已告客滿,下班機要隔日才有。只得乘夜班機回家,因此失去共襄勝學的難得機會、無限慢望!一幌就是好幾年才再有機會加入OCEESA,成為它的幼齒會員而非原意的創會會員、會因而少了數年。於一九九零年與一九九一年,蒙受王抗曝、洪永哲、沈鐸、黃金寶、唐次朗等博士的推舉,分別當選為其秘書長與副會長一職。從此得與海外華人環保學有所成的佼佼者任事、並得聞「海外華人環保學會 OCEESA」的 核心會務工作、殊不勝愉快!

接受「聯合國開發總署 UNDP)」委派赴華講學與考察的契機:一九九一年中期,接得唐次朗會長的電話說起「聯合國開發總署 (United Nations Development Programe or UNDP)」正在甄選一位國際環保專家赴中國大陸考察、講述先進國家現行而有效的環保科技與工藝流程、並協助中國東北地區各類特定工廠改善其汚染問題。前幾年請的都是美國人、因不諳中國語及文化、有若隔靴消養。因此,此次中方特別要求聯合國開發總署」因此特破例請 OCEESA 提供人選。中方提出的講題洋洋灑灑共兩頁含二十四大類。污染媒體涵蓋空気、廢水、汚水、飲用水、固體廢棄物、有害事業廢棄物、噪聲、太空垃

圾、放射性廢棄物等等;而工業類別則包括 冶鐵、煉鋼、發電、煉焦、煤的氣化、染 整、石化、化工、電鍍、廢物再生/重用、垃 圾焚化、煤渣回收/重用等等。另外又加了一 個子題目,即當時最熱門而位於美國亞利桑 納州 (State of Arizona) 內的生物圈第二號 (Bio-Sphere II)實體 計畫。其要求可謂玲瑯 滿目,且規定每一類都要詳予闡述。

「聯合國開發總署」甄選日程非常緊迫。當時我提議由唐次朗會長他本人代表本會應徵,無奈其岳母正得病、不克遠行。王抗曝博士亦有要事不能輕易離開美國。最後落在我頭上去頂替此項不太容易而非常有意義的聯合國項目。還好不負衆望,我的提名被「聯合國開發總署」接受了。此後三個月,不眠不休地為赴華講學的事準備材料。終於編製了六百多頁的投影片(Transparencies)[註:當時還沒有 PowerPoint,而 且幻燈片也太貴了]。另又印了五份紙張映本,它就佔了我行李的大部分重量。

「海峽兩岸環保研討會 MTEPC」的緣起與

濫觞: 在與中國國務院及「遼寧省國際會議中心」(該中心是「聯合國開發總署」在華的正式對口單位)協調訪華的行程與細節時,他們總是殷切的訊問我還有什麼要求或心願,誠意感人! 在不經意中,我請教唐次朗博士說我們 OCEESA 對中方有何需求 / 心願。他乃跟我提到王抗曝與沈鐸兩位博士鼓吹了幾年的「海峽兩岸三地環境保護研討會」乙事,不幸皆因種種因素胎死腹中。他才鼓勵我不妨要求中方促成此「海峽兩岸環

保研討會」的創辦。當時我們並無十分把握,但認為此事是「海外華人環保學會OCEESA」千載難逢的機會,我就滿口答應下來了。這個擔子從此就落在我的肩上了。與大陸國務院提出此要求後,經過幾天時間,其答覆是:「抵華後再斟酌」(一點不確定性的感覺就埋在心理,時時提醒著我!)。

「海峽兩岸環保研討會 MTEPC」創會時的 **兩岸三地奔波:** 在王抗曝、沈鐸、唐次朗、 黃金寶等幾位前會長們的祝福下,於一九九一 年末,我終於搭乘飛機離開美京華盛頓、轉 舊金山與東京、抵達北京首都機場。通□後 出了行李間,就見到中方來接機的人員:除 了司機外共四人,分別代表中國國務院「外 國事務辦公室」(簡稱外辦室)、「僑務辦 公室」(僑辦室)、「臺灣事務辦公室」 (臺辦室)及「遼寧省國際會議中心」四個 單位。我雖然納悶為什麼需要如此勞師動衆 的,但還是滿臉笑容與每個人握手與寒諠。 過了幾天與他們較熟悉時,才請敎這個接機 陣仗是什麼道理。回答是: 我是聯合國的代表 又是入籍美國的公民,應由外辦室來接待:我 生於"解放前"的北平市且旅居美國逾二十多 年,也可由僑辦室迎接:此外我祖籍福建龍溪 縣(亦稱漳州)且在臺灣成長二十幾年是為 閩南籍臺灣人,自然由臺辦室來歡迎。由此 事,您不得不佩服中國對一個個人或團體資 料的掌握之週全與分析能力,暨面面俱到的 工夫!

一行人搭廂型車沿首都機場公路進北京城



(註:當時首都機場規模不大,且機場通北京 市的高速公路還不存在)。華燈初上時,我 們到了鬧區王府井大街,並進住三星級的 「臺灣飯店」。又是有心安排的"臺灣式" 飯店 (註: 其用心良苦耶)! 用過晚餐... 我提議散散步再聊聊的主意。大夥一出旅店 的玄関,就發現對街毫無燈火竟然一片漆黑 (註: 一九九一年大陸經濟還未真正起飛. 故 燈火不多)。過了街,一大夥人圍了上來, 說些我聽不懂的話。僑辦室的官員與他們嚷 嚷並揮揮手,好像要他們離開(註:後來才知 道他們在說非常難懂的北京當地土話)。原 來他們是無家可歸的乞丐在要錢。官員說你 一給錢就沒完沒了,更多乞丐會馬上出現。 這是我第一晚對北京首都的印象(註:大陸全 面改革開放幾年以後,就改觀了)!第二天 又一行人 (包括我的父母親在內) 在北京到處 景點參觀. 對我的出生地及幾世紀的首都有實 質性而多方面的瞭解與體會. 印象非常深刻 (註: 而後又回去造訪多次)!

以上當時的經驗與氛圍使得我對創辦「海峽兩岸環境保研討會(MTEPC)」的信心打了一些折扣!

「海峽兩岸環保研討會 MTEPC」兩岸三地 的創會共識:

本著環境保護是沒有國界的理念,海峽兩岸雙方應該可以公開討論相互關注的環保問題,共同切磋並尋求解決之道,此應是「雙贏」的策略!而「海外華人環保學會(OCEESA)」為海外成立多年且知名的華人

科技專業團體,應可扮演中立而有效的媒介, 戮力促成「海峽兩岸環保研討會MTEPC」的創立。我在美洲、中國大陸地區與臺灣地區之間的持續穿梭工作,在幾番斡旋/折衷後,終於達成下述不成文的幾項重要默契,以利第一屆研討會的積極展開:

- 1. 各地與會人員以高等院校相關科系的 學者/專家/教授為原則。政府單位 /組織人員不宜參加。(後來修訂為 各方政府單位/組織人員,若也是高 等院校相關科系的學者/專家/教 授,可以此身分參加)。
- 研討會場裡外及其鄰近一律禁止有國家形象標誌、標示/文字、圖樣、或符號的展示(如:國旗、國徽、國花、國鳥等)。
- 研討會場裡外及其鄰近一律禁止有國家形象相關影音的播放(如:國歌、國旗歌、軍歌等)。
- 4. 研討會場裡外及其鄰近一律禁止有國家元首或其他中央級領導人影相/語音的展示或播放。
- 5. 研討會的所有論文/著述及相關文宣 /印刷品皆不得有標示國名或國家級的字眼,凡如:「中華人民共和國」、「中華民國」、「國立」、「國家級」等字眼一律禁止。 茲舉二例如下:臺灣新竹的清華大學不稱「國立清華大學」而稱為「臺灣地區清華大學」或「新竹清華大學」(茲有別於「北京清華大學」)、「中國

國家水質標準」則應為「大陸地區水質標準」等等。

- 7. 「海外華人環保學會 OCCESA」為 大陸地區與臺灣地區共通認定為「海 峽兩岸環保研討會 MTEPC」的協辦 單位。全權甄選與審核海外地區的與 會代表,論文數量與題目,代表的履 歷/職稱等,並及時將所收集的資料 寄達我處,經上述不成文規定由我做 最後審核後,編入總議程與論文集。
- 8. 大陸地區的主辦單位 (最後決定由 「上海同濟大學」出任) 全權甄選與 審核大陸地區的與會代表,論文數量 與題目,代表的履歷/職稱等,並及 時將所收集的資料寄達「海外華人環 保學會」,由我收件,經上述不成文 規定由我做最後審核後,編入總議程 與論文集。地主主辦單位「同濟大 學」還兼任其他地主的工作事宜

- 如:接機、地面交通、食宿、會場布 置等。
- 9. 臺灣地區的主辦單位 (最後決定由我的母校臺灣地區「台南成功大學」出馬) 全權甄選與審核臺灣地區的與會代表,論文數量與題目,代表的履歷/職稱等,並及時將所收集的資料寄達「海外華人環保學會」,亦由我收件,經上述不成文規定由我做最後審核後,編入總議程與論文集。
- 10. 兩岸無異議地全權委託「海外華人環保學會 OCCESA」完成第一屆「海峽兩岸環保研討會 MTEPC」總議程與論文集等的編輯與印製,並即時寄發「上海同濟大學」以資應用。

幾個月後,我應大陸與臺灣雙方的要求,乃藉在芝加哥市舉辦的一個國際環保會議的機會,安排雙方主任級的官員在電梯間不期而遇及認識,並逕赴我的旅店房間進一步秘室洽談。兩方皆表示非常重視此事,樂觀其成,但官方不會公開露面,全由高等院校相關科系的學者/專家/教授來執行。

「海峽兩岸環保研討會」在上海的第一次會 議暨臺北的第二次會議等於【OCCESA的 階段性臨界任務】:

終於在上述的冥冥姻緣際會下,一九九二年 九月二十三日至二十八日第一屆 「海峽兩岸 環境保研討會」亦即 Mainland-Taiwan Environmental Protection Conference (or "MTEPC") 在 「海外華人環保學會 OCESSA

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」(雖屬協辦單位)的**主導下**,由大陸地區「上海同濟大學」與臺灣地區「台南成功大學」共同主辦,在上海虹橋區「銀河賓館」(Galaxy Hotel)盛大開幕並圓滿舉行。其主題為「藍天、淨土、清水」──獻上與會者及我個人對它的殷殷期許與無限展望! 該會獻文獻策、文情並茂、暢所欲言、熱情洋溢、欲罷不能。互道珍重再見時,兩岸三地已議定並約好明年在臺灣臺北會師。

第二屆「海峽兩岸環境保研討會」翌年在臺灣臺北舉辦,由「臺灣大學」與「北京清華大學」共同主辦。「臺灣大學」為地主單位。「海外華人環保學會(OCEESA)」依例為協辦單位,積極扮演「媒人」的重要角色!那年我因當選為「海外華人環保學會(OCEESA)」的會長,也就自然地成成為育會(OCEESA)」的會長,也就自然地成成為育會的大部分事物。會議非常成功! 還依稀記得會的大部分事物。會議非常成功! 還依稀記得會的大部分事物。會議非常成功! 還依稀記得會該清東後,大夥意猶未盡地集結在臺北一家負有詩意而名為「紫藤廬」的溫馨小店聊到深夜半更,才依依不捨地相約翌年大陸再相逢!

「海外華人環保學會 OCESSA」於「海峽兩岸環境保研討會」的第一階段性任務乃告圓滿達成!本文筆者有幸參與其全程的濫觞、組織、發展、創立、茁壯等,殊有榮焉!

「海峽兩岸環保研討會 MTEPC」創會後記:

從一九九二年創會後,借助兩岸三地的環保 老 枝 與 新 幹 . 「 海 峽 兩 岸 環 保 研 討 會

MTEPC」有如推波助浪般地,又圓滿地舉辦了二十幾屆迄今,成果豐碩,誠屬難能可貴! 筆者僅參加了在江蘇南京辦的那一場會議,但于願足矣!

於一九九五年,「中國國務院」與「聯合國開發總署 (UNDP)」共同響應「聯合國」對全球的呼籲,在北京「崑崙飯店」盛大舉辦全球至今唯一的「中國二十世紀議程 China Agenda 21」大型國際會議。忝為兩位僅有的境外華人代表(註:另一位代表港澳地區;當時港澳還未回歸中國大陸)之一,筆者有幸被邀請參加並在「人民大會堂」的千人大會上發表演說。

中國國務院於一九九五年通過並批准了「淮河流域水污染防治條例」是為中國以國法治理一個廣大流域的第一遭,明令於十年後的二零零五年基本上將准河河水達標還清。一九九六年,筆者應中國國家環境保護局(後來升級為環境保護總局)之邀請,組織並領噵了一支美國高級環保專家團(含美國 CH2M Hill 公司與北京清華大學等)赴華參加「中美淮河流域水汙染防治研討會 Sino-American Huai River Water Pollution Control Seminar」,寄望替中國找到解決之道。

另筆者又於一九九七、一九九九、及二零零一年參加在北京舉辦共三屆的「中美工程技術研討會 (Sino-American Technology & Engineering Conference or SATEC)。舊雨新知,同窗切搓,不亦樂乎!

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綜上所述,筆者與「海外華人環保學會」之 緣分方興未艾多年,枝幹藤蔓糾葛無間,是 為我一生中的一件大樂事!

茲拷貝筆者一九九六年當年在「中美淮河流 域水汙染防治研討會 Sino-American Huai River Water Pollution Control Seminar」開 幕式中獻出的一首詞【試填《沁園春 憶淮 河》】,特資記念:

西源桐柏,東迄江濤,億載迢遙。 望華國南北,惟此滔滔; 紅妝浣紗,浪裡白條。 蒼茫錦帶,猿鳥飛渡,詩人墨客爭吟謠。

興水利,蘇皖兼魯豫,各領風騷。 工農改革開放,引無數產業競比高。 今污廢旱澇,歲歲凌霄!

夏禹治水,一代天驕; 隋皇運河,睥視瓊瑤; 律法治淮笫一遭。 集中美,為炎黃江山,還我多嬌!

筆者後語:

如今已經過四個「國家五年計畫」將近廿十年的功夫,准河水污染依舊,未能達標還清,甚至於每況愈下! 海峽兩岸的環保問題更加複雜與多元化。譬如:

京、津、冀地區(甚至整個華北與華中平原)經常籠罩在 PM_{2.5} (已非昔日的 PM₁₀)污染的陰霾空氣下、比昔日

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PM₁₀ 汙染物對人體有更直接的健康 危害

- 人口稠密的上海大都會地區黃浦江上 出現千條以上漂浮死豬案例;
- 臺灣地區八里汙水處理廠在建設十幾 年後才克全面投產:
- 兩岸近海海域(甚至於遠洋海域)汚染所引發的海洋生態破壞與海產減產 難題極其嚴重:
- 大陸地區癌症村為長期的隱性問題:
- 大陸北京地區與臺灣南部地區地下水 超抽引起的地層下陷問題;
- 海峽兩岸的地區、美國及全球各國對 「地球氣候變遷(Global Climate Changes)」的議題,風風雨雨尚無 定論等等;(註:此與「全球溫室 效應加溫(Global Warming)」絶 對不是同義字)。

以上比比皆是:老病癥揮之不去、新問題接踵而來!海峽兩岸三地專家/學者絞盡腦汁,在過去三十年間發表成千上萬的論文, 其成果輝煌有之,差強人意之處也不缺!政府與各界領導們如何攜手共創「經濟」與「環保」齊頭並進的局面,絕對有待高度智慧暨翻天覆地/旋□乾坤的持久性堅持與努力!

在此文末,筆者對海峽兩岸及 OCEESA 等 三地的所有同儕先進在環保領域上往日的卓 越成就與不懈努力,致上最誠摯的敬意!並 祝一切順心如意!





A Short History of MTEPC

海外華人環保學會(1980 –2013) - Celebrating OCEESA 33rd Anniversary

劉成均 Clark C.K. Liu, Ph.D., P.E., F. ASCE Professor Emeritus - Department of Civil & Environmental Engineering, University of Hawaii OCEESA President - 2008

Twenty years ago, the relation across the Taiwan Strait was still tense. It was difficult for environmental engineers and scientists in the Mainland and Taiwan to get together with their counterparts, especially in large groups. At the time, members of Overseas Chinese Environmental Engineering and Science Association (OCEESA) were often invited by Mainland and Taiwan to visit and to give advice on various issues related to pollution control and environmental conservation. Based on their personal observations, these OCEESA members realized the needs for





direct and free exchange between environmental scientists/manager s on the Mainland and Taiwan in large conference settings; and they took



establishment of this direct exchange as their responsibility. Subsequent hard work by environmental scientists across the strait and OCEESA paid off. With the blessing of environmental protection agencies on Mainland and Taiwan, the 1st Mainland Taiwan Environmental Protection Academic Conference (MTEPC) was held in September 1992 at the Galaxy Hotel in Shanghai. The conference was jointly organized by Tongji University in the Mainland, Cheng Kung University on Taiwan, as well as OCEESA in North America - it was indeed a history in the making!

The conference theme of the 1st MTEPC was Blue sky, un-polluted land, and clear water. It pulled together 180 environmental experts and scholars from Mainland, Taiwan, and North America. Late Dr. Thomas Shen (沈鐸博士) of OCEESA played a pivotal role for the successful launching of this conference. The photo to the left shows one the technical sessions during the 1st MTEPC. Dr. Thomas Shen was seated the second from the right.

The 2nd MTEPC, with the conference theme of Source water protection and water treatment technology, was held in December 1993 at Howard Plaza Hotel in Taipei. Sixty-eight Mainland environment experts and scientists participated in the conference. It made a record at the time as the largest group of Mainland scientists and scholars that had ever visited Taiwan since 1949 (See left). The first two conferences laid down a solid foundation on which many future MTEPCs were organized and held as evidenced by the following summary table.



A Summary Table of Past MTEPCs

No.	Date	Location	Organizers	General Theme	Paper
1	9/23-28/1992	Shanghai	Tongji Uiversity Cheng Kung University OCEESA	Blue sky,Unspoilded Land and Clear Water	58
2	12/21-26/1993	Taipei	National Taiwan Univ. Tongji University OCEESA	Source Water Protection and Water/Wastewater Treatment Technology	117
3	8/28-31/1995	Beijing	Tsinghua University National Taiwan Univ. OCEESA	Resources, Development, and Environmental Protection	156
4	12/17-19/1996	ChungLi	Central University Tsinghua University OCEESA	Environmental Management of Sustainable Development - Prevention and Control	163
5	5/26-30/1998	Nanjing	Southeast University Central University OCEESA	Environmental Management of Sustainable Development - Prevention and Control	266
6	12/7-11/1999	Kaohsiung	San Yat-san University Southeast Uiversity OCEESA	Sustainable Environmental Management in 21th Century	236
7	4/21-25/2001	Wuhan	Wuhan University San Yat-sen University OCEESA	Sustainable Environmental Management in 21th Century	237
8	10/14-18/2002	Hsinchu	Jiaotong Univ. (Hsinchu) Wuhan University OCEESA	Technology and Management of Sustainable Development	286
9	5/10-152004	Xian	Jiaotong Univ. (Xian) Jiaotong Univ. (Hsinchu) OCEESA	Sustainable Development of Western China and Environmental Protection	472
10	10/23-29/2005	Taichung	Hung Kuang University Jiaotong Univ. (Xian) OCEESA	Win-Win Situation of Technological Advancement and Environmental Protection	381
11	6/8-12/2007	Harbin	Harbin Institute of Technology Hung Kuang Univ. OCEESA	Strive together for the Development of Environmental Protection teconology and the formation of a harmonic Society	335
12	10/26-28/2008	Kaohsiung	Kaohsiung Univ. of Science and Technology Harbin Institue of Technology OCEESA	Exchange Experience, Renovate Technology, Move together for Sustainable Communities	331
13	4/23-25/2010	Chongqing	Chongqing University Kaosiung Univ. of Technology OCEESA	To strive together for a Sustainable Development	223
14	11/507/2011	Tainan	Cheng Kung Univ. Chongqing University OCEESA	Making Low Carbon Society, Achieving Mutual Environmental Prosperity	131
15	11/2-6/2012	Guilin	Guilin Univ. of Science and Technology Cheng Kung Univ. OCEESA	Environmental Protection in the Development of a Green Economy	306



The oction

Since 1993, MTEPCs have been held alternately in Mainland and Taiwan every one or two years. These conferences were always organized by one university in the Mainland, one university on Taiwan, and OCEESA. A group Photo of OCEESA delegates and their spouses at the closing ceremony of 11th MTEPC held in Harbin in 2007 is shown below.



Later, the holding of across-the-strait conference has become popular and has proliferated into many different types of academic and professional fields; however, MTEPC has been recognized as the pioneer and one of the most successful such conferences. A group photo of 13th MTEPC held in Chongqing in 2010 is shown below.



As the general relationship between Mainland and Taiwan is improving, the importance of OCEESA for organizing and conducting MTEPC is diminishing. However, the presence of OCEESA in MTEPC, according to our colleagues in the Mainland and Taiwan, remains highly desirable, if not at all essential. This recognition was reflected by the statement of the 2006 MTEPC Consultative Committee held in Shanghai (See the next article in this special issue). This statement rejuvenated the role of OCEESA as a productive and mutually-beneficial partner of MTEPCs; and in a broader sense, the environmental protection and sustainable development in Mainland, Taiwan, and beyond the seas

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海峽兩岸環境保護研討會之回顧

駱尚廉

臺灣大學環境工程學研究所特聘教授

有鑑於此,在各方人士與海外華人環 境保護學會(OCEESA,黃金寶會長、 沈鐸副會長、王抗曝及黃夏平博士)、 同濟大學(高廷耀校長、黃鼎業副校長 、顧國維副校長、蔡不忒所長)及成功 大學(馬哲儒校長、溫清光及鄭幸雄教 授)共同努力下,於1992年9月成功地 在上海召開了第一屆「海峽兩岸環境保 護研討會」,開創兩岸環保交流之先河 。與會人士皆盼此研討會能繼續舉辦以 利海峽兩岸間之環保學術交流,因此公 推臺灣大學與同濟大學共同主辦第二屆 研討會, 而於 1993 年 12 月在臺北擴大 舉行,為辦好此次研討會,筆者與楊萬 發、曾四恭及蔣本基教授親自前往同濟 大學與范謹初院長及蔡不忒所長等協商 如何辦理大陸學者來臺參加研討會之事 (此為兩岸第一次有超過 40 人以上的團 體來臺)。

第三屆海峽兩岸環境保護研討會則由 清華大學(北京市)與臺灣大學共同主 辦,於 1995 年 6 月在北京召開,時值兩 岸關係因兩國論而緊張,但錢易院士、

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郝剛依臺。與長交,吉院臺參三會、流令院等模籌會士表興處士表興感人人,會中展見高,余仍來議,所、昂其



中最令人關懷的是「如何永續此類意義 非凡的交流活動?」及「如何開展兩岸 實質的環保合作課題?」兩大問題。

第一個問題已獲兩岸環保研討會諮議 委員會議解決,採雙方交叉接力及輪辦 方式,持續舉辦研討會。第二個問題是 大家目前的焦點,也是是否能由認識、 瞭解,到進一步實質合作以解決共同環 保問題的關鍵。由歷屆海峽兩岸環保研 討會之主題與發表論文看來(表一), 其所顯示之重要意義包括:

- (1) 水污染的問題仍是兩岸目前環境污染 之最大宗,但由管理策略、模式及防 治處理的論文篇數如此之多,而上、 下水道工程論文寥寥可數之相對比較 ,可知兩岸都是光說不練,污水下水 道工程幾為全世界最落後國家之列。
- (2) 酸雨、沙塵及 PM₁₀(或 PM_{2.5})為兩岸目前共同的污染問題,也具甚高的共通性,因此完成整體監測網,互換相關資料及共同研究防治技術,對兩岸空氣污染問題之解決,非常具有實質意義與重要性
- (3) 難降解有機及無機污染物之處理技術: 兩岸在過去都屬「重工業、輕環保」, 環境中累積之有機與無機毒物驚人,兩 岸也都有許多學者從事處理技術之研究 ,因此已有實力合作研究
- (4) 固體廢棄物資源化及其處理處置技術: 減廢、有毒物質之安定化、無害化、固 體廢物之資源化與回收再利用,甚至廢



(5) 研討之重點漸由固、氣、水三廢,轉 移到環境政策、管理、規劃及保育。 甚至對都市環境問題、減廢、污染預 防、全球變遷與永續發展等,也都能 趕上世界的潮流。

棄物交換再利用,兩岸都深具合作之潛 為邁開兩岸環保合作的第一步,校與校 及系所與系所結為姊妹校、姊妹系所, 對雙方能在教學、科研等各方面發展全 面合作極為有利。臺大環工所與大陸清 大環工系已展開合作協議,也望能獲得 陸委會、海基會及其他政府部門的協 助,共同為兩岸環保與永續和諧的發展 而努力。



臺灣大學與同濟大學 第二屆研討會籌備會議



臺灣大學與清華大學 第三屆研討會籌備會議



第二屆研討會與會人員參觀故宮博物院

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表一 海峽兩岸環境保護研討會

屆	日期	地 點	主辦單位	主題	論文數
1	1992.9.23-28	上海市	同濟、成大	藍天、淨土、清水	58
2	1993.12.21-26	台北市	台大、同濟	水源保護與污防技術	117
3	1995.8.28-31	北京市	清華、台大	資源、發展與環境保護	156
4	1996.12.17-19	中壢市	中大、清華	可持續發展之環境管理-預防與控制	163
5	1998.5.26-30	南京市	東南/南京、中大	可持續發展之環境管理-預防與控制	266
6	199.12.7-11	高雄市	中山、東南/南京	邁向 21 世紀之可持續環境管理	236
7	2001.4.21-25	武漢市	武漢、中山	21 世紀可持續發展之環境保護	237
8	2002.10.14-18	新竹市	交大、武漢	永續環境技術與管理	286
9	2004.5.10-15	西安市	西安交大、交大	西部開發與可持續發展之環境保護	472
10	2005.10.23-29	沙鹿市	弘光、西安交大	共創科技發展與環境保護雙贏局勢	381
11	2007.6.8-10	哈爾濱	哈工大、弘光	促進環保科技發展攜手共建和諧社會	335
12	12 2008.10.20-26	高雄市	高雄科大、	經驗交流、技術創新、	331
12		2000.10.20-20 同雄川	哈工大	共同邁向永續環境	331
13	2010.4.23-25	010.4.23-25 重慶市	重慶、高雄科大	節能減排 COOL 地球、	223
				共創兩岸產業發展	
14	2011.11.5-9	台南市	成大、重慶	打造低碳社會、共創環保榮景	131
15	2012.11.2-6	桂林市	桂林理工大、成大	資源、環境與可持續發展	306

協辦單位:海外華人環境保護學會(OCEESA)





海峡两岸环境保护学术研讨会之故事

夏四清(siqingxia@tongji.edu.cn) 上海同济大学教授

在海峡两岸环境保护学术研讨会开创性的于大陆、台湾之外的美利坚合众国举办之际,受大会组委会之委托,让我写一点关于海峡两岸环境保护研讨会演变之历史,然四清乃本研讨会之后生,从2004年5月第九届在西安举办后才届届介入,实在不敢言研讨会开创之历史,许多知讯均来自于前辈,故称之为"故事"。

"随着世界经济与工业的神速发展,环保问题方兴未艾,环境保护意识普遍抬头;假以时日,国际贸易自由化运动定将全球经济发展涌向另一高峰,继之而来的环保事务下还年追求'永续'或'可持续性'发展下环保生命周期观的落实更是艰辛万难。近年来亚洲太平洋地区经济之成长有目共睹,世人咸入的经济活动中心,随之而兴的环保更求与要求活动中心,随之而兴的环保制,生变势力不可。中国海峡两岸为亚太地球与要求为不可。中国海峡两岸为亚太地球场持续努力不论在大气、海洋、生态、地球物理学上而言,其地区属性相似;在广义。"(简单1993年12月咨议委员会组织章程草案)。

然而,由于地球人都知道的原因,海峡 两岸华夏同胞长着同样的皮肤、有着同样的 传统文化和语言,却无法直接面对面交流,

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更不用说学术 层面的合作与 交流,让全球 华人十分揪心。



据我所了解的讯息,早在上个世纪 80 年代初期(1980-1982年)黄鼎业先生曾 到美国北卡罗来纳州立大学土木工程系做访 问学者,到80年代末或90年代初,他作为 同济大学副校长经常访问美国, 偶遇其浙江 江山同乡 1989-90 担任海外华人环境保护学 会(OCEESA)会长的王抗曝博士(Dr. Lawrence Kong-Pu Wang),也就是第一届 在同济举办时指定 OCEESA 方总联系人。 黄校长和王博士的交谈甚是投机,由于王博 士当时的 OCEESA 会长身份,黄校长提出 回国后激请他到同济访问并加强与同济大学 环境工程学院的交流与合作。后来又在联系 方式上出现了一些曲折,但终于还是邀请到 OCEESA 代表一行访问同济大学,并进行广 泛的交流,当时提议先举办一个会议,曾命 名"两岸三地环境保护研讨会",同济大学利 用在环境保护领域的学科优势负责联系大陆 参会代表,OCEESA 方面负责联系台湾参会 代表和其他 OCEESA 能联系到的代表。经 报批于 1992 年 9 月 23 日至 28 日于上海银 河宾馆成功举办,由于是第一次,

当时称"1992 年海峡两岸环境保护研讨会" (如图),在筹办过程中出现很多现在想象 不到的场景,包括随时与北京的电话联系, 哪些话能讲不能讲都要请示,可见,该研讨 会的启动是如此不易。正是由于该研讨会来 之不易,当时确认每届要选择海峡两岸两个 大学举办,且每届有一个主题,第一届在同 济举办时选择与同济大学有渊源的成功大学 作为合办单位,当时的主题是"蓝天、净土、 清水"。

从此开始了至今年第 22 年的办会历程,办会频率为每一年至一年半举办一次,选择开会的学校提前自由申请,地点和时间的选择照顾到 OCEESA 和台湾代表的建议,希望代表在学术交流的同时顺便游览祖国的大好河山。每届会议期间会抽空召开咨议委员会会议,确定下届会议的举办时间。

第二届于 1993 年 12 月在台北(台大、同济)举办,咨议委员会在有亚洲第一流茶馆美誉的紫腾庐茶馆广泛讨论,出台了"海峡两岸环境保护交流活动咨议委员会组织章程草案"。第三届于 1995 年 8 月在北京(清华、台大);第四届 1996 年 12 月在中坜市(中大、清华);第五届 1998 年在南京(东南/南京、中大);第六届 1999 年 12 月在高雄(中山、东南/南京);第七届 2001 年 4 月在武汉(武大、中山);第八届 2002 年 10 月在新竹(交大、武大);第九届 2004 年 5 月在西安(西安交大、交大);第

十届 2005 年 10 月在沙鹿市(弘光科大、西安交大); 2006 年 8 月在超强台风"桑美"的巨大影响下,在同济大学举办了一次"海峡两岸环境保护学术研讨会咨议委员会会议",会上决定成立海峡两岸环境保护研讨会的常设机构,由我负责协调办会有关事务,会后通过向各举办过的高校发邀请函,更新了"海峡两岸环境保护研讨会指导委员会"(咨议委员会)成员。

会议讨论决定今后海峡两岸环境保护研讨会可以采用综合的或专题的形式举办,举办地点也可以在大陆和台湾地区以外。第十一届 2007 年 6 月在哈尔滨(哈工大、弘光科大);第十二届 2008 年 10 月在高雄(高雄一科大、哈工大);2009 年 4 月于天津在天津城市建设学院举办了一次专题会议"保护水环境,创建绿色滨海新区";第十三届2010 年 4 月在重庆(重庆大学、高雄一科大);第十四届 2011 年 11 月在台南(成大、重庆大学);第十五届 2012 年 11 月在桂林(桂林理工、成大)。以上所有举办的协办单位均为海外华人环境保护学会(OCEESA)。第十六届这次移师到了 Los Angeles。

最后衷心祝愿本研讨会越办越好,使其成为海内外华人在环境保护领域的重要交流平台。如有任何与该研讨会有关的讯息请随时与我联系。欢迎任何时间访问同济!

顾国 维 教授



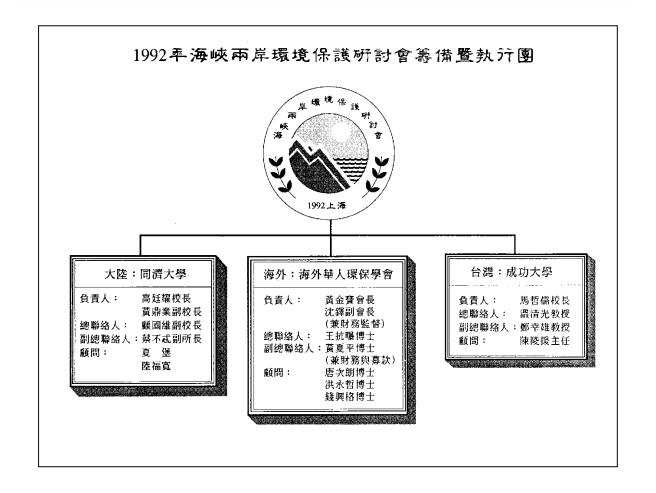
老教授们 廷 耀 比南口

海外華人環保學會(1980 –2013) - Celebrating OCEESA 33rd Anniversary

教授 78



1992 年海峡两岸环境保护研讨会筹备暨执行图(同济一正两副校长参加及其现状照片)



海峽两岸環境保護研討會邁入第2階 段 - 咨議委員會 2006 年上海會議

劉成均 Clark C.K. Liu, Ph.D., P.E. 夏威夷大學十木及環境工程系名譽教授 OCEESA President - 2008

在海外華人環境保護學會(OCEESA) 的媒介促成下、第一屆海峽兩岸環境 保護學術研討會(MTEPC)由同濟大學, 成功大學,與 OCEESA 共同主辦於 1992 年9月23至28日在上海召開。到了 2006 年、這一項大型學術研討會己在 14 年內成功地召開了十次。對於這項 成功貢獻最大的是海峡兩岸各大學及 OCEESA 共同組成的咨議委員會。

十次研討會成功召開之後、海峡两岸 環境保護工作的重心已逐漸由理論轉 向實務。 同時 OCEESA 媒介功能的重 要性也逐漸遞減。 有鑑於此, 咨議委 員會認為有必要集會商討海峽兩岸環 境保護學術研討會未來努力的方向。 咨議委員會也認為有必要討論如何更 有效地利用 OCEESA 的專門人材及對國 外環保實務經驗來幫助海峡两岸的環 境保護工作。

2006年8月3至6日這三天內、來自 OCEESA和海峽两岸相關大學的20多名 咨議委員集會於上海同濟大學。 會議 中回顧了海峽兩岸環境保護學術研討 會的歷史、並商討了未來發展的方向 和策略。

會議達成了以下各項共識:

1. 對海峡两岸環境保護學術研討

- 舉辦十届以來的成果给予充分 肯定、認為該研討會對促進两 岸環境保護同行的學術交流、 人員交往起了重要作用; 并對 OCEESA 在海峡两岸環境保護學 術研討會中的貢獻给予了充分 肯定。
- 2. 為了適應海峡两岸環境保護的 新形势、 决定成立海峽两岸環 境保護研討會的常設機構,分 别在大陸、台灣和 OCEESA 設秘 書處。
- 3. 成立"海峽两岸環境保護研討 會指導委员會"。大陸方面分别 由同濟大學、清華大學、浙江 大學、南京大學、東南大學、 重慶大學、武漢大學、西安交 通大學、哈爾濱工業大學、和 華東理工大學各推薦一名委 員;台灣方面由台灣大學等推 薦 10 名委員: OCEESA 方面由其 執行委員(5名)出任,指導委 員會以協商一致的原則决定研 討會的相關事官。
- 4. 經充分討論後决定今後本研討 會名稱改為: "海峽两岸環境保 謢研討會(MTEPC)",同時將第 十一届研討會的時間暫定為 2007 年 7 或 8 月份、會議主承 辦单位為哈爾濱工業大學和弘 光科技大學。
- 5. 會議討論决定今後海峽两岸環 境保護研討會可以採用综合的

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是 (Process)

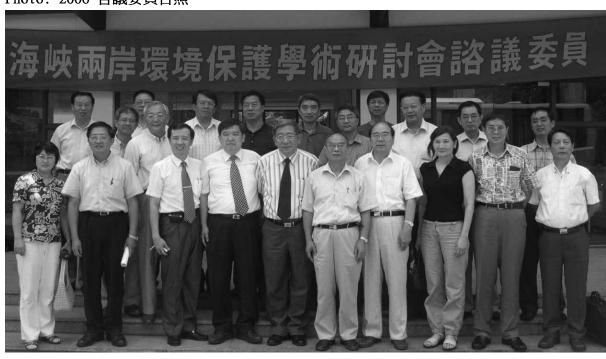
也可以在大陸和台灣以外地區。

6. 除了定期籌辦海峽两岸環境保 護研討會外、指導委員會將努 力促進海峡两岸之環境改善、 學術與人員交流和科研合作, 并邀请相關環保企業参加到本 研討會、為两岸環境保護事業 做出貢獻。

這次會議期間正逢颱風掃過華南、香港機場運作大受影響,多位經香港前往與會的台灣和北美地區的咨議委員

都滯留機場 10 多個小時、 但他們仍 然先後趕到會場使會議能成功召開。 這件事也讓我們看到海峽两岸環境保 護研討會成功的背後有許多參與者的 辛勞付出。從 2006 年迄今八個年頭又 過去了。 在這段期間又有五屆海峽兩岸環境保護研討會成功的舉行、而且 參加人數和論文發表數皆遞創新高。 今年(2013)八月的研討會更首次在北美召開; 老幹新枝、 群聚一堂、 更為華人環境保護學會(0CEESA) 永續發展和海峽两岸的環境保護工作有效 進行注入活力。

Photo: 2006 咨議委員合照



前排自右至左: 龍騰銳(重慶大學),劉成均(OCEESA),繆麗華(OCEESA),郝吉明(清華大學),顧國維(同濟大學),張恒一(OCEESA),蔣本基(台湾大學),方國權(弘光科技大學),袁保強(OCEESA),袁園(同濟大學)。

後排自右至左: 夏四清(同濟大學),羅固源(重慶大學),姚重華(華東理工大學),汪大翬(浙江大學),呂錫武(東南大學),鄭永松(OCESA),賀延齡(西安交通大學),駱尙廉(台湾大學),方漢平(OCESA),陸根法(南京大學),林志高(新竹交通大學),周培疆(武漢大學)。

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15th Mainland-Taiwan Environmental Protection Conference (MTEPC)

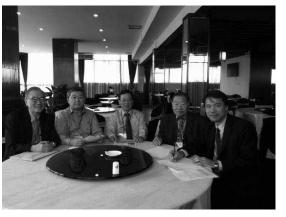
November 03-04, 2012
Guilin University of Technology
Kaimin Shih, Associate Professor
Hong Kong University
OCEESA Secretary – 2013

OCEESA President, Prof. David Shaw, briefly addressed in the ceremony to introduce the role of OCEESA in assisting the development of MTEPC, to welcome the conference participants, and to appreciate the conference organizer



(Guilin University of Technology).

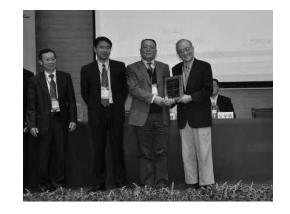
OCEESA Delegates discussed about the preparation progress and ideas of the next MTEPC meeting (the 16th MTEPC) in Los Angeles. The delegates then got together again right after the lunch and had a brief meeting hosted by Prof. David Shaw. Prof. David Shaw expressed the support of consultative committee secretary on current planning details of the 16th MTEPC. EESA delegates chaired various technical sessions & also delivered 5 talks.



From left: Prof. David Shaw, Prof. Jeff Kuo, Prof. Jy-Shing Wu, Dr. Robert Chang-Chun Lao, and Dr. Kaimin Shih



Prof. Jeff Kuo presented at a technical session



David Shaw presented OCEESA plaque to Prof. Dunqiu Wang Dean, School of Environmental Science & Engineering, Guilin University of Technology



10 Best Student Paper OCEESA Awards: The winning papers and the authors are:

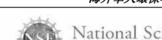
- . "载钯石墨烯催化电极降解氯代有机物的研究"- 曾志朋, 王辉, 兆勇, 鲁光(北京林业大学环境科学与工程学院; 北京师范大学水科学研究院)
- 2. "污泥和餐厨垃圾联合干法中温厌氧 发酵"-董滨, 戴翎翎, 何群彪, 金波, 戴 晓虎(同济大学环境科学与工程学 院)
- 3. "污水再生处理雾化曝气臭氧氧化系统运行费用分析"-赵文玉,郑晓凤,马邦定,李宇基,胡洪营(桂林理工大学环境科学与工程学院)
- 4. "生物絮凝剂 MFX 处理水中磺胺甲恶唑的效能研究" 邢洁, 杨基先, 吴丹, 马放, 李昂, 魏薇 (哈尔滨工业大学市政环境工程学院)
- 5. "关键酶活性对污水处理效果的影响 一实际污水厂 Orbal 氧化沟工艺研究" - 韩云平, 刘俊新, 郭雪松 (中国科学院 生态环境研究中心)
- 6. "無機聚合技術應用於綠色水泥之開發研究"-鄭大偉,陳信安(台北科技大學資源工程研究所)
- 7. "都市垃圾焚化飛灰水洗去除氯化物 之條件探討" - 柯明賢, 陳盈良 (臺北 科技大學材料及資源工程系; 成功大 學永續環境科技研究中心)
- 8. "染料脫色中間物對於染整廢水處理 同時能源回收之評估分析" · 陳博彥, 劉士琦 (宜蘭大學化學工程與材料工 程學系)
- 9. "台灣地區水體環境中腺病毒之親源分析" · 施孟欣, 郭獻文 (東海大學環境科學與工程學系)
- TO. "由都市污水處理廠廢棄活性污泥萃取 PHAs 技術之研究" 呂孟珊, 蔡勇斌, 賴榮豊, 陳谷汎 (暨南國際大學土木工程學系; 暨南國際大學應用化學系)

MTEPC Consultative Committee Meeting

OCEESA delegates participated in the meeting. Discussion highlights are: The preparation details for the 16th MTEPC in Los Angeles were reported by David Shaw. The members requested the organizer (OCEESA) to issue an invitation letter for an international-level conference to facilitate the approval process. The committee decided to fully support the advertising activities of the 16th MTEPC among the Mainland and Taiwan universities. The committee heard the presentation of the 17th MTEPC organizer candidate, Tunghai University (Taiwan), and approved their request of organizing the 17th MTEPC. The idea of establishing an MTEPC website was also mentioned in the meeting and members responded positively for this idea. The committee secretary agreed to evaluate the feasibility of this suggestion.



David Shaw presented OCEESA plaque to Prof. Xuehong Zhang President, Guilin University of Technology



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National Science Foundation WHERE DISCOVERIES BEGIN

SINO-U.S. WORKSHOP on
THE CHALLENGES AHEAD: SUSTAINABILITY ISSUES AT THE
NEXUS OF ENERGY-WATER-CLIMATE-AIR POLLUTIONS (NEWCAP)
August 5-6, 2013; NSF, Stafford II Building, Room 555
Arlington, VA, U.S.A.

Energy, water resources, climate, and air pollution have become closely related over time through the technological evolutions, atmospheric and geochemical reactions of natural or anthropogenic pollution sources. The workshop, to be held at NSF Stafford Building August 5-6, 2013 will explore the establishment of several Sino-U.S. collaborative research teams to identify priorities for major projects on topics (discussed below) that will help research scientists, engineers, and practitioners to: Develop concepts for energy production in harmony with socio-economic development and adaptive resource management. Achieve minimization of environmental pollution & climate change. Discussion topics include, but not limited to:

AREA I: IMPACTS OF BIOMASS AND FOSSIL-FUEL COMBUSTION TO CLIMATE AND PRECIPITATION CHANGES

- Are there linkages between biomass and fossil-fuel combustion emissions and management of freshwater resources via climate and precipitation-extreme (floods and droughts) changes?
- Should combustion-induced aerosols be targeted to mitigate climate effects, which are significantly impacting the global freshwater supplies?
- How can we integrate knowledge on the sources of combustion aerosols of organic species, their transport, formation, transformation and properties to determine their effects on radiative forcing and hydrological cycle?
- What is the influence of anthropogenic emissions on aerosol distributions and precipitation?
- Can clean-coal technology help to mitigate climate change?

AREA II: THE IMPACT OF CLIMATE CHANGE ON FRESHWATER SUPPLIES

- What are the linkages among hydrologic, ecological, and socio-economic aspects of semi-arid and arid regions?
- What are impacts of climate change on high-elevation snow, ice, and permafrost hydrology and surface water availability?
- Where and when climate change and human activities will create water scarcities?
- How will these scarcities be affected by climate change?

AREA III: URBANIZATION, MEGACITIES, AND ENVIRONMENTAL MANAGEMENT

- Exploring new technologies for water and wastewater treatment for environmental and human health protection
- Direct reuse of water as an option that megacities can use to meet the urban demand for potable water.
- The role of new technologies for desalination to assist water scarcity and drought management
- Evaluation of advanced motor vehicle technologies or roadway management to reduce transportation emissions affecting air and water quality in the megacity environment.

The ultimate goal is to establish a Sino-U.S. long-term collaborative research network that advances global sustainability science and education as an integrated approach to the challenges in the nexus of energy-water- climate-air pollution (NEWCAP).

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Cross-Strait
Environmental
Summit in Taipei 2012

程群 Charles Cheng Ph.D. OCEESA 2011 President



The 2012 Cross-Strait Environmental Summit was held in the Howard Plaza Hotel in Taipei from April 22 to April 24, 2012. Twelve OCEESA members participated in the Summit. The Summit was organized and hosted by the Taiwan Environmental Sustainable Development Foundation (TESD), co-organized by the Chinese Society for Environmental Sciences (CSES) and the Environmental Forum of Global Chinese Scientists, and supported by the Taiwan Environmental Protection Administration. OCEESA was the organizer for US participants for the Summit. It was the first high-level, largescale environmental dialogue between both sides of the Strait. The purpose of the Summit is to promote exchanges in environmental science, technology, policy programs, and to create environmentally sustainable societies across the Strait.

The Summit was attended by high-level officials from both sides of the Strait, including Chairman of the Straits Exchange Foundation Chiang Pin-kung (江丙坤), Minister of Taiwan EPA Stephen Shu-Hung Shen (沈世宏), Chairman of Chinese Society for Environmental Sciences Wang Yuqing (王玉庆), former Director of Taiwan Control Yuan Fredrick F. Chien (錢復), and President of TESD Larry L.G. Chen (陳龍吉). The Summit was also attended by first-class scientists from Mainland China, Taiwan and USA, including two members of the Chinese Academy of

Engineering (工程院士), many professors and researchers from universities and research institutes, as well as professionals from government and industries.

OCEESA played an important role in the Summit. First, OCEESA had the honor to help recruit and organize all US participants for the Summit. This was a result of a meeting between TESD and OCEESA delegation in November 2011. During that meeting, TESD President Dr. Chen requested OCEESA's assistance in providing professional expertise and recruiting US speakers for the Summit. OCEESA recruited total of 21 US delegates, 12 are OCEESA members, and they are: David T. Shaw, Charles Cheng, An-Min Liu, Shoou-Yuh Chang, John C P Huang, Wei-chi Ying, Edward Chen, Kaimin Shih, Chun-Chao Chou, James Lu, William Fang, and Ben Chen. Photo 1 shows some attending members.

OCEESA also recruited 9 participants from the following organizations: Chinese American Environmental Professionals Southern Association (CAEPA), California Chinese American Environmental Protection Association (SCCAEPA). OCEESA assisted the Summit organizer to prepare abstracts, papers, and PowerPoint slides (including providing sample format), and timely collecting and transmitting the above from US participants. OCEESA also helped arrange lodging and Summit activities for



Photo 1, Some attending members (from L to R: Charles Cheng, David Shaw, An-Min Liu, John Huang, Shoou-Yuh Chang, and Kaimin Shih).

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US delegates. Second, 10 OCEESA members gave presentations or remarks at the Summit in various sessions including Air Quality and Climate Change, Water, Soil and Groundwater Pollution Control, Noise Control, Resource Recovery and Solid Waste Management, Education, and Low Carbon and Green Industry. Photo 2



Photo 2, Four members in a panel discussion (from L to R: Edward Chen, Kaimin Shih, An-Min Liu, and Shoou-Yuh Chang (1st one at

is a snapshot of 4 OCEESA members in a panel discussion at the Resource Recovery and Solid Waste Management session.

Third, OCEESA's President of 2011 Charles Cheng was given the honor to present a speech at the opening ceremony, and to preside a keynote speech session (Photo 3). These are precious opportunities to introduce OCEESA and to make OCEESA more visible in the international stage.

The Summit successfully concluded after two days of excellent speeches and presentations. A tour to Taipei Landfill



Photo 3, President of 2011 Charles Cheng presides a keynote speech session

and Incineration Plant was carried out after the conference and many members participated in the tour.

The Summit opened the door for further collaborations between OCEESA and the governments and research institutions from both sides of the Strait, as well as other professional organizations around the world.

The 2nd Joint Environmental Science and Technology Seminar by OCEESA and Chung Hwa University of Medical Technology (CHUMT) in 2011

程群 Charles Cheng, Ph.D. OCEESA 2011 President

The 2nd joint Environmental Science and Technology Seminar was held by OCEESA and Chung Hwa University of Medical Technology (CHUMT) on November 7th, 2011, in coordination with OCEESA members' participation of the 14th MTEPC in Taiwan (Cheng Kung University). This joint seminar was planned by OCEESA members during the 13th MTEPC in Chongqing, and organized by OCEESA Director Professor Kaimin Shih (University of Hong Kong) and Professor Pao-Wen Grace Liu of CHUMT. Eight members participated in the joint seminar, their names and presentation titles are as following (Photo I, front sitting row from left to right): Jeff Kuo, "Sequential Disinfection for Water Reclamation"; Herbert Fang, "Renewable Bio-Energy Production from Wastes and Wastewater in Taiwan and China"; Clark Liu, "Water and Energy Sustainability in a Changing Environment"; David Shaw, "Challenge and Opportunity at the Nexus of Air Quality/Climate/Energy/Water Research"; Charles Cheng, "US Strategies for Water Quality Protection"; Prof King-Pong Lin, President of CHUMT; Prof Juu-En Chang, NCKU; David Koo,





"Evaluating the Limitation of On-Site Wastewater Treatment Processes-Sensitivity on Urban Growth, Water Quality Management, and Costs"; Shao Yuan Leu, "Evaluation and

Recommendation to Energy Auditing of Wastewater Treatment - A Case Study in California"; Kaimin Shih, "Why Hazardous Metals Can Be Thermally Stabilized By Clay Materials?" Prof Jimmy Kao, National Sun Yat-Sen University. Three professors from National Cheng Kung University, National Sun Yat-Sen University, and National Kaohsiung Marine University also gave presentations. Audience included professors, graduate and undergraduate students from CHUMT and other local universities.



OCEESA-CHUMT joint seminar

OCEESA President Cheng delivered a speech to introduce OCEESA and attending members. He presented OCEESA "Outstanding Environmental Service Award" to President Prof King-Pong Lin, Prof Chih-Ta Wang, and Prof Pao-Wen Grace Liu for their support and organizing of the seminar. Prof King-Pong Lin presented a CHUMT banner to President Cheng. The seminar was a great success. Participating OCEESA members very much appreciated CHUMT's hospitality and honor received during the visit. CHUMT compensated ~\$1,100 for OCEESA speaker; all OCEESA speakers donated this money to OCEESA for future MTEPC Best Student Paper Award.



President Cheng presents award to President King-Pong Lin



Prof King-Pong Lin presents a CHUMT banner to President Cheng

The 1st Joint Environmental Science and Technology Seminar by OCEESA and East China University of Science and Technology (ECUST) 2010

> 程群 Charles Cheng, Ph.D. 2011 President

It has been discussed among OCEESA's visionary members that OCEESA should conduct more activities, such as a joint seminar with local universities or organizations, during the time when OCEESA members attend MTEPC or other major conferences. OCEESA can effectively make use of members' expertise to foster knowledge exchange and increase exposure in Mainland China and Taiwan,

without members incurring additional travel expenses. Other advantages include attracting more members to participate in MTEPC and other international activities, recruiting more members, and raising funds for OCEESA's Best Paper Award program.

The 1st joint Environmental Science and Technology Seminar was held by OCEESA and East China University of Science and Technology (ECUST) on May 10th, 2010, in conjunction with OCEESA members' participation of the 1st Forum of Global Chinese Scientists for Environmental Protection in Shanghai. This joint seminar was planned and organized by 2010 President Wei-Ping Pan and 1988 President and ECUST visiting Professor Wei-chi Ying. Eight members participated in the joint seminar, their names and presentation titles are as following (Photo, from left to right, front row): Wei-Yin Chen, "Modification of Coal by Supercritical CO2"; Herbert Fang, Recent Development of Anaerobic Technology in Asian"; Robert Lao, "Environment, Climate Change and Sustainable Development in China"; Prof Yu, VP of ECUST; Prof. Liu, Dean of ECUST; Wei-Ping Pan, "Mercury Emission, Control and Measurement from Coal Combustion"; Prof Huang, Associate

Dean of ECUST; (back row) Anmin Liu, "Integrated Wastewater Management for Overall Water Resources Management"; Charles Cheng, "Domestic Wastewater Treatment and Disposal Practices in USA"; Steve Fan, "Sludge Treatment Comparison between Egg-Shaped and Conventional Digesters"; Jason Wen, "Drinking Water Regulation and Water Quality Management"; Prof Wei-chi Ying. Six professors from ECUST also gave presentations. Audience included professors, graduate and undergraduate students from ECUST, as well as professors from Fudan University, Tongji University and Shanghai Jiaotong University.

OCEESA President Pan presented OCEESA awards to VP Prof Yu, VP Prof Tu, Dean Prof Liu, Director Prof Jiao, Associate Dean Prof Huang, and Prof Ying of ECUST for their support and organizing of the seminar. The seminar was a great success. Participating OCEESA members very much appreciate ECUST, especially Prof Ying, for the hospitality and honor received during the visit. ECUST compensated \$150 for each speaker; all OCEESA speakers donated this money to OCEESA for Best Student Paper Award fund.



Welcoming OCEESA speakers by ECUST



Prof Yu of ECUST presents a \$1,200 check to OCEESA President Pan



Pursuing Environmental Sustainability in a Built Environment - Hong Kong

Dr. Kaimin Shih

Associate Professor, Department of Civil Engineering, The University of Hong Kong Secretary/Treasurer, OCEESA

Hong Kong, also nicknamed "the Pearl of the Orient", is a typical example of built environment in Asia. Striving from a volcanic rock island, it now supports more than 7 million residents and stands as one of the key financial capitals in the world. Fast development and economic growth have led to a great challenge for citizens to re-think how to maintain a good balance between the economic prosperity and environmental quality. Therefore, my environmental engineering teaching career at Hong Kong has been a very different journey from what I was trained for. The goal of promoting a sustainable development in this mega-city is truly a challenge as well as a great learning experience for me.



Dr. Kaimin Shih speaking in an advertising video for HKU's Faculty of Engineering.

Traditional industrial activities have been mostly relocated out of Hong Kong nowadays, and the typical industrial pollution streams are rarely seen. Many industrial wastewater treatment problems and soil/groundwater remediation issues are not encountered in Hong Kong. However, the treatment of large quantity municipal wastewater becomes a great challenge to the city, due to the very limited land resource. Hong Kong thus mainly utilizes ferric chloride to conduct "chemically-enhanced primary treatment (CEPT)" to quickly process wastewater with a much less space footprint, comparing to the conventional secondary treatment process, in the city. However, the impact of such effluent discharged into the surrounding marine environment becomes

another focal point of environmental concern. The biodiversity in Hong Kong marine environment has been closely monitored by public sectors and intensively studied by tertiary institutes. The authority has established a real-time monitoring system for the seawater quality of recreational beach areas, with a future development of forecasting capability, to ensure the safety of citizens in beach activities. To support the huge population, Hong Kong is currently importing 80% of its fresh water from the neighboring Guangdong province, and the exploration of new water technology, such as desalination and water reclamation, has been a re-occurring. To reduce the consumption of fresh water, Hong Kong has been adopting a dual-supply system by using seawater for toilet flushing for more than half a century. However, this decision has now also become a challenge for the consideration of wastewater reuse/reclamation strategies. This example clearly shows the interconnection of different decisions along the way of pursuing a more sustainable water environment in a built environment.

The support of a dense population unavoidably encounters the challenge of maintaining the air quality suitable for a living environment. Emission from transportation has been a great burden for many mega-cities in the world, including in Hong Kong. The solution of this problem largely relies on the development of public transportation means, particularly the subway system. Over the years, Hong Kong has built one of the most efficient and convenient subway systems, and it largely releases the burden of motor vehicle emission in the city. For taxi service, all cabs are now powder by liquid petroleum gas (LPG) to reduce the particle emission. More buses are also now gradually reformed into that fuel type. With its topographical features, Hong Kong is generally free of heat-island effect. However, the very high density of tall buildings creates microclimates and local wind fields which can enrich air pollutants in certain locations. Therefore, the wind engineering is also included in some civil/environmental engineering curriculums to assist students to resolve this practical need in their careers. Three quarters of the city electricity is currently generated by Hong Kong's coal-fired power plant. Although this pollution source has been closely monitored and equipped with the state-of-the-art air pollution control unit, its short distance to the

city often triggers strong controversy in whether Hong Kong should increase the supply of nuclear power from Guangdong province to reduce the emission from coal-fired power plant. To reduce the level of trans-boundary air pollutants from Guangdong province, Hong Kong has also invested and subsidized clear productions for Hong Kong owned enterprises in Guangdong to help reduce the air quality impact to Hong Kong. Overall, the policy structure needs to be skillfully integrated and also needs to include trans-boundary management for the air quality issue in this built environment.

Although highly limited by land resource, Hong Kong currently only uses landfill for disposing its municipal solid waste (MSW). The sustainability of landfill strategy has been a great debate in these years, but the incineration strategy always receives strong public resistance. With this dilemma in Hong Kong, the authority encounters great difficulties in both the extension of landfills and the adoption of waste incineration. Although a wastewater sludge incineration plant is now under construction, the progress of planning a wasteto-energy combustion plant for MSW is still heavily dragged by the site selection issue. Recent failures of getting the legislative approvals for a number of landfill extensions have future created a huge pressure of the waste management problem in Hong Kong. The authority has recently turned to Taiwan and Japan for their experiences in waste reduction and recycling, but the very different social situation and business type in Hong Kong has led to different implementation difficulties. Small food waste digestion plants are now under planning to create a more sustainable and environmentally-friendly waste management strategy. However, such quantity is still not able to match the main problem of mixed MSW largely generated in the city. Many typical environmental engineering curriculums do not include extensive content in waste management, but students in Hong Kong may face this challenge in their future careers. The development of novel waste technologies and the skill of communication toward all stakeholders are the urgent needs in developing a more sustainable waste management strategy in Hong Kong.

With issues in water, air and waste demonstrated above, pursuing environmental sustainability in Hong Kong is a very different path for environmental engineers. However, it is a true example for many fast developing built environments around the world. OCEESA members who used to or now dedicate in these challenges at Hong Kong have created new technologies and management strategies to assist the development in this city. It is a combination of resolving interconnecting problems, trans-boundary issues, and stakeholder relationship in the process of sustainable development. However, it is absolutely not an end, but just a beginning, for all of us to appreciate the very different learning lesson in pursuing the environmental sustainability in a built environment.



One of the field trip activities organized by HKU's civil engineering students



全球华人科学家环境论坛

方丹群 Dan Q. Fang 著名科学家,曾任中国环境科学学会第一届理 事及第二届常务理事

为广泛联系全球的华人科学家、学者及学 术团体,通过学术交流活动,整合全球华人 科学家的人力和智力资源,开展环保领域国 际合作,为中国引进海外智力与人才、为中 国和世界环保事业做贡献。在中国国家环环 境保护部和中国科协支持下,由中国环境科 学学会联合海内外多家华人科技团体和环保 组织共同创建了"全球华人科学家环境论坛" 平台,并于2010年5月正式启动。论坛的 发起组织包括: 美国南加州华人环保协会 (SCCAEPA), 海外华人环境保护学会 (OCEESA). 环球中国环境专家协会 (Pace),中华海外生态学者协会(Sino-Eco), 国际电除尘协会(ISESP), 华美环境保 护协会(CAEPA), 华人环境学者工程师协会 (CESPN), 北美华人岩土工程师协会 (NACGEA), 国际华人交通运输协会(ICTPA-SCC), 美西华人协会(CAPS),美国南加州华 裔教授学者协会(CSA), 中国学生学者环境与 公共健康合作会(ENCSS), 中国旅美科技协 会洛杉分会(CAST-LA), 交通大学南加卅校友 会(CTUAA-SC), 中国科技大学南加州校友 (USTCAA-SC). 在论坛初期参加的单位和组



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织还有:西澳洲科 技协会,台湾环 境永续基金会,台 湾环保设备工业 同业公会,英国 蓝橡控股



(Blue Oak Global Holdings)等以及浙江大学、上海交通大学、环保部环境与经济政策研究中心、北京劳保所以及一些环保产业集团,等等. 该论坛的发展还得到了中国工程院环境与轻纺工程学部的支持。论坛的成员不断的在发展增加中,最近英国牛津剑桥投资,浙大海元环境科技加盟,共襄盛举。

"论坛"国内秘书处设在中国环境科学学会国际部,国外秘书处现设在美国洛杉矶。同时开通了工作网站,建立了专家人才库,并编辑出版《活动简报》,并计划每两年举行一次大型学术活动,中间开展一系列中小型活动。

2010 年,"论坛"的主要开展了以下工作,举办了首届全球华人科学家环境论坛学术交流会议,论坛的成功举行标志著全球华人科学家首次有组织成规模的和中国本土环境科学家、工程师、企业家融合在一起进行学术交流。並对中国政府的的环境保护工作直接建言、直接参与。也标志着中国的环境保护工作直接建言、直接参与。也标志着中国的环境保护现了全球华人科学家加入。"论坛"邀请海外60名学者参加中国国家"十二五"环境保护规划是出资,从海外环境保护规划提出资调建议,最后由方丹群、吕正雄、潘伟平、陈惟寅、刘安民、温俊山、童卫星、郦永刚、程群等9位专家执笔撰写编写了《中国

"十二五"环境保护规划建议书》,并提交至 环境保护部以及中国科协等有关领导部门, 得到了肯定,并成为中国国家编制"十二五" 环境保护规划的一个重要依据;"论坛"还组 织了北美以及台湾地区的学者赴国内进行高 级讲座活动,如在清华大学、浙江大学、上 海交通大学、华南理工大、中国环境科学院 等高校以及科研院所,都得到了好评。2011 年,继续围绕"论坛"的宗旨把开展活动,在 美国洛杉矶与 SCCAEPA 合作,在台湾与台 湾环境永续基金会合作各将举办一次学术交 流和论坛,并协助中国环保企业改造升级以 进入国际一流绿色产业行列,等等。

作为三十年前参与中国环境科学学会创建的 理事和现任的国际合作高级顾问, 我在 2008 年接受中国环境科学学会的委托,在海外负 责联络海外有关科技团体和积极热情的科学 家个人,共襄盛举,搭建这个平台。从 2008 年 12 月份起,与吕正雄博士联名向海外华人 科技团体和一些有名望、热心环境事业的科 学家个人发出了邀请函。邀请函发出后,首 先得到我和吕博士作过会长和理事的美国南 加州华人环保协会(SCCAEPA)的前任会长温 俊山博士,時任会长容跃博士,付会长童卫 星博士的支持。在理事會表數次勾通讨论之 后,成为第一个加盟的海外科技团体。接 着,海外华人环境保护学会(OCEESA)在会 长陈惟寅、付会长潘伟平、秘书长程群博 士、前 SCCAEPA 及 OCESSA 会长刘安民 总裁的积极努力下,经理事会同意正式加 盟。随着工作的深入和繁忙,方、吕二教授 又邀请温俊山博士及刘安民总裁共同筹办论 坛事宜。於是有最初的海外十三家环保、科

技协会和机构的相继加盟。接著於 2009 年 10 月 17 日在中国武汉召开了<<全球华人科学家环境保护论坛>>筹委会工作会议。 SCCAEPA 的方丹群,吕正雄,温俊山参加了会议。2010 年 5 月,童卫星会长组织了 21 位 SCCAEPA 會員前往上海举参加了首届"全球華人科學家環境論壇",并參與"中國國家 12-5 環境規劃咨詢會",发表论文,主持分会议。是海外最大的团组。作为论坛的发起者和骨干成员,SCCAEPA 对论坛给予了积极的支持。















The 1st Forum of Global Chinese Scientists for Environmental Protection in Shanghai

程群 Charles Cheng, Ph. D. OCEESA 2011 President

The first Forum of Global Chinese Scientists for Environmental Protection was held in Shanghai from May 5th to May 7th, 2010. This Forum is jointly organized by the Chinese Society of Environmental Science and 15 oversea professional organizations. OCEESA is one of the founding members of the Forum. Eight OCEESA members attended the Forum (Photo 1), their names and presentation titles are (from left to right): John Chien (a former member); Charles Cheng, "Water Protection Policy and Strategy - What Can We Learn from USA?"; Wei-Yin Chen, "Modification of Coal by Supercritical CO2"; Anmin Liu, "Wastewater Treatment at the Crossroad (污水处理何去何 ?)"; Wei-Ping Pan, "Mercury Emission, Control and Measurement from Coal Combustion"; Jy S. Wu, "Adapting TMDL Approach for Sustainable Watershed Management"; Robert Lao, "Incineration of Municipal Solid Waste and the Possible Cooperation between the Mainland and Taiwan"; and Jason Wen. Absent from the photo were Wei-chi Ying, "Environmental Friendly Activated Carbon Processes for Removing Water Pollutants"; and Alexander Chuang, "Post-Combustion CO2 Capture with



Solid Amine Sorbents".

The Forum mingled with the "Consultative Meeting for the Chinese Twelfth Five-Year Environmental Protection Planning" and



the "2010 Annual Meeting of the Chinese Society of Environmental Science". Members attended both meetings and gave presentations in various sessions. In addition, members also attended the Opening Ceremony of the First Forum (Photo 2). Members toured the 2010 World Expo on May 8th, 2010.





近代工程技術討論會 METS

鄭永松 Yung Sung Cheng Ph.D. Senior Scientist and Program Manager Lovelace Respiratory Research Institute, Albuquerque, NM

1964年中國工程師學會 (中工會,CIE-ROC) 理事長 李國鼎先生及秘書長費驊先生 聯絡在 紐約的美洲中國工程師學會 (CIE-USA) 希望 能借用華裔科技人才的經驗來促進台灣的技 術發展。經過一年的緊密準備,第一屆近代工 程技術討論會 (Modern Engineering and Technology Seminar, METS) 於1966 在台北 舉行。此後METS 隔年舉辦,歷經半個世紀從 未間斷。1969年中工會理事長孫運璿先生主 導第三屆METS的籌備,並成為METS數十年 來最積極的推手。

每一屆METS閉幕時,與會專家提出總結報告包含對政府的建議事項。為了實施這些建議,時任經濟部長的孫運璿先生,在1973年成立以政府資金為主的半官方機構工業技術研究院,以財團法人的方式突破政府法規限制,以高薪聘請歸國學人,從事產業研發。1974年孫運璿與時任美國無線電公司(RCA)的潘文淵 (METS第一屆美方籌委副主席,第二屆主席)討論後,決定半導體產業為台灣1970年代中期之後的經濟發展重點,自RCA技術移轉,取得了積體電路的技術,奠定了台灣半導體產業的基礎。

METS 透過學術交流以及 學人回國就業創業,默默 地見證了台灣工業從加工 出口到電子電腦 和精密機 械 的轉型和提升,經濟突



飛猛進,並於90年代從發展中的國家進入開發中的國家。台灣經濟發展的模式為多個國家所學習效仿。隨著台灣的科技發展,METS研討會的主題不斷的擴展到能源、環保、生物科技、光電通訊、奈米科技等不同領域。



1970 孫運璿先生 (左起第四位) 親自到機場迎接 METS 美方講員



1970 METS 蔣經國先生 (左二) 和李國鼎先生 (左一)

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近年來更討論前瞻性的科技,旨在打造智慧台灣 和創新台灣的未來。

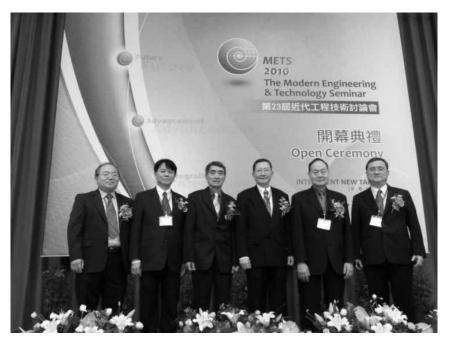
在網路發達的今天,不斷更新的先進通 訊技術縮短了太平洋兩岸的距離,但是 面對面的討論仍然提供深入交流的最 好機會。METS是美洲中國工程師學 會建立的第一個國際交流平台,我們有 必要持續參與互相交流 以保持美洲中 國工程師學會的影響力。

1966年以來 兩年一次的METS 從未中斷,第24屆METS 於2012 年十一月 11至14日假台北台大醫學院國際會議

中心舉行。METS的六人美方籌備委員會(主席、副主席、總幹事、秘書、兩位顧問)每兩年由CIE-USA的全國理事會(National Council)選出。OCEESA作為CIE-USA的一個分會,歷年來有許多會員應邀為METS講員或選入籌委會。值得一提的是鄭國賓擔任過1968總幹事和1970主席,禹如斌1994秘書,黃肇镳 2000主席,2002和2004 顧問,



METS 2012 馬英九總統接見美方籌委 及講員並一一握手



METS 2010 美方籌備委員 (左起 邱建興, 方玉山, 鄭永 松, 吳同慶, 陳錦江, 林嘉孚)

黃夏平2000 秘書, 張建祺 2004總幹事 和 2006副主席,鄭永松 2008秘書, 2010總幹事, 2012副主席和2014主席。



METS 2000 美方籌委會主席黃肇镳拜會工研院 院長 李鐘熙

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中美工程技術研討會 (SATEC)

鄭永松 Yung Sung Cheng, Ph.D.
Senior Scientist and Program Manager
Lovelace Respiratory Research Institute,
Albuquerque, NM

近代工程技術討論會 舉辦多年,建立交流平 台,有助於台灣工業的轉型和經濟的發展, 尤其是電子和半導體產業的成長,效果顯著 ,有目共睹。中國改革開放之後,也考慮這 個模式。 1992年,中國外國專家局(外專局)以中國國際人才交流協會名義和美洲中國 工程師學會 (CIE-USA) 簽署合作協議。根據 協議,自1993年起,雙方每兩年在中國舉辦 一次工程技術研討會,旨在搭建平台 以交流 中美工程技術,解決中方企業技術難題。 1993年10月由外專局、國家科委、國際人 才交流協會與美洲中國工程師學會在北京聯 合召開了第一屆中美工程技術研討會 (Sino-American Technology and Engineering, SATEC), 邀請了海外華人專家 49人 國內專 家150餘人分八個課題討論,會議形成9份建 議書 共有88條建議。

2006年第七屆研討會起,美國機械工程師學會(ASME)加入為共同主辦單位。中美工程技術研討會至今已成功舉辦九屆,共有600餘名外方專家和1700名中方專家參會共提出900多條技術創新和企業發展建議,技術交流涉及多項領域。中方以外專局為主,先後有科技、信息產業、經貿、環保、工程、教育等政府部門參加。中國石油、寶鋼集團、

中國電信、中國網通、北方正大、海爾集團、聯想集團和華北製藥等130多家國有和民營企業以及科研機構分別參加過各次研討會。



研討會一般先由各專家組分別到企業基地 進行技術交流,了解狀況並提供技術診斷和咨詢,然後集中到北京和中方專家研討,作出結論,歸納成建議書。因為深入企業,緊貼實際,充分交流,因此成果豐碩 為領導人所重視,歷屆研討會專家分別得 江澤民、朱鎔基、李鵬等中國領導人的接見。

每一屆中美工程技術研討會美方的籌組是由 CIE-USA 的全國理事會(National Council)選出 六人籌備委員會來負責。OCEESA 會 員多人受邀為SATEC環保組的專家,劉安民 和鄭永松 分別擔任2001 和2006 研討會美方籌備委員會的總幹事。此外1999 第四屆研 討會環保組由黃肇鑣主持包括黃夏平、張守 玉、劉安民、田長焯和鄭永松等多名 OCEESA 會員參加。環保組由美方



1997 第三屆 SATEC 中國國家主席 江澤民接 見美方專家 和美方籌委會主席 林章生握手





組長黃肇鑣,中方組長李思宇和美方顧問洪 勝男率領,到江南各地,上海,無錫,杭州 ,寧波參觀環保產業,污水處理廠,焚化爐 ,及電廠,隨後到北京聚齊研討,

等外華人環保學會(1980–2013) - Celebrating OCEESA 33rd Anniversary

為OCEESA 會員與會人數最多的一屆。之後 多年OCEESA 會員仍然擔任多屆環保組美方 組長之重任。



1999 第四屆 SATEC 環保組在人民大會堂合影

左起 王嵩(人才交流協會),洪勝男,張守玉,鄭永松,沈明敏(美方專家),黃肇鑣,李思宇(中方組長),熊天渝 (美方專家),田長焯,黃夏平,陳耀仁(來自台灣專家),劉安民,和張冬(外專局).





2006 第七屆 SATEC 環保組在人民大會堂會場合影

2012 第九屆 SATEC 低碳組組長劉安民和夫人在會場合影

A Brief History of AAEOY

鄭永松 Yung Sung Cheng, Ph.D.
Senior Scientist & Program Manager
Lovelace Respiratory Research Institute,
Albuquerque, NM
OCEESA President – 2005

One of main functions of the CIE-USA .National Council (NC) is to coordinate events at national and international levels. CIE-USA has started international/global events include the Modern Engineering and Technology Seminar (METS since 1966) and Sino-American Technology (SATEC since 1993) to promote the international technology exchange. More recently, we initiated an important national event, the Asian American Engineer of the Year (AAEOY) Award in coordination with the National Engineers Week Foundation, a coalition of 100 professional societies, major corporations and government agencies.

CIE-USA joined the coalition of National Engineers Week (EWeek) in 2002 through the efforts of 2002 NC chair, Thomas Wu. In conjunction with the EWeek celebration, CIE-Dallas Fort Worth chapter under the leadership of Thomas Wu, George Wan and Jason Yeh also planned and hosted the first AAEOY Award Banquet on February 23 of 2002. The cerebration of the Asian American engineers was so successful that it continues every year with CIE-USA local chapters taking turns to host the event. The mission of the AAEOY celebration is to recognize outstanding Asian-American professionals for their leadership, technical achievements and remarkable public services in the fields of STEM (Science / Technology / Engineering / Mathematics). Since 2002, hundreds of Asian-American professionals from

Dr. Yuan-Tseh Lee, a Noble Laureate received the Distinguished Award at 2006 AAEOY in Seattle

leading US
technology
corporations,
prestigious research
institutions as well
as US Armed
Forces have been
selected as



recipients of the AAEOY prestigious Award. The past awardees included academia, key executives and astronauts. corporate Besides recognizing outstanding Asian American engineers and scientists from across the country, AAEOY Award also honors and celebrates the achievements of Asian Americans of global stature and influence with the Distinguished Awards. The distinguished awardees have served as role models and a source of inspiration for the STEM community as a whole. Many internationally known scientists have received these Distinguished Awards at the AAEOY events including 7 Nobel Laureates of Asian descent.



2002 Thomas Wu addressed the audience in the inauguration of AAEOY in Dallas







With the support and participation of major technology corporations, US armed services and government agencies, the AAEOY award ceremony become an annual event of the mainstream professional platform highlighting contribution and services of Asian American community in the US and indeed in the world. OCEESA under the leadership of Francis Chang, Shoo-Yuh Chang, and Wei-Yin Chen hosted the 2007 AAOEY in Washington, DC (See Article "2007 AAEOY"). OCEESA together with CIE-Southern California Chapter have also been chosen this year by the CIE-USA National Council to host the 2015 AAEOY celebration in Los Angles. In addition, the 2012 AAEOY was hosted by the CIE-New Mexico Chapter in Albuquerque under the leadership of Eliot Fang and Yung Sung Cheng, an OCEESA member.







2012 AAEOY - Yung Sung and Chui Fan



OCEESA members and spouses attended the 2006 AAEOY in Seattle

Dr. Francis Chang at the 2007 AAEOY in Washington D.C.



2012 AAEOY Awardees in Albuquerque

2007 AAEOY in Washington DC Hosted by OCEESA

Shoou-Yuh Chang 張守玉, Ph.D., P.E. DOE Samuel Massie Chair Professor Civil, Architectural & Environmental Engineering North Carolina A&T State University OCEESA President - 1997

This report is based on the 2007 AAEOY program manual (Doc.1) & 2007 AAEOY official report by Francis Chang, Shoou-Yuh Chang, and Wei Yin Chen (Doc. 2). OCEESA was approved by the CIE-USA Council members at the CIE-USA 2005 National Council meeting to organize the 2007 Asian American Engineer of the Year (AAEOY) Awards. The OCEESA was faced with two challenges, first the membership is small compared with other large CIE-USA chapters, and further the members are scattered all over the US. With the challenges in mind the 2007 AAEOY Chairman Dr. Francis Chang (2006 OCEESA president, 2007 CIE-USA National Council Chairman) planned the event early and effectively. A 2007 AAEOY Organizing Committee was formed and the first group teleconference was held on January 6, 2006. The complete list of the 2007 AAEOY Executives is shown in Appendix A. Despite the geographical difficulties and the scattered nature of OCEESA members, frequent remote communications with occasional site visits were sufficient to complete the preparation and the event was successfully presented on time and under budget.

The funding of the AAEOY is a critical element for the success of the event. Dr. Francis Chang was instrumental in obtaining funding from major corporations (Boeing, BP, Cisco, IBM, Lockheed Martin, Northrop Grumman, GM, Sandia, all with \$20k contributions, except GM and Sandia at \$10k), Asian corporations (ITRI, \$10k and CTCI, \$5k) and several OCEESA members made generous donations (John Huang, \$2k, Anmin Liu, \$1k, and James Whang, 2 Tables sponsorship).

The 2007 AAEOY Awards celebration was successfully presented on March 30-31, 2007 at Hotel Washington in Washington, DC. About 350 participants attended and important government officials and corporate executives congratulated the awardees with keynote speeches and a special message from President



George Bush. The event not only paid high tributes to Asian American engineers but was also highlighted by the presence of highest Asian American achievers in US government. The only two cabinet secretaries of Asian heritage in US history up to that time: the Hon. Elaine Chao and Hon. Norman Mineta both attended. The Hon. Secretary Elaine Chao of the Labor Department was the guest of honor of the Awardees' Night on March 30 and she delivered a keynote speech to congratulate the honorees and emphasize the contributions that will continue to be made by future generations of Asian Americans. For the Awards Banquet on March 31, the Hon. Robert Cresanti, Under Secretary of Commerce for Technology, delivered a cordial keynote speech that not only praised the numerous past contributions by the Asian American engineers but also emphasized the welcome by his department to members from this distinguished scientific community at all times. To encourage our younger generation to pursue engineering excellence, the 2007 AAEOY also offered a career fair, a distinguished lecture series and seminars. Further, CIE-USA also sponsored a Best Residential Zone Special Award for the National Engineers Week Future City Competition for the 7th and 8th grade students. Reporting by other local community organizations also paid high tributes to this event and is shown in Appendix B. The recipients of the 2007 AAEOY awards are listed as follows:

Distinguished Lifetime Achievement Awards: 1. The Hon. N. Mineta, Vice Chairman, Hill & Knowlton, Inc. and Former Secretary of Transportation as well as Secretary of Commerce. 2. Mr. Sam Araki, CEO and President ST-Infonox, Inc. Former President of Lockheed Martin Missiles and Space Co.



Distinguished Science and Technology Awards: 1.Dr. Taylor Wang, the first Asian American Astronaut Scientist. 2. Dr. James Wei, Emeritus Dean of Engineering and Applied Science at Princeton University and a member of the Academia Sinica (Wang on the left, Wei in the center in the picture on the right).

Distinguished International Services Award: Dr. Hwa Nien Yu, Emeritus Member of IBM Research, Chairman, Technical Advisory Committee, ITRI and a member of the Academia Sinica.



Asian American Engineers of the Year Awards: Twelve outstanding Asian American engineers from eight of America's leading technology companies received the 2007 AAEOY Awards:

- I. Boeing: Joan Wada, Associate Technical Fellow, Systems Engineering; and S. Jason Hatakeyama, Project Leader, Networks Mechanical and Structural Engineering
- 2. BP: Xiuli Wangm, Project Leader
- 3. Cisco: Yixing (Eddie) Ruan, Technical Leader, Routing Technologies Mike Ma, Senior Software Development Manager
- 4. GM: Goro Tamai, Project Leader, Truck 2-Mode Hybrid program
- 5. IBM: Sidney Chow, Director, xTDC and CSTL
- 6. Lockheed Martin: Clement Chen, VP, Corporate Strategic Development Ron Nakamoto, VP and General Manager, Network and Communications
- 7. Northrop Grumman: Brad Furukawa, VP and Chief Info Officer, Space Technology Kim L. Ong, Industrial Engineer/Statistician, Information Technology
- 8. Sandia National Laboratories: Wen L Hsu, Manager Remote Sensing and Energetic Materials Department

Community Reporting on 2007 AAEOY (Doc. 2)



My Involvement as a City Planner with OCEESA

Rubin Yu, Ph.D., 禹如斌 President Northwest Chinese American Environmental Protection Association

Urban Planning as a field of study and profession was relatively new in the 20th century. In early 1970's the environmental movement took place in the United States. Affected by this movement the city planners have made a great effort in protection of environment through land use planning and development control. Prevention and minimization of environmental impact from urban development and other human activities has been the focus of city planning.

As a city planner I have been involved with OCEESA since 1992; a few years ago I became an inactive member. As a city planner I came to OCEESA with a very unique and different background from other members. To my knowledge I was the only member with education and experience in urban planning in OCEESA.

As a professional city planner I have made a great effort to introduce the environmental protection in urban planning to my OCEESA colleagues and the environmental professionals in Taiwan and China. I have prepared and presented numerous papers at the conferences in Taiwan and China. Most of these papers were published in the OCEESA Journal; the following are some of the papers:

- "Urban Development and Environmental Protection System of the State of Washington";
- "State of Washington Growth Management Act, a New Guide for Sustainable Development";
- "A Study of Non-governmental Organizations and Their Impact on Environment";

- "The Environmental Permit System of the State of Washington";
- "Protection of Environmental Sensitive Areas in the State of Washington";
- "The Effect of the 1999 Federal Endangered Species Act on the State of Washington";
- "The Effectiveness of Environmental Impact Assessment in City Planning and Development";

The message of the above articles is clear that urban planning is an effective tool to prevent and minimize environmental impact created by development and other human activities. I hope that I have broadened the view of my OCEESA colleagues on environmental problems and issues.

As for myself I have learned a great deal in environmental science and engineering from my OCEESA colleagues. Most of all, I have made a lot of friends in OCEESA since 1992 to this date. Attached is a photo picture taken at near 哈爾滨, China in 2001. People in the pictures: From the left to right are Dr. and Mrs. Clark Liu, Dr. and Mrs. Pao-Chiang Yuan and Dr. and Mrs. Rubin Yu.





A Reflection of My Service in the U.S. National Science Foundation

劉成均 Clark C.K. Liu, Ph.D., P.E. 夏威夷大學土木及環境工程系名譽教授 OCEESA President - 2008

Created by Congress in 1950, the U.S. National Science Foundation (NSF) is the only federal agency dedicated to the support of fundamental scientific research. The NSF is responsible for formulating national goals and strategies for research and education, and for supporting University professors to conduct research with an annual federal budget of over \$7 billion. The head director of the NSF leads several assistant directors, each of whom heads a particular directorate.

In the fall of 2007, I was invited by the NSF for an interview for the position of the program director of environmental engineering. After a full day, they asked me to see the assistant director. When I walked into the assistant director's office, the first thing I told him was that I really admired his nice and spacious office. He laughed and said that he is the head of the entire Engineering Directorate. I have to admit that after my interview, the one thing I remember the best was that at the NSF there are *All Chiefs, and no Indians* – everybody is a director, and the big boss is called the "assistant director."

After a two-year Intergovernmental Personnel Act (IPA) service of the NSF, I became fully aware that NSF program directors are indeed *chiefs* as they manage merit reviews, awards, and declination processes independently; and that they are responsible for long-range planning and budget development.

The NSF environmental engineering program manages more than 100 research projects. Every year, 30 to 40 new 3-year projects are added and about the same numbers of old projects expire. The selection of new projects is highly competitive as the program receives more than 300 proposals annually.

The panel review (Photo 1) is an important part of this rigorous selection process.

After a university professor accepts an invitation by a program director to serve in a review panel, he is required to complete an online review of the proposals assigned to him/her before traveling to the Arlington headquarters for a two-day panel meeting. Finally, all proposals are ranked and put into the categories of highly-recommended, recommended, and not-recommended. Unfortunately, more than 85% of proposals, including some highly-recommended ones, cannot be funded. Therefore, academic integrity, fairness and confidentiality are extremely important in the selection process.

I appreciate very much the service and dedication of more than 150 environmental engineering professors from Universities across the nation who helped me in panel reviews, among them many OCEESA members (Photo 2).

As NSF is celebrating its 63-year anniversary, I am sure it will maintain its outstanding track record and continue to contribute to the success of the U.S. as the world leader of science and technology.

Photo 1: A Panel review session



Photo 2: OCEESA members at NSF

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From Sanitary Engineering to Engineering Consultant Business

陳學海 Ben Chen, PhD Owner, Chen Moore and Associates in Florida

Editor's note: Ben Chen, a longtime members and supporter of OCEESA, is an engineer and a successful entrepreneur. Chen Moore and Associates was founded in 1986 in Broward County in Florida by Dr. Ben H. Chen, P.E., BCEE. Utilizing his background in environmental engineering, Dr. Chen's initial business plan was to provide high level consulting to both public utilities and to the consulting engineering community. After trying different methods to grow the business, Dr. Chen found the greatest success in the process of organic growth that the firm maintains today. His business scope includes Civil Engineering, Environmental Engineering, Landscape Architecture,

Construction
Engineering,
Irrigation
Design,
Geographic
Information
Systems
(GIS), etc.
Chen Moore



and Associates has offices in Fort Lauderdale (opened 1986), Miami-Dade County (opened 1997), Palm Beach County (opened 2003), Martin County (opened 2011) and Alachua County (opened 2011). Chen Moore and Associates also opened a sister company in 2011 in the Republic of Panama to pursue potential opportunities in Latin America. He also volunteered in "Work Force One-Employment Solutions" to help the unemployed. Ben shares his story by providing the following article published in National Taiwan University's Civil Engineering Department News Letter in 2009.

去做與自己無關的事—訪傑出校友陳學海博士 採訪•撰文 張國儀

移居美國佛羅里達州多年的傑出校友陳學海博 士,參加了今年十一月假臺大土木系館舉行的 B52 級同學會,回到了久違的台北。藉此機會 杜風也幸運地採訪到了這位古道熱腸的資深系 友。陳學海,Chen Moore & Associates 工程顧 問公司(www.chenmoore.com)創立人,目前仍 積極投入工作中。個子高大壯碩,陳學海給人的 第一印象卻意外地柔和慈善。成功高中畢業後進 入臺大土木系,陳學海回憶起大學時代,直說自 己不是個用功的學生,只不過,該上的課都會去 上、該考的試都會準備,如此而已。大學畢業後 進入土木研究所,陳學海說,當年衛生工程尚未 與土木分家,所以其實他在研究所專攻的是衛 工。談到這一點,陳學海認為,衛生工程與土木 工程息息相關,「衛工需要的基本知識很多,結 構、測量、土壤,這些是一定不可缺少的基本必 修科目,和土木工程有許多不可分割之處。」想 起念書時代時常睡在實驗室裡,陳學海笑得開 心,彷彿那是一段閃閃發亮的黃金歲月般珍貴。

憶臺大土木—學徒制的訓練

不惑之齡,在美國創業

在美國取得博士學位後,陳學海就留了下來工作 定居。一直到四十歲,他卻興起了創業的念頭。

下當時替人工作也已經十多年了,只不過自己漸漸無法認同公司的管理方式,覺得不符合自己的理想,再加上太太的支持,所以我就出來開公司了。」 創業的路上,有挫折也有學習,陳學海說,他深刻地體認到做人處世的方式有多麼重要,「我是個比較中式的人,一定要對下屬好人際的關係。開公司的人,一定要對下屬好,他們是工程顧問公司,等於沒有任何資產,唯一的資產就是我們的腦袋,所以一定要善待員工。」也因為秉持這樣的理念,陳學海將公司一半的股權半買半送地給了員工,讓大家能有福同享。

目前已屆退休的年紀,陳學海說,自己工作起來還是興興頭頭的,並不覺得累,只不過,等禮別了,還是要放手。「像這次到臺灣來兩個書間,我都不必太操心,下面的人可以把事情都處理好,其實我也很高興,希望再過幾年,能夠慢慢放手給他們去做。」陳學海瞇起眼時候不對說:「不過要放手就得要忍,有時候是下面人做得不好,也不要出聲,有時候不可以從中去以強情,所以從中去以後,就到我在也還在學。」

金融海嘯席捲

做與自己無關的事

雖然大環境風聲蕭蕭,各種變動此起彼落,但能 站穩腳步的人,除了實力之外,更要依靠心靈的 穩定充實。陳學海從十三年前開始從事義工工 作,加入了 Work Force One—Employment Solutions 這樣一個公益單位,幫助失業的人找工 作,也輔導有需要的人轉業。雖然陳學海的公司 受到金融風暴衝擊,多少受到了影響,但是他依 然非常感謝自己所擁有的一切,「社會上有很多 非常不幸的人。」陳學海說,幫助弱勢的族群讓 他學習到了非常多,也更懂得感恩。「很多人來 謝謝我做了這麼多年,我說你不要謝我,是我要 謝謝你們,因為 you make me a better person!這是很重要的事。」也因此,陳學海非常鼓勵員工多去參加一些與工作無關的活動,投入人群,「時間你花,沒關係,我支持你,需要花點小錢,也沒問題。如果每個人都能變成一個 better person,那你的公司一定也可以變得更好,這是我的想法。」陳學海說。

在金融風暴後,Work Force One 這個單位的經費增加,陳學海說:「這不是好現象啊,因為代表失業率增加了。」而目前這個公益單位很主要的一個方向是對失業的人進行 re-training,也就是轉轉業。「其實現在有很多職缺是找不到人做的,一個大宗是綠能產業,這方面的工作機會很多,所以我們會去找外包的職訓公司,一大宗是綠能產業,這方面的工作機會活為產業,一方面也幫助失業的人學習新技能,以增加他們就業的機會。」談起這份完全不支薪、完全與自身專業無關的義工工作,陳學海滿是於慰的神情。對他來說,能善待身邊的人,努力經營好人際關係,並且能夠無私地付出,這就是獲得成功人生的關鍵。



Ben Chen & Wife Susan in Europe



One of Chen's Project

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A Glance of EPA Greater China Program I Served

楊仁泰 Jentai Yang, Ph.D. P.E. OCEESA President - 1996



In a very hot summer Friday afternoon in 1982, most Washington bureaucrats were on vacation either at home or at the Atlantic Ocean beaches. I was working on a special groundwater

protection regulation under the Safe Drinking Water Act and heard a noise from a group of Chinese visitors who just got lost in the EPA's Office of Water hallway. I greeted this group that came from Tianjin Environmental Protection Bureau. That was my first encounter with Chinese mainland environmental professionals. In the following years, we developed very close working relations that lasted for decades including the period that I served as EPA's Greater China environmental program manager in the Office of International Affairs (OIA) from 1993 to 2004 when I retired from EPA.

One year later, I was invited by the United Nations to visit China as an environmental specialist and met many central and local environmental officials from Beijing to Guangzhou. China was in its fourth year of four-modernization movement and the environmental problems already started to emerge. China's Environmental protection program was in its infant stage and the national Environmental Protection Bureau was a small office under the then Ministry of Urban and Rural Construction. I was deeply impressed by that scrupulous statement from all the officials that China's industrialization process would not follow the old pathway of the western countries, i.e. "Pollute first and treat later". That China would follow a unique Chinese strategy of "three simultaneous" which was a

preventative measure toward environmental management by synchronizing all environmental management together with economic development during the three phases of design, construction and operation.

For a person who had just witnessed some of the worst pollution occurred in the US in the sixties and seventies, I was exuberant to hear this exciting and encouraging message. Unfortunately, this rosy promise was only like a blink and quickly in the next three decades, China experienced an unprecedented explosive economic growth in human history accompanied with a mega-scale devastating environmental pollution. It had followed exactly the same old industrialized countries' pathway of "pollute and then treat". Before the end of the 20th century, China was labeled as having most polluted cities (1) in the world according to various media (2) and the World Health Organization.

The US-China environmental cooperation program

The first US-China environmental cooperation agreement was signed in 1980 during the honeymoon period right after the two countries just established diplomatic relation. Most of the bilateral cooperation projects were for air and water research managed by EPA's Office of Research and Development (ORD). Those activities gradually died down due to lack of funding when the China program was hit by the Congressional sanction as a result of Beijing Tianmen incident in 1989.

Since I met the Tianjin group, I had always wanted to be a part of EPA's international cooperation program to work with the Chinese authorities. Luckily, in 1993, I got an opportunity on detail to OIA and later took the position as China program manager for US-China bilateral cooperation that includes Taiwan and Hong Kong. I had high hope that I could do something for China's environmental protection to accommodate its fast GDP growth. However, I quickly discovered that the EPA's international environmental cooperation



is not a statutory mandate under the US Environmental law. Therefore, there is no discrete funding to support this type of activities. The internal struggles in OIA to fight for limited resources were fierce and the political environment had never been in favor of China program. The bombing of the Chinese Embassy in Yugoslav and the air collision in South China Sea added ice to the already frozen relations.

Even with all these difficulties and setbacks, we did pool some resource and put together a few projects in the area of capacity building for environmental management and technical cooperation for air and water pollution control. Luckily, in all those difficult years, under such an unfriendly political environment, we were able to get many EPA professional staff to support and participate the bilateral program with their time and knowledge particularly those employees with global vision and others with Chinese cultural connections. Our working relation with then China National Environmental Protection Agency (NEPA) was lukewarm and cordial.

A sudden rise of enthusiasm to revitalize the US-China environmental cooperation occurred in 1999 during the visit of Premier Zhu Rongji. Premier Zhu and Vice President Gore cochaired the Opening Ceremony of US-China Environment and Development Forum. A number of letters of intent were signed between the two sides on cooperation in environmental protection and energy. From then on, the two sides meet each year under the State Department general umbrella program of "US-China Science and Technology Cooperation" (S/T Agreement). The White House Chief Science Advisor sometimes led the US delegation for the bilateral meeting that took place in Washington and Beijing alternatively.

Many of the stalled projects got a new life. An increased number of Chinese central and local environmental professionals visited EPA in the form of "Study tours". EPA added many new projects in the following



US and Chinese delegates signing an environmental cooperation in Beijing, July 15, 2002

area to the environmental section of the S/T agreement. Most of the new projects were for combating climate change and mitigating the transboundary movement of air pollutants. The current bilateral program that has been carried out under this agreement can be viewed on EPA's OIA China ⁽³⁾ website.

- Environmental management and capacity building
- Regional air quality management and emission control
- Global climate issue and green house gas reduction
- River basin watershed management and discharge permit evaluation
- Hazardous waste management and toxic chemical control



USEPA Administrator Michael Leavitt and SEPA Minister Xie Zhenhua signing an Environmental Agreement in Washington DC, Dec 8, 2003

Since the start of the US-China Strategic Economic Dialogue in 2009, the US-China environmental cooperation caught some high level attention by both sides. This is particularly true for climate related issue such as greenhouse gas inventory and reduction; green energy development and trade.

The US-Taiwan cooperation:

Taiwan was in the fast lane developing its economy in the 1980s. Facing all kind of environmental deterioration, Taiwan was eager to learn the US environmental experience to mitigate its growing environmental pain. The US-Taiwan cooperation was first mentioned at the 1992 Rio summit. Taiwan EPA then Administrator Chao inquired the possibility of establishing a cooperation program to then EPA Administrator Dr. William Reilly. The request got shelved when Dr. Reilly left EPA in the following year after US general election and the Democrats took over the White House.



Taiwan EPA Administrator Chang Lung Sheng and USEPA Administrator Ms Carol Browner witnessing the Signing of USEPA-AIT environmental cooperation agreement in Washington 1993

In the spring of 1993, I found this old folder with some previous correspondences. I spearheaded the effort to work with the EPA attorney and discovered that there were major legal obstacles in developing a bilateral cooperation agreement. In the absence of a diplomatic relation between Taiwan and the United States, we had to circumvent the political roadblocks and developed a pair of parallel documents that were signed at the end of 1993 in a two-step process. One agreement was signed between USEPA and the American

Institute in Taiwan (AIT) and a companion document was signed between AIT and Taipei Economic and Cultural Representative Office (TECRO) on behalf of Taiwan EPA. This was one of the most complicated bilateral document ever signed between USEPA and any other foreign agencies.

In the early years of the program implementation, the official meetings between the two administrators were restricted by the US State Department. No official meetings were allowed to take place at the US government office. Later in the Clinton administration, this restriction was relaxed and all the succeeding Administrators of Taiwan EPA therefore, were able to visit EPA and held a courtesy meeting in EPA Administrator's office.



Taiwan EPA Administrator Stephen Shen visit USEPA Administrator Lisa Jackson on August 11, 2011

With such a special political relation between the United States and Taiwan, US funding to support the bilateral program were practically unavailable. Fortunately in those economic booming years, Taiwan was one of the four dragon states in Asia with a sound financial resource. Taiwan EPA was willing to pay for the program cost. USEPA would provide inkind support including personnel services and office expenses. The two sides have signed and implemented a total of 10 general agreements that accounts for more than 170 individual projects covering the following major areas over the past 20 years since 1993:

- Environmental management
- Environmental law and enforcement





- Water pollution control technology
- River basin management
- Safe drinking water protection
- Hazardous waste management and emergency responses
- Air pollution control
- Greenhouse gas and climate change
- Energy efficiency programs
- Toxic chemical control and measurement
- Information and data management

Many of these projects are in the form of training seminars, meetings, information management, laboratory analysis, field studies and etc. In addition to EPA Headquarters program offices, EPA Region 2 in New York, Region 3 in Philadelphia, Region 9 in San Francisco and Region 10 in Seattle were among the most active partners in implementing the US-Taiwan (4) bilateral programs. Various federal agencies in the Department of Energy (DOE), Department of Interior (DOI) and Department of Commerce (DOC) were frequently invited to contribute to the program.

Environmental Organizations:

A successful civil society needs three fundamental pillars, i.e. the government, the business/industry and the general public represented by the non-governmental organizations (NGO). The success of US environmental protection effort was largely the result of the environmental movement in the late 60s and early 70s. One of the most significant environmental movements was the Earthday movement (5) in 1970 that aroused American people and subsequently resulted in the birth of the first national environmental agency in the world, the US Environmental Protection Agency. EPA has always been a strong supporter for and partner with environmental organizations. With this in mind, I was very mindful about the development of environmental organizations in China and Taiwan and supported the US based "Overseas Chinese Environmental Engineers and Scientist Association" (OCEESA) and others.

Taiwan's environmental organizations flourished in the 1990s and had exerted tremendous force to influence the government policies. China's environmental NGO was not developed until after the mid 90s. Among many prominent environmental NGOs that I supported, one of the most successful NGO was Global Village of Beijing (6) (GVB). During the development of GVB, we got supports from various foundations, institutions and governmental agencies such as US Department of Agriculture (USDA), US Information Services (USIS) and some State agencies such as Maryland Department of the Environment. We were able to nurture GVB to grow from a one-person organization in 1996 to one of the largest Chinese NGOs today with numerous domestic and international recognitions and honors (7). It has added tremendous dimensions to the China's environmental program.



Liao Xiaoyi of Global Village of Beijing honored by President Clinton as Global Citizen in 2008

Epilogue

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Looking back of this brief history of US-China environmental programs that I had involved, I feel extremely lucky that I had such an opportunity to serve this program. Now ten years after my departure from EPA, I am still loosely connected with many of these programs and happy to see some of them are still growing.

As China surpassed Japan to become the world's second-largest economy in 2009, its impact to the global environment also became a major issue that needs be addressed. In the fourth US-China Strategic and Economic

Dialogue held in Washington, Climate change, clean energy, and the environment were discussed and became the focal point for bilateral cooperation between the two sides in the future.



4th US-China Strategic and Economic Dialogue held in Washington DC July 2013

In Taiwan, since the KMT regained power in 2008, a positive working relation was resumed by both USEPA and Taiwan EPA. The two sides are now working toward establishing Taiwan as an "Environmental Hub" for Asian countries focusing on regional capacity building and environmental monitoring.



Taiwan EPA Administrator Steven Shen hosted an Asia Regional Mercury Workshop at US EPA Headquarters in July 2013

Since the devastating 2008 Sichuan earthquake, GVB also added a new focus to its environmental program. GVB's LOHAS program aimed to solve environmental issues through the establishment of a harmonious society now extended to six provinces. Its effort has grown to such a dimension that attracted domestic and international attention.



A startup of a LOHAS community by GVB in Daping Village, Pengzhou, Sichuan Province 2010

All these efforts lead me to believe that the blue sky and clean water will soon return to China. One thing that I had always wanted to do without success was to bring the two sides of government across the Taiwan Strait to work together toward cleaning the environment. With the improved relations between China Mainland and Taiwan, I am finally seeing the light at the end of the tunnel. Let's work hard to bring that to being for the welfare of all Chinese people.

Foot Note of website reference:

- (1) most polluted cities: http://www.chinahush.com/2013/01/29/se ven-cities-in-china-listed-among-the-tenmost-polluted-cities-in-the-world/
- 2) <u>various media</u>: http://ndnews.oeeee.com/html/201301/15/ 16214.html
- (3) OIA China: http://www.epa.gov/international/region s/Asia/china/index.html
- 4) <u>US-Taiwan</u>: http://www.epa.gov/international/region s/Asia/taiwan/
- (5) <u>Earthday movement:</u> http://www.earthday.org/earth-day-history-movement
- (6) Global Village of Beijing: http://www.gvbchina.org.cn/about_
- (7) recognitions and honors:

 http://www.gvbchina.org.cn/about_us/da
 shiji jiangxiang.html





Greetings from Canada

Chang-Lu Lin, 林昌爐 Ph.D. Waverley, Nova Scotia canlincx@eastlink.ca OCEESA President – 2000

Thank you very much for inviting me to attend the upcoming general meeting of OCEESA in conjunction with the conference/workshop starting August 8 in LA. First of all, my congratulations to you and others involved in the preparations, organization and staging of the conference in partnership with SCCAEPA.

In addition to celebrating its achievements over the last 33 years, the Board Members could perhaps take this opportunity to do some soul searching, with participation of others of course, by revisiting the objectives, mandates and sustainability of OCEESA for the next 30 years. Seeking input from others especially getting younger bloods involved are critically important for OCEESA's future. Cultivating partnerships with various government agencies, institutions, and industries from Taiwan, Mainland, and the U.S. or other international organizations such as the UN could perhaps be a viable option to be considered for strengthening OCEESA's relevancy in the future.

In Canada, as others, leadership is viewed as the key impetus to sustainable development and Canadians expect their governments to practice what they preach so that others will follow. Governments, industries, businesses, experts and the public must work together. Partnerships and stewardships are necessary and common sense must prevail. OCEESA needs to articulate its role in the sustainable development priority of the 21st century.

Besides, I suggest that OCEESA needs to formally recognize the contributions and services made by Prof. Yung-Tse Hung for over the last 30 years.



Without his continued dedication and efforts, OCEESA would perhaps be considerably different today. Besides, efforts of others such as Dr. Jentai Yang, Dr. John Huang, An-Min Liu, Dr. Shoou-Yuh Chang, Dr. Shaw Yu, should be recognized as well. Again, many thanks to you for the invitation.

Retired in 1996 as Assistant Deputy Minister, with the Nova Scotia Department of the Environment, I have been fortunate in a way to have opportunities to participate in many areas of environmental challenges of interest to scientists, engineers, and managers & the general public in resources management and environmental protection, including legislative & policy initiatives, and environmental economy of importance for a sustainable society. Whether in government services or with OCEESA, I am grateful to be a member of a dedicated team, and collectively, believing in meeting sustainable initiatives that we should all be doing in the first place, really.

Among some of the issues we tackled during my presidency in 2000, the following may be of interest to OCCESA from historical perspective: 1) we overhauled our website (www.oceesa.org); 2) completed the revision of OCEESA Constitution and By-Laws, incorporating a Protocol for Nomination Procedure and Selection Criteria for Honorary Member,

3) Established a new Canadian Chapter of OCEESA in Halifax & initiated discussions for a third chapter; 4) Successfully staged the second OCEESA Round Table in D.C. to address improved services for membership at large and to improve communications and collaborative opportunities with six overseas Chinese environmental organizations, two government agencies, and WEF. 5) We have initiated the appointment of Advisors, and renewed the appointment of Executive Director, and Editor-in-Chief of the OCEESA Journal, 6) During 2000, we held 9 Council/Board of Directors' meetings, including eight teleconference meetings and one face-to-face meeting in DC, 7) Participated in the METS 2000, in November in Taipei.





Beautiful Peggy's Cove in Nova Scotia

Environmental NGO in Canada - Cleaner Production in China

Robert C. Lao 勞長春

Residence Project Manager, Canada-China Cooperation of Cleaner Production and Circular Economy (1996-2006)

1. Introduction

A Cleaner Production (cp) cooperation project was initiated by the Chinese and Canadian governments in 1994. The goal of this multi-year and multi-million dollar project was to promote environmentally sustainable development in China by enhancing its capacity to manage its environment. The strategic context was a shift in the environmental protection policies in PRC from a focus on "end of pipe treatment" to the more sustainable objectives of "pollution prevention" (PP), and the efficient use of raw materials and energy (CE). The implementation approach focused on collaborative effort among Chinese-Canadian

counterparts, designed to support the achievement of China's CP/CE goal at all levels, from policy and legislation through to implementation at the factory/plant. Capacity building and information



sharing and awareness raising efforts were designed to promote the sustainability and extensive dissemination of results.

2. Implementation of CP and CE in Chinese Industries and Societies

The purposes of the Project are:

a. To assist China in implementing CP in priority industrial sectors consistent with China's Priority Programs for Agenda 21 by: strengthening the institutional capacity of relevant departments to promote Implementation of CP in priority sectors;



The secretary was a second sec

- supporting governmental agencies, industries and enterprises to apply CP in these sectors.
- b. To foster cooperation between Chinese and Canadian counterparts; and
- c. To increase awareness of gender issues and increase support for women's full participation

Canadian government approach "Results based Management" was used in managing and implementing of the project. Considerable effort was taken for CP/CE to the manager of factories which were selected as the demonstration sites for the project. In practice, when enforcing CE at factories, many technical problems will be encountered and needed to be solved., and CP can then provide essential technical solutions and support.

3. Results and Discussions

Work breakdown structure (WBS) of the project was divided into four major parts, and through which activities were implemented to achieve the primary goal and objective of results.

- a. WBS 100: Policy and regulations for CP/CE With assistants from other OCEESA members, two laws: one "CP Promotion Law" and the other "CE Promotion Law" were passed by the National People's Congress in 2003, and 2005 respectively. Also with advices and assistances from members, a number of guidelines on CP/CE Policies were produced.
- b. WBS 200:CP/CE solutions and technical plans for project demonstration industries Six priority sectors were identified by Chinese counterparts for demonstration and their CP/CE guidelines and regulations to be developed. They are nitrogen fertilizer; pulp/paper; chloro-alkali PVC chemical plant; brewery; nickel/copper smelters in the nonferrous metal industry and oil drilling processes. Guidelines in addition to these six sectors were also prepared by Chinese request for other Priority industries namely steel, electr0-platting, chromic salt, battery and coal, as assessment framework indicators for CP/CE

- c. WBS 300: Training and awareness: More than 1500 training placements including plant managers, technique staffs, government officials, and decision makers, were being taught in CP/CE practices. Over several hundred individuals were invited participating in study tours to Canada and USA for gaining first hand CP/CE information, experiences and knowledge.
- d. WBS 400: Information system: The project website, both in Chinese and English, significantly improved the input and retrieve of CP/CE information for government agencies, environmental organizations, industries, and general public. For more information, please refer to the project website: www.Chinacp.org.cn.

In a joint cooperation project between the Canadian Public Service School and that of CPC, China, a book on "Canadian History on Sustainable Development (SD)" was written and published by the Party School as a volume for the series it prepares on the profiles of major countries in the world.

OCEESA Participation

For all involvement and service for environmental protection and improvement through CP/CE/SD in China, this writer had invited some OCEESA members from Vancouver, Ottawa, and Toronto regions to participate in the project by conducting seminars, lectures, information sessions and social/sightseeing activities for study tour groups from China.

Moreover, by introducing OCEESA organization to the visiting delegates, many of them attended several MTEPC held subsequently in China and Taiwan, and contacted their counterparts across USA, Canada and Hong Kong. Although it is a unique case for this writer who was recognized for his effort and contribution and received in 2005 a "Foreign Expert Achievement Award" from the State Council of China. It is hoped that other OCEESA members will contribute their knowledge and wisdom to the noble course of protecting the environment and providing a better world for we to live.

Reflections on the 33 Years of OCEESA

Yung-Tse Hung, Ph.D., P.E., DEE 洪永哲 Professor, Civil and Environmental Engineering, Cleveland State University

As a founding member of our Overseas Chinese Environmental Engineers and Scientists (OCEESA) since the beginning of OCEESA in 1980, I have the unique privilege to observe the



growth and development of our OCEESA during the past 33 years. During these 33 years, I have played different roles for our OCEESA as President, as founding Editor-in-Chief, OCEESA Journal. I have taken care of OCEESA headquarter in Cleveland, Ohio, operation since 1982. We are very grateful for our members' annual dues payment. This sustain the continued operation of OCEESA headquarter in Cleveland, Ohio.

In the early years, members were mainly from Taiwan. Most members were in their 30's or 40's. These members are now either retired or near retired or may still working well past their retirement age. In 1980's most OCEESA directors and officers and members were mainly from Taiwan. In 1980's OCEESA was very fortunate to have student members who are from Taiwan. For example, Pen-Chi Cheng 蔣本基, Tsun-Kuo Chang 張尊國, and his wife, Whei-May Lee 李慧梅, who were Ph.D. students in environmental engineering at Purdue University in 1980's were OCEESA student members. Mr. Cheng and Mr. Chang have served as OCEESA Directors. They have helped to make arrangement of classrooms for OCEESA annual meetings at Purdue University in early 1980's. Now they are professors in environmental engineering or related fields at National Taiwan University, Taiwan. OCEESA also have other student members in 1980's. These student members who are now senior professors in universities in Taiwan and some of them have retired from teaching career at universities in Taiwan.

In recent years OCEESA started to have members who are from mainland China and are of younger age. Recently we started to have OCEESA directors and officers who are from mainland China. Among 14 current OCEESA directors and officers 10 are from Taiwan and 4 are from mainland China. The gradual shift from Taiwan to mainland China regarding general membership and OCEESA directors and officers reflects the shift of environmental engineers and scientists residing in US from Taiwan to mainland China.

During the past 33 years, we have a total of 33 Presidents. 13 of them (or 40%) are university faculty; 14 (or 42%) work for industry and 6 (or 6%) work for government. 3 of the expresidents have passed away and have left the scene. These include Dr. Robert Hsi-Lin Howe 侯希 臨, OCEESA President in 1980, Mr. Eugene Y. Hsi 席與錚, OCEESA President in 1983, and Dr. Thomas To Shen 沈鐸, OCEESA President in 1993. OCEESA are grateful for their faithful service to our OCEESA.

I would like to take this opportunity to acknowledge the outstanding contributions of several OCEESA members, who have made important contributions to OCEESA growth and development during the early history of our OCEESA. I have the privilege to be friend of Prof. Ju-Chang Howard Huang for over 40 years, who is a retired Chair Professor, Department of Civil Engineering, Hong Kong University of Science and Technology, Hong Kong. Prof. Huang has helped to bring OCEESA into existence, and was instrumental in laying the early foundations. 錢興格 has made important contributions to OCEESA in preparing the initial draft of OCEESA Constitutions. In 1980's 周基樹, President in 1986, 谷文琦, in 1987, and myself, have worked very closely together and shared vision and plans for the growth and development during the infancy period. Prof.





Ju-Chang Howard Huang started OCEESA newsletter in 1980. I have changed OCEESA newsletters to OCEESA Journal in January 1984. Since 1984, 董永生, who was Senior Engineer, Central China Municipal Design Institute, Wuhan, China, and who was Visiting Scholar from China under my supervision, has contributed greatly in the preparation of publications of OCEESA in the early stage of OCEESA Journal 1984 and in 1985. I have helped OCEESA to obtain tax exempt status with IRS and obtained non-profit corporation status with Ohio Secretary of State, Ohio.

Dr. James Shia-Pin Whang 黄夏平 OCEESA President in 1994 and Dr. Lawrence Kong-Pu Wang 王抗曝 OCEESA President, have played very important role in bringing MTEPC (Mainland-Taiwan Environmental Protection Conference) into existence in 1992.

I initiated First OCEESA Best Paper Awards competitions in 1986, based on M.S. or Ph.D. dissertation research conducted in universities in Taiwan and mainland China. Some of the winners of best paper awards in mainland China have become senior professors in environmental engineering and environmental science in universities in China.

Dr. Don Tsye-Lang Tang 唐次朗 OCEESA President in 1991, has served as OCEESA representatives to attend CIE/USA National Council meetings several years at his own expenses. We are indebted to Dr. Tang's faithful service to OCEESA.

Two OCEESA ex-Presidents have made very important contributions to OCEESA President's bank account. Dr. James Shia-Pin Whang 黄夏平 OCEESA President in 1994 was the organizer for OCEESA. For First International Environmental Protection Conference, San Francisco, California, USA, January 21-22, 1995. Surplus of about \$30,000 started President's bank account. The fund was used to help travel expenses for representatives to attend National Council meeting, CIE/USA. 張恆一 President in 1996,

was the organizer for 2007 Asian American Engineer of the Year Award (AAEOY), March 31, 2007, Washington, D.C. Surplus of \$13001.37 was transferred to OCEESA.

沈鐸 President in 1993 was a very strong advocate of our OCEESA and made presentations in Taiwan and in China for many years until his death on March 26, 2005. Dr. Shen represented OCEESA very well and was very well known in environmental field in Taiwan and in China.

In the 33 years history of OCEESA, a lot of changes have taken place. OCEESA is facing new challenges. We need both people and money. Firstly, recruitment of new members is a must for OCEESA to exist and to grow sustainably. Most of longtime members are getting old and will leave the scene in the future. We must recruit new members, especially, new members from mainland China. OCEESA is heading the right direction in encouraging life memberships for mainly long time old OCEESA members and offer affiliate memberships at no membership dues for the next 2 years. Secondly, generating income through co-sponsoring of conferences, workshops, AAEOY is extremely important to bring in fund to promote our OCEESA among young graduate students and professors in Taiwan and in China. OCEESA also needs to continue to take active role regarding participation in co-sponsoring MTEPC (Mainland-Taiwan Environmental Protection Conference. Co-sponsoring of MTEPC or related conferences and workshops in USA.

It has been a long 33 years journey for our OCEESA. Our OCEESA have a great future. With wisdom, hard work, and excellent contributions of our OCEESA members and OCEESA directors and officers, old and young members alike, OCEESA will have excellent sustainable growth and development and will fulfill OCEESA missions as stated in OCEESA Constitutions. It has been indeed a great joy and great honor for me to be associated with OCEESA for the entire past 33 years since 1980.

Members Profile

(Collected by 洪永哲)

Wen-Chi Jim Ku, Ph.D.,P.E. 谷文琦 OCEESA President (1987-1988)

Principal Engineer & HNTB Fellow (retired) HNTB Engineers, 952 Promenade Circle (H) Cicero, IN 46034 H: (317) 984-3882 gloriak88888@yahoo.com,

Dr. Ku received his B.S. degree in Civil Engineering from National Cheng Kung University, Taiwan; M.S. degree in Sanitary Engineering from Harvard University; and Ph.D. degree in Civil Engineering from University of Massachusetts. He is a registered professional engineer and a board certified environmental engineer with more than 40 years of experiences in planning, design, and construction engineering. He had participated in the preparation of more than 100 engineering study reports and design of more than 50 water and wastewater treatment and conveyance facilities. Wastewater treatment facilities he worked on ranged in size from 0.1 to 350 million gallons per day with project costs of up to \$135 million. Six of the projects received excellence-in-design awards from professional organizations. He has published or presented more than 20 technical papers and authored a technical manual entitled, "Handbook for Sewer System Evaluation and Rehabilitation" (1975).

Before his retirement in July 2012, he was a Principal Engineer and Fellow with the engineering consulting firm HNTB
Corporation. In addition to serving as project engineer or manager on planning, design, and construction projects, he was involved in numerous marketing efforts, preparing proposals and participating in client interviews. He was also an adjunct instructor at the Indiana University-Purdue University in Indianapolis, Indiana. Earlier, he had worked as a department manager and laboratory director for an engineering consulting firm in North Springfield, Vermont, and as a sanitary

engineer with a consulting firm in Boston, Massachusetts.

He is a member of American Academy of Environmental Engineers, Water Environment Federation, and Indiana Water Environment Association. He had served on the Research, Residues & Bio-Solids, Collection System, and Awards Committees of the Water Environment Federation, and was a founding board member of the Midwest Society for Trenchless Technology. He had also served as a reviewer for the U. S. Environmental Protection Agency's STAR scholarship program and Small Business Innovative Research program.

Dr. Ku is a founding member of OCEESA in 1980. He worked with Dr. Yung-Tse Hung and others in developing visions, setting goals, and recruiting new members for the organization and continued the efforts in promoting membership growth, improving the quality of the OCEESA Journal, and encouraging university professors and students in Taiwan and Mainland China to compete for OCEESA's Best Paper Awards.

Dr. Wei-Chi Ying 應維琪 OCEESA President (1988-1989)

Visiting Professor (retired) Department of Environmental Engineering, East China University of Science and Technology Shanghai, 200237 China wcying@yahoo.com

Receiving the certificate of ECUST Honorary Professor at my farewell party



I began my second career at East China University of Science and Technology (ECUST) in Shanghai as a visiting professor of environmental engineering in late February 2003 and started ECUST Adsorption Technology R&D Laboratory in July 2004. During the subsequent 8 years, we published





more than 60 papers in major English and Chinese environmental journals, making our lab internationally well known for many important accomplishments in the research, development and application of activated carbon technologies for water and wastewater treatment. Utilizing grants 10 R&D projects sponsored by local and national agencies and companies, our study results have significantly improved the biological activated carbon (BAC) processes. 6 PhD, 11 MS and more than 15 BS students graduated from our lab. During my second career of nearly 10 years, I served as an editorial board member of AICHE's Environmental Progress and an associate editor of Environmental Pollution and Control (Chinese). I was invited to present papers at 8 mainland universities and research institutions, 5 universities in Taiwan as well as 7 national and international environmental conferences. I coordinated the visit of 8 senior OCEESA members as key speakers at the successful and well attended ECUST-OCEESA Environmental Technology Seminars on May 6, 2010.

The memorial education fund that I started in May 2004 awarded scholarships to 36 graduate and undergraduate students of environmental science and engineering.

At the farewell party on September 21, 2012, I became the first ECUST honorary professor without any concurrent title of significance. On September 26, 2012, my wife and I left for New Taipei City, Taiwan to enjoy our retirement living in the newly remodel apartment my late parents built in 1966 when I was a junior of chemical engineering at Tunghai University (Taichung, Taiwan).

Dr. Don Tsye-Lang Tang 唐次朗 OCEESA President - 1991

Science Review Administrator USEPA 754 Ridge Dr. (H) Mclean, VA 22101 USA O: (202)343-9778 tang.don@epa.gov

Dr. Tang joined OCEESA in 1985. During the year being the President in 1991, he participated in the establishment of the Cross

Strait Environmental Science & Technology Association, and the following year was one of the 13 OCEESA members attended the first conference in Shanghai. In 1992 he went with more than 10 OCEESA members to participate in the National Construction Conference in Taiwan. He was first elected as the Chair of Environmental Session, and then the General Chair of the whole conference. In the 1990s he volunteered to represent OCEESA in the Conference of Engineers Society of North America in California, with no or minimum financial support from our association. He has more than 50 years of experience in environmental science and engineering, working for private companies and government agencies. Currently he is a Science Review Administrator with U.S. Environmental Protection Agency.

Chin-Pao Huang 黃金寶 OCEESA President - 1992

Donald C. Phillips Professor; Department of Civil & Environmental Engineering; University of Delaware; Newark, DE 19716 USA O: (302)831-8428 F:(302)831-3640 huang@ce.udel.edu

Professor Huang, began his academic career at Harvard University where he studied aquatic chemistry under the direction of Professor Werner Stumm in 1966. After earning his Ph.D. in 1971, he taught at Wayne State University briefly before joining the University of Delaware in 1974. He joined the University of Delaware as Assistant Professor in 1974 and was promoted to Associate Professor in 1980, Full Professor in 1984 and Distinguished Professor in 1996 and Donald C. Phillip Professor in 2001. He also served as Department Chair from 1996 to 2011. He received the highest university honor of Alison Professor at the University of Delaware in 2009.

His research specialties are: (1) specific chemical interactions at the solid-liquid interfaces, (2) the chemistry and control of heavy metals, and (3) advanced oxidation processes for water and wastewater treatment. Recently, he has expanded his research

activities into environmental nanotechnology with an emphasis on developing innovative nanomaterials and systems for environmental applications, studying the fate and transport of engineered nanoparticles in the aquatic environment, and investigating the responses of ecological systems to engineered nanoparticles.

He has mentored 8 post-doctors and supervised the thesis research of 100 graduate students (59 M.S. and 41 Ph. D.). Majority of his students and post-doctors are faculty members at major universities in USA, Taiwan, Korea, Germany, Turkey, and Brazil.

Professor Huang has received numerous honors including the Gorgon Maskew Fair Medal from Water Environment Federation for worthy accomplishments in the training and development of future engineer in 1999, the Best Theoretical Paper Award from the World Water and Environmental Congress for research in activated carbon adsorption of volatile organic carbon in 2003, the Wesley W. Horner Award from the American Society of Civil Engineers for research in sonochemical process for the inactivation of *Cryptosporidium* in water in 2008 and the Gordon Maskew Fair Award from the American Academy of Environmental Engineers for substantial contributions to the status of the engineering profession, the quality of the worlds' environment and the Academy in 2012. Professor Huang is an author of Classic Citation and has published over 250 technical papers with a current h-index of 54 according to the Google Scholar.

Ching-Tzone Tien 田慶宗 OCEESA President - 1995

Chief, Groundwater Discharge Permit Division;

Maryland Department of Environment; 9120 Walthanwoods Rd., Baltimore, MD 21234 O: (410)631-3323 H: (410)668-7139 ctienmde@juno.com, ctien@mde.state.md.us

Dr. Tien is currently Chief of the Groundwater Discharge Permit Division of the Maryland Department of the Environment.

C. Tien has been with the Maryland Department of the Environment (MDE) since July of 1975. He was the principal author of the Maryland Sewerage Facilities Guidelines (1978) and helped to develop guidelines regarding groundwater discharge in Maryland including the MDE Land Treatment Guidelines (2003) and Draft Water Reuse Regulations (2009). C. Tien was named the Young Engineer of the Year (1979) by the Maryland Society of Professional Engineers. He is a Professional Engineer (PE) licensed in the State of Maryland. C. Tien has authored or coauthored 32 research papers, book chapters, conference proceedings and governmental publications. He is also an instructor at the University of Maryland, College Park for two graduate courses: (1) ENPM 637 Biological Principles of Environmental Engineering, and (2) ENPM 666 Groundwater Hydrology and Pollution Control. C. Tien's specialties include, but are not limited to: (1) Water and wastewater treatment; (2) Water pollution control; (3) Waste management, and (4) Groundwater hydrology and water quality protection.

With the generous financial support from Taiwan Environmental Administration to OCEESA in 1995, OCEESA served as the leading organization to establish the International Chinese Environmental Federation (ICEF) to unite the Chinese environmental associations in the USA at that time to sponsor conferences and other activities. In 1995, C. T. Tien also coordinated with faculty and staff from universities in China and Taiwan to organize the 3rd Mainland and Taiwan Environmental Protection Conference (MTEPC) held in Tsinghua University.

Shoou-Yuh Chang, Ph.D., P.E.,張守玉 OCEESA President - 1997

DOE Samuel Massie Chair Professor Civil Engineering, North Carolina A&T State University, 3907 Pondfield Court (Home)Greensboro, NC 27410 O: 336-334-7737 H: 336-668-4341 chang@ncat.edu,





I received my Ph. D. in Environmental Engineering from the University of Illinois and accepted an offer as an assistant professor at the University of Missouri of Rolla in August 1981. The reason I went to Missouri and got involved with OCEESA has to do with Dr. Ju-Chang Huang. At that time, he was my mentor and took us to Purdue Industrial Waste Conference and started of organizing of OCEESA. In 1986, I moved to North Carolina A&T State University as an associate professor and later promoted to professor and in 1995 was selected as the Department of Energy Samuel Massie Chair of Excellence Professor in Environmental Engineering. In 1999, I received the DOE Massie Chair of Excellence Program Outstanding Research and Educational Accomplishments Award.

My research interests include environmental systems analysis, solid, hazardous and radioactive waste management, and water quality modeling. I have had extensive research experience in the use of models to generate alternatives for waste management systems and more recently in the use of filtering techniques to improve model accuracy (published five papers in this area in Journal of Environmental Engineering, ASCE in 2012). I have directed more than 30 research projects with a total funding more than 10 million dollars and supported and trained more than 60 graduate and 40 undergraduate students and published 50 journal papers, 8 book chapters and 90 conference proceeding papers. I have served as the Regional Editor, The Journal of Solid Waste Technology and Management since 1995. I was the recipient of The Journal of Solid Waste Technology and Management Iraj Zandi Award in 2000 and again in 2012 in recognition of the contribution to the field of solid waste technology and management. I also served as Associate Editor, The Journal of Environmental Informatics from 1996 to 2000.

As for OCEESA activities, I have served as Board Director several times and as Secretary-Treasurer (1995), Vice President (1996), and President (1997). Because of my background, I have been very interested in promoting Mainland-Taiwan Environmental Protection Conference (MTEPC). Although I missed the first conference in Shanghai, I since attended and presented papers at 10 consecutive MTEPCs and served as Consultative Members representing OCEESA as needed. I represented OCEESA and presented Keynote speech at the 5th and 10th MTEPCs. Through OCEESA, I was also fortunate to be invited to present a paper at the 1995 International Chinese Environmental Protection Conference, in San Francisco and served as Advisory Committee of the 1997 International Chinese Sustainable Development Conference in Los Angeles. At that time, OCEESA was one of the four members of International Chinese Environmental Federation. For my service, I received the International Chinese Environmental Federation Outstanding Leadership Award in 1997. I was also invited as an annual evaluator for Taiwan Environmental Protection Agency in December 1999, I was in charge of the evaluation of Water Quality Division. Through OCEESA and CIE/USA, I attended two METS, two SATEC, served one year as CIE/USA National Council Treasurer and served as the Conference Executive Chair and Program Chair for the Asian Engineers of the Year Awards Conference, Washington DC, 2007.

Anmin Liu, P.E. 劉安民 OCEESA President in 2002

President, AML Env Engr Consultants;10 Mela Lane, Rancho Palos Verdes, CA 90275 O & H: (310)541-6898 anminliu@cox.net, amlski@yahoo.com

Back in 1976, when "computer generation" was just starting to grow, I was leading a team to explore into "computerization of wastewater treatment plant". The automation of



a wastewater treatment plant operation and maintenance is the only way for process

control and optimization of operation efficiency and cost saving measures.

Starting 1981, the City of Los Angeles Hyperion Wastewater Treatment Plant started a project called Hyperion Full Secondary Treatment Conversion. This project, from engineering design, construction, equipment installation, equipment commission, process start-up, and technical training cost \$1.6 billion and completed in November 1997. At the end of the day, the Hyperion Plant has the capacity of treating 450 MGD (million gallons per day) of wastewater and recycles 50 MGD for reuse of irrigation, industrial cooling water, ground water recharge and in-plant use. As the Hyperion Plant's operation and engineering manager, I was the project manager for Hyperion Plant from 1981 to 1997. It was a rewarding, challenging and difficult project, but most of all, I was fortunate to be involved in this project and able to contribute to the success of this project and made the water in Santa Monica Bay is ever cleaner than before. This vast project was named one of the 10 Public Works projects of the Century by the Engineering News Record Magazine. The projects in this category are Golden Gate Bridge in San Francisco, the Hoover Dam in Nevada.

陳天生 Edward T. Chen OCEESA President - 2003

I was Deputy
Director of the
Houston's
Department of Solid
Waste Management,
oversees the city's
environmental



resources & recycling program, as well as the overall of the solid waste operations in South Region of Houston. These responsibilities includes management and oversight of an operation consist of more than 230 full time employees (30 technical and management staff & 200 field workers) and with annual operations & disposal budget of \$ 35 million. The day to day operations which includes automated garbage collections, heavy trash/tree waste collections, bio-degradable bag yard waste collections, curbside recycling and manned/unmanned recycling drop-off services, and organized & managed household hazardous waste (HHW) program in a one of the country newest state-of-the-art designed HHW facility.

During my tenure at Houston, I was a lead of the city environmental protection delegation to speak & attend numerous meeting & conferences in professional associations, State and Federal agencies in U.S. In 1993, received the U.S. Conference of Mayor's Municipal Solid Waste Management Association National Fellowship Award in Washington D.C., given in recognition of outstanding contribution in the field of Solid Waste.

In 1998, received the Chairman's award from Houston Corporate Recycling Council for outstanding leadership in Houston's recycling efforts. In 1999 & 2002, two times as Mayoral appointee was a delegate of the Mayor's Business Development Mission to China, Japan and Taiwan to promote business development in the area of environmental Protection.

In 1998 & 2000, two times as invited keynote speaker for International Solid Waste Management Conference by Taipei Municipal Government Environmental Protection Dept. In 2002, was appointed by the Mayor of Houston to be Environmental Protection Coordinator and an Advisor to the Shanghai Municipal Government in China.

In 2003, City of Houston organized an





Environmental Summit in Houston with OCEESA, 20 plus of the OCEESA members were attend this event.

In 2004, received the President's Award from the Recycling Alliance of the Texas for outstanding leadership in solid waste & recycling.

In 2007, as a conference keynote speaker at "Contamination Clean up 07", an industry summit held in Australia. In both 2009 & 2011, as invited keynote at "International Conference on Waste Management Technology" hosted by Tsinghua University, China.

My Involvements in Non-Profit Ventures 張建棋 Chein-Chi Chang Ph.D. OCEESA President - 2004 Educational cooperation with universities in China and Taiwan

In 2002, as the Education
Committee Chair of OCEESA, Dr.
Chang was approached by some environmental professors in China to offer a Modern
Environmental Science and Engineering course.



Chien-Chi Chang removed the ruble from the school site.

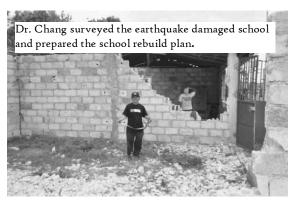
At that time, He did find several OCEESA senior members who were willing to co-teach this course online. Later, the course did not go through due to technical difficulty on China side. Since then, Dr. Chang has personally assisted many environmental programs in China or Taiwan for understanding the environmental and technology development in the US. Some of these

universities include: 桂林理工大学, 北京师 范大学, 山东大学, 天津大学, 哈尔滨工业大 学, 南阳理工学院, 浙江大学, 浙江工商大学, 浙江工业大学, 北京科技大学, 四川大学, 湖 南大学,中南大学,华侨大学,山西医科大学 Volunteer experience in Haiti after the 2010 Haiti Earthquake Dr. Chang spent two weeks in April of 2010 in Leogane, a port city in Haiti located 18 miles west of Port-au-Prince. Leogane. Approximately 80 percent to 90 percent of the buildings collapsed or damaged in Leogane, the epicenter of the 2010 January 12 earthquake. As a structural engineer with specialized training in rapid visual screening, he was selected as a disaster assistance volunteer by the American Society of Civil Engineers and Hands on Disaster Response, a non-profit organization.

Dr. Chang assisted with removing ruble from school sites, surveying the condition of school sites and rapid visual screening for buildings. He also assisted local jurisdictions with restoring the water system. The water system in Leogane was installed in 1981. But, there are no records or drawings for this system. All of the information is maintained in the city plumber's head. While in Leogane, Dr. Chang worked with the city plumber to map the city's water system for future water restoring and maintenance purposes. He walked with the city plumber along the water mains alignments using GPS to locate reservoirs, water mains and valves. Dr. Chang also recommended constructing a drainage channel alongside of the road to eliminate flooding problem for a field hospital, so that the more field hospital units could be installed on the safe ground.

Involvement of Water Environment Federation - Currently, Dr. Chang is the

second vice chair of Watershed Management Committee of Water Environment Federation (WEF). WEF is the largest water environment professional organization in North America. Dr. Chang will become the first vice chair and chair in 2013 and 2015.



Dr. Chang is also the vice president nominee of Chesapeake Water Environment Association (CWEA). CWEA is a local chapter of WEF and covers the states of Maryland and Delaware, and District of Columbia. CWEA has approximate 800 members who are government employees, consultants, and university professors and students. Dr. Chang will automatically become President-Elect and President later if he gets elected for the Vice President.

Wei-Yin Chen 陳惟寅 OCEESA President - 2000

Professor, Chemical Engineering University of Mississippi, 119 Hillside Dr. (H) Oxford, MS 38655 (O) 662-915-5651 cmchengs@olemiss.edu,

He has been conducting research in the areas of fuel conversion and emission control during power generation since 1975. Recognizing the fact that all novel CO₂ capture and utilization technologies start with CO₂ fixations, he has been investigating the reactions of CO₂ with various types of carbons, especially those with

aromatic hydrocarbons, in the past five years. Photocatalytic, ultrasonic and thermal reactions have been his primary interests. Some of his hypotheses have been demonstrated, and the discoveries of his group seem to have transformative benefits on gasification, combustion, CO, capture, CO, storage, CO, utilization and soil amendment; future studies seem to be warranted. The ultimate goal of our research is to develop a family of technologies that mitigate global climate change. His research has been supported mainly by the US Department of Energy and the National Science Foundation. He has reviewed proposals for agencies of several countries, and manuscripts and books for over 50 journals and publishers. His editorial works include a recently published 4-volume, 54-chapter handbook entitled Handbook of Climate Change Mitigation. He has been taking leadership roles in several professional organizations. Dr. Chen is serving as an adjunct faculty and advisory member of several universities in China and Taiwan. He has received teaching, research and service awards from the School of Engineering of UM.

Dr. Wei-Ping Pan 潘偉平 OCEESA President - 2010

Professor, Chemistry Department Western Kentucky University 3326 Kyle Ct, (H) Bowling Green, KY 42104 O: 270-745-2272 wei-ping.pan@wku.edu,

Dr. Wei-Ping Pan has served as Assistant to the President, Founder and Director of the Institute for Combustion Science and Environmental Technology, and Director of the Confucius Institute at Western Kentucky University for the past 27 years. Dr. Pan received his B.S. degree in Chemical Engineering from Chung Yuan University, Taiwan and his Ph.D. in Physical Chemistry from Michigan Technological University in 1986. He began teaching at Western Kentucky University in 1986, and has taught at WKU ever since.





Dr. Pan has published more than 170 peer-reviewed papers during his tenure, the majority of which are related to coal combustion and emissions, and materials characterization. He has pioneered work in the area of clean coal technology, emission control, and thermal analysis involving effluent gas analysis and has used the TG/FTIR/MS technique extensively in the study of many different types of materials. Dr. Pan has mentored more than 100 undergraduate students, 55 graduate students.

Throughout his career here at WKU, Dr. Pan has established a variety of laboratories with unique specialties. The Thermal Analysis Laboratory (established in 1986) focuses on the effect of heat on solids, gases, and liquids. The Combustion Laboratory (1993) allows scientists to study what occurs when materials are burned. The Emissions and Control Laboratory (2001) can sample and measure the by-products of combustion. The newly formed Thermophysical Properties of Materials laboratory (2013) can determine the physical properties of materials changing as a function of temperature. He is responsible for developing and collaborating all of these laboratories under one roof at the Institute for Combustion Science and Environmental Technology (ICSET).

Dr. Pan was named a Fellow of the North American Thermal Analysis Society (NATAS) in 1997. He has served as President of NATAS in 2001, received the Distinguished Service Award from NATAS in 2004, and was selected as the 2008 recipient of the Mettler Award (NATAS' highest honor), which recognizes distinguished achievement in the field of thermal analysis. During 2010, the 13th MTEPC was held at the Wanyou Conifer Hotel in Chongqing from April 23rd to 25th; the first Forum of Global Chinese Scientists for Environmental Protection was held in Shanghai from May 5th to May 7th and a joint ECUST-OCEESA workshop was held at ECUST campus on May 10.

Dr. Pan was selected to receive the 2006

Distinguished College/University Scientist Superlative Award of the Kentucky Academy of Science. Dr. Pan not only teaches students at WKU, but he also shares his knowledge around the world. Dr. Pan has been appointed a Visiting Professor for Zhijiang University, Shanghai Jiao Tong University, Harbin Institute of Technology, Southeast University, Huazhong University of Science and Technology, North China Electric Power University, Taiyuan University of Science and Technology, Hefei University of Technology, China Ming University, University of Shanghai for Science and Technology, and Anhui University of Science and Technology.

Dr. Charles Qun Cheng 程群 OCEESA President - 2011

Engineering Geologist, San Diego Regional Water Quality Control Board, California EPA 9838 Via Caceres (H) San Diego, CA 92129 USA O: 858-627-3930 H: 858-538-0568 cheng@waterboards.ca.gov

浙江大學地球化學理學士學位,美國加州大學 聖地亞哥分校 Scripps 海洋研究所地球科學博 士學位,加州理工學院博士後研究員。在世界 聞名的 Scripps 海洋研究所師從兩位美國科學 院士和一位著名地球化學家從事重金屬污染, 大氣污染,微量元素和同位素環境地球化學 研究;在著名學府加州理工學院與一位美國科 學院士合作,從事環境與宇宙化學研究。曾任 美國環保顧問公司資深科學家,高級水文地質 家,技術部主任,現任加州環保署水資源 電 局資深專家,項目主管,負責執行美國聯邦和 加州政府水資源保護管理政策和核心項目, 1996 年榮獲美國聯邦政府頒發的傑出環保獎。

先后任"海外華人環境保護學會"秘書長/財務 長,副會長,會長。任"南加州華人環保協會" 理事。兼任加州大學聖地亞哥分校、 Cuyamaca 學院和 Grossmont 學院授課教授。 受聘為遼寧省環科院客座研究員,瀋陽市環保局特聘高級顧問,中國科技大學課程教授。 2006 以美國華人環保考察交流博士團成員身份,對中國 6 大城市進行訪問交流並呈交專家意見書;2008 年和 2011 年被中國環保部環境規劃院特邀為外籍專家參加"南京國際排污交易研討會"和安徽池州"水環境保護的價格與稅費政策國際研討會",並發表演講。 2011 年分別為北京大學開設《美國水環境保護政策與管理》課程;為人民大學開設《中美水環境政策與管理》高級研修班。

在國際學術刊物上發表過眾多學術論文,多次 參加國際國內學術研討會並發表演講和主題演 講。為美國政府撰寫過多篇內部調研報告,專 業研究文章,技術指南等科學文獻。在"海外華 人環境保護學會"任職期間,2010年以副會長 的身份在重慶大學舉辦的第 13 屆海峽兩岸環 境保護研討會(MTEPC)上發表了主題演講; 組織和參加了在上海舉辦的第一屆全球華人科 學家環境論壇:組織和參加了在華東理工大學 舉辦的第一屆 OCEESA 聯合環保科技研討 會;代表 OCEESA 參加了 2010 美洲中國工程 師學會全國理事會,並為 OCEESA 爭取舉辦 AAEOY 作了演講。 2011 年以會長的身份率團 參加在成功大學舉辦的第 14 屆 MTEPC,並在 諮議理事會上為 OCEESA 爭取舉辦第 16 屆 MTEPC 發表了演講;組織和參加了在中華醫 事科技大學舉辦的第二屆 OCEESA 聯合環保 科技研討會;率團拜會台灣環保署官員,協商 2012 年海峽兩岸環保高峰會議的籌備事宜。 2012 年與前台灣環保署陳龍吉署長和中國環境 科學學會王玉慶理事長一起組織了由台灣、大 陸、美國三方舉辦的台北"2012 兩岸環保高峰

會議",為會議甄選了 21 位美國專家做專題報告,代表 OCEESA 在開幕式上致辭,並主持了專題演講報告會場

Dr. Ting Wang 王亭 OCEESA Member

Director, Energy Conversion & Conservation Center, 932 Engineering Building, University of New Orleans, 2000 Lakeshore Drive, New Orleans, LA 70148-2220 USA (504) 280-7183 twang@uno.edu, Web: eccc.uno.edu

Professor Ting Wang is currently the Director of Energy Conversion and Conservation Center and Jack & Reba Matthey Endowed Chair for Energy Research of University of New Orleans. He is also a



Professor of Department of Mechanical Engineering. Prior to UNO, he taught 15 years at Clemson University. He has been involved in energy conservation and power generation in full spectrum for the past 34 years. He is an experimentalist with significant Computational Fluid Dynamics (CFD) experience. He specializes in gas turbine power generation, poly-generation, integrated gasification combined cycle (IGCC), clean coal technology, alternative fuel generation and applications, turbomachinery, energy efficiency, and general thermal-flow engineering. He has conducted both fundamental and applied research with funding from U.S. governmental agencies and various industries.

Professor Wang received a Ph.D from University of Minnesota at Twin Cities and an M.S. degree from State University of New York at Buffalo with a major in mechanical engineering. He has published over 250 research papers and reports and was the recipient of the American Society of Mechanical Society (ASME) George Westinghouse Silver Medal for his contributions to power engineering in general.





He was the past Chair of ASME Coal, Biomass, and Alternative Fuels Committee and present Chair of ASME Gas Turbine Heat Transfer Committee. He serves on the editorial board of International Journal of Rotating Machinery and Journal of Mechanics as well as on the Advisory Board of International Pittsburgh Coal Conference. He is also an associated editor for the ASME Journal of Thermal Science and Engineering Applications. He is an ASME Fellow and member of American Institute of Aeronautics and Astronautics (AIAA). He was appointed by former Louisiana Governor "Mike" Foster as a member of the Louisiana Comprehensive Energy Policy Advisory Commission.

Roger J. Cheng 鄭均華 Board Director of OCEESA- Albany Chapter

Research Associate (EMERITUS)
The State University of New York at
Albany; President En-Tech Inc., USA 540
Jefferson Court Guilderland, NY 12084
H: (518)456-7039 rogerjcheng.com
rjc12084@yahoo.com,

I was a Science Teacher from National Taiwan Normal UniversityC:\Users\Roger\Desktop\WEB SITE rogerjcheng\rogerjcheng.com\TAIWAN **CONNECTION-SCIENCE and EDUCATION** ACTIVITY.htm (class-43) in the fields of Physics & Chemistry, and an outsider not professional trained in the field of Environment. In 1957, I borrowed \$50 and airfare to fly to the United States looking to further my education and opportunities. First, at Florida State University, I became a technical assistant working for Dr. Seymour Hess, head of meteorology and an expert on the atmosphere of Mars. I helped design very sensitive equipment (hygrometers) to measure "water vapor" in the atmosphere of Mars in an experiment to confirm that the white caps on Mars were ice (water) and. not frozen carbon dioxide .-- A NASA project for future Martian-Exploration.

Then, in 1966, I came to New York, as a research assistant for Dr. Vincent J. Schaefer

for \$1.25 per hour, working for 10 hours a week, at the newly formed Atmospheric Sciences Research Center (ASRC) at UALBANY, (Foundered by <u>four</u> members of Dr. Irving <u>Langmuir's</u> term from GE-R/D Center --- Schaefer, Vonnegut, Blanchard & Falconer), and stayed at ASRC for 32 years. The state university of New York recognized me in 1978 with" The SUNY Chancellor <u>Award</u> for Excellence in Professional Service.

A major funding project (Dr. Volker A. Mohnen—Director of ASRC) from US-EPA with the cooperation of Chief-Scientist-Dr. Thomas T. Shen of the NYS-DEC and scientists at RPI, allowed me to participate in a detailed investigation of the emissions from power plants (both from oil and coal burners), acid rain formation and their impact on our environment using the new modern equipment from the ASRC's Laboratory for Atmospheric Particulate Analysis (Manager-Cheng). Four major reports were published, ALL, as featured cover articles in: Journal of Air Pollution Control (1976, 1984), Analytical Chemistry (1987), EPA Report (1979) and Air Pollution and Control-book in Chinese (1985).

Dr. Petr Chylek of (NCAR and MIT) collaborated with my studies on power plant emissions. We examined the radioactive properties of clouds containing submicron soot particles as impurities. The soot particles are assumed to be distributed randomly inside cloud drops and enhances the visible light absorption in clouds, as well as to global pollution possibly affecting the earth's climate. Two major reports, deals with power plant emissions and their affect to our climate, were published in: Apply Optics, (1981) and, Journal of. Atmospheric. Sciences. (1984).

In the early years of 1970. Dr. Thomas T. ShenC:\Users\Roger\Desktop\WEB SITE rogerjcheng\rogerjcheng.com\TAIWAN CONNECTION-SCIENCE and EDUCATION ACTIVITY.htm (my Mentor, Teacher & Friend) drafted me to assist him working in the CommitteeC:\Users\Roger\Desktop\WEB SITE rogerjcheng\rogerjcheng\rogerjcheng\com\CHINA

CONNECTION-EXCHANGE PROGRAM.htm of the National & International Environmental Organizations APCA(now-AWMS), CAPPS, IUAPPA. He was a visionary & I was a go getter! Since early year of 1970 I was member of OCEESA, and involved many Environmental

ActivitiesC:\Users\Roger\Desktop\WEB SITE rogericheng\rogericheng.com\The MICRO-WORLD in OUR ENVIRONMENT.htm between Taiwan, China, USA and International. During the year (1975-1992) with Dr.Shen, we were the several committee member of APCA(now-AWMS)-(Power Plant Emissions, In-Door Air Quality, Acid Rain, Science Education), Especially, we both were in charge of APCA-International Committee and as Session Chairman of Environment during Annual Meetings for more than ten years. We always invited Environmental Researchers (two/year) from Taiwan, Hon-Kong, and (after 1980-China) to report at APCA Annual Meetings.

After President Nixon opened the door of China-1980, I was invited as only Chinese American in a 35 members of delegation attending- "The First US/CHINA CONFERENCE on ENERGY, RESOURCES and ENVIRONMENT"-Beijing-1982. Again, I was only Chinese – American in a 14 members of delegation participating at "US-CHINA AIR POLLUTION TECHNOLOGY WORKSHOP" Nanjing & Beijing-1985. At the request of Chinese National Council—a delegation of OCEESA, headed by Prof. Yung=Tse Hung, went to China-2001, conducting a Technical Workshop in two provinces (Zhejiang & Jiangsu).

Joseph Ming L. Wong, P.E., 黄鳴立 OCEESA Board Director 1989-1990 Chief Engineer, Brown and Caldwell 5237 Heavenly Ridge Ln (H),Richmond, CA 94803 USA,O: (925) 210-2555

wongjoem@yahoo.com,

Mr. Wong is currently Chief Engineer and Advanced Treatment Technology Leader of Brown and Caldwell, with over 35 years of consulting and engineering experience in municipal and industrial water and wastewater treatment and reuse. He received BS and MS in Chem. Eng. from U of Washington, is a registered professional engineer in California, Florida and Washington and is a Board Certified Environmental Engineer (BCEE).

He represented OCEESA in the CIE/USA
National Council from 1991-1992 and served as
NC's Treasurer in 1992. Joe also served as
President of Chinese American Envi Prof'l
Asso 1998-99 & 2009-2010. He has been active
in other professional associations such as
American Water Works Association, Water
Environment Federation, WateReuse
Association, American Institute of Chemical
Engineers, California Water Environment
Association, American Membrane Technology
Association, American Academy of
Environmental Engineers and Scientists and
International Water Association.

Joe served in the Literature Review Committee for WEF and published the review article on Petrochemicals for five years. He served as Industrial and Hazardous Waste Committee member for CWEA and received the Silver Cover Award for long term service and contributions. He served as Desalination Committee Chair for 3 years and is currently Water Resources Division Chair for the CA-NV Section of AWWA, and received Rock Star Award. He was a planning committee member, contributor and reviewer for the 5th edition of the Water Treatment Plant Design Handbook (2012). He was reviewer/editor for AWWA manuals on Seawater Desalination and Microfiltration and Ultrafiltration. Currently he is the committee chair for preparing a new AWWA manual M62, entitled 'Membrane Applications for Water Reuse. He is also involving in the planning of the first Industrial Water Reuse Specialty Conference for WateReuse Association to be held in Long Beach, California in 2013.

Joe is the primary author of 100 conference papers and published articles, and four book chapters in the environmental field. His most favorite project in his long term consulting





career was leading the development and design of the China American Petrochemical Company (a joint venture of BP and CPC) water reuse system in Taiwan. The successfully operated 9,000 m³/d system uses processes of Oxidation/Filtration/GAC /UF/UV/RO, is the first major water reuse system in Taiwan and also the first in the worldwide petrochemical industry. Joe is also active in his church in San Francisco. He has served as an elder since 1985, ministries have included teaching Sunday school, leading missions and various committees, chairing worship services and occasionally preaching. He and his wife Teresa have been married since 1976. They have three grown children and two lovely grandchildren. He is thankful to God for His blessings on his life and career.

Prof. Yung-Tse Hung, Ph.D., P.E., DEE OCEESA President (1985-1986)

Professor

Dept. of Civil & Environmental Engineering Cleveland State University Cleveland, Ohio 44115 USA Email: yungtsehung@yahoo.com

Prof. Yung-Tse Hung, Ph.D., P.E., DEE was OCEESA President from 1985-1986. He has been Founding Permanent Executive Director since 1986. He was a founding member of OCEESA in 1980. He was OCEESA Secretary-Treasurer,



1982-1983, OCEESA Vice President, 1984. He is the founding Editor-in-Chief, OCEESA Journal, since January 1983. He has taken care of OCEESA best papers awards competitions for mainland and Taiwan since the beginning of the award competition. He has taken care of abstracts collections and registrations for MTEPC conferences on behalf of OCEESA since the first MTEPC in 1992. He is responsible of OCEESA headquarter in Cleveland, Ohio, operation since 1982.

Professor Yung-Tse Hung, Ph.D., P.E., DEE, Fellow-ASCE, is Professor of Civil Engineering at Cleveland State University, Cleveland, Ohio, USA, since 1981. He has obtained his B.S. and M.S. degrees in Civil Engineering from Cheng Kung University in Taiwan, and his Ph.D. degree in Environmental Engineering from the University of Texas at Austin in 1970. He has been on faculty and taught at 16 universities in 8 countries. He has served on the faculty of Civil Engineering at the University of Canterbury, New Zealand, University of Texas at Arlington, University of North Dakota, Hong Kong University of Science & Technology, United Arab Emirates University, and Cleveland State University, Nanyang Technological University, Singapore, Curtin University of Technology, Perth, Australia, and Cleveland State University. As a Fulbright Scholar he has served on the faculty of Kazan State University, Kazan State Technological University, Kazan State Academy of Architecture and Construction, Kazan, Russia, and Kyrgyz State National University, International University of Kyrgyzstan, Kyrgyz Agrarian Academy, Kyrgyz State University of Construction, Transportation and Architecture, and Bishkek Humanities University, Bishkek, Kyrgyzstan.

His primary research interests and publications have been involved with biological wastewater treatment, industrial water pollution control and industrial waste treatment, and municipal wastewater treatment. He has about 10 books, 450 report and journal publications, and conference presentations in water and wastewater treatment. He is a Fellow of American Society of Civil Engineers, a diplomate of American Academy of Environmental Engineers, Fellow of Ohio Academy of Science, a member of Association of Environmental Engineering Association and Water Environment Federation. He is the Executive Director of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA) and the Editor-in-Chief of OCEESA Journal. He is Editor, International Journal of Environment and Waste Management (IJEWM), Editor, International Journal of Environmental Engineering (IJEE), Editor-in-Chief, International Journal of Environmental Engineering Science (IJEES), and Guest Editor, Special Issue on "Science and Technology of Wastewater and Sludge Treatment", Water - MDPI. He is coeditor of several environmental engineering books by Humana Press and CRC. He is a registered professional engineer in Ohio and North Dakota.

Ten OCEESA Best Papers 2013 International Environmental Conference & Workshops August 8-15, 2013, Los Angeles, USA

Theses best papers were reviewed and selected by the MTEPC Planning Committee in Mainland China and in Taiwan, respectively.

(A) Five best papers from Mainland China

Nitrogen removal from nitrate-laden wastewater by integrated vertical-flow constructed wetland systems

Chang Jun-jun^{1,2}, Wu Su-qing^{1,3}, Dai Yan-ran^{1,4}, Liang Wei^{1*}, Wu Zhen-bin^{1*}

¹ State Key Laboratory of Freshwater Ecology and Biotechnology, Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, 430072, China; ²Research Institute of Engineering and Technology, Yunnan University, Kunming, 650091, China; ³Jiangxi academy of environmental sciences, Nanchang, 330029, China; ⁴ Graduate University of the Chinese Academy of Sciences, Beijing, 100049, China; liangweio2@tsinghua.org.cn.

Defluoridation from aqueous solution by chitosan modified natural zeolite Sha Peng¹, Song Hong^{2*}

¹ PhD student and ² Chair Professor, School of Resources and Environmental Science, Wuhan University, Wuhan 430079, P. R. China pengshahuanke@126.com, songhongpku@126.com.

Iodinated trihalomethane formation from microbially derived organic matter during the biological treatment of micro-polluted source water

Yuanyuan Wei a,b, Yan Liu b,*, Rui-hua Dai b, Xiang Liu b

a National Engineering Research Center for Urban Pollution Control, Tongji University, 588 Miyun Road, Shanghai 200092, China. b Department of Environmental Science and Engineering, Fudan University, 220 Handan Road, Shanghai 200433 wyy_046@163.com, liuyan@fudan.edu.cn, rhdai@fudan.edu.cn, liuxiang@fudan.edu.cn

Effects of Bile Salts and Divalent Cations on the Adsorption of norfloxacin onto Agricultural Soils Jie Cui, Xu Zhang*, Shahua Qian

School of Resources and Environmental Science, Hubei Biomass-Resource Chemistry and Environmental Biotechnology Key Laboratory, Wuhan University, Wuhan, 430079, P.R. China 314668469@qq.com, xuzhangwhu@gmail.com, qiansh@whu.edu.cn

Identifying key parameters to a novel bio-ecological wastewater treatment process combined with modified A_2O biofilm and hydrophyte filter bed for rural areas

Yifeng Wu, Guangcan Zhu and Xiwu Lu*

School of Energy and Environment, Southeast University, 2 Sipai Lou, Nanjing 210096, China shinfun@seu.edu.cn; gc-zhu@seu.edu.cn; xiwulu@seu.edu.cn



(B) Five best papers from Taiwan

Assembly Magnetic Metal Ozone Catalyst to Decompose Humic Acid

Lu, Li-wei' and Chang, Cheng-Nan'

¹Department of Environmental Science and Engineering, Tunghai University, Taichung, Taiwan david921223@msn.com, cnchang@thu.edu.tw

Development and Implementation of Waste-to-Resources Supply Chain Exemplified by Yong-An Industrial Park

Shu-Yuan Pan¹, Pen-Chi Chiang²*, E.E. Chang³, F.C. Yan⁴, Jimmy C.M. Liu⁵, and C.Y. Hua⁶

¹ PhD student, ² Distinguish Professor, ³ Professor, ⁴ Technical Specialist, ⁵ Manager and ⁶ Project Manager, ¹¹² Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan; ³ Department of Biochemistry, Taipei Medical University, Taiwan .⁴ Industrial Development Bureau, Ministry of Economic Affairs, Taiwan; ⁵¹⁶ Environmental Engineering Department II, Sinotech Consultants, Ltd., Taiwan; ⁴ 71 Chou-Shan Rd., Taipei City, Taiwan 10673; doo541004@ntu.edu.tw, pcchiang@ntu.edu.tw, eechang@tmu.edu.tw, fcyan@moeaidb.gov.tw, jimmliu@mail.sinotech.com.tw, cyhua@mail.sinotech.com.tw

Integrated Photobioreactor System for Microalgal CO₂ Fixation: Feasibility Testing and Energy Appraisal

Walter Den^{1,2}, Mengshan Lee², and Jules Chuang¹

¹ Department of Environmental Science and Engineering, Tunghai University, Taichung, Taiwan
² Tunghai Green Energy Development and Management Institute, Tunghai University, Taichung, Taiwan wden@thu.edu.tw

Degradation of Dichloromethane by Zero-valent Copper and Vitamin B₁₂

Chang-Chieh Huang and Shang-Lien Lo2*

¹ PhD student and ² Distinguished Professor; Graduate Institute of Environmental Engineering, National Taiwan University; 71 Chou-Shan Road, Taipei, Taiwan; sllo@ntu.edu.tw

Phylogenetic Analyses of Human Adenoviruses (HAdVs) in recycled activated sludge of municipal wastewater treatment plant

Liang-Zhi, Chen (陳良誌)¹, Meng-Hsin, Shih (施孟欣)¹, Hsion-Wen, David, Kuo (郭獻文)²

¹ Master student and ² chair professor; Environmental Science & Engineering, Tunghai University, Taichung, Taiwan; go1340021@thu.edu.tw, hwkuo@thu.edu.tw

Environmental Issues Q & A

王莉茵 Lih-in Wang Rezania Minnesota Department of Health (MDH) St Paul, Minnesota

I. How do I know my city water (drinking water) is clean?

Each year by July I, consumer's will receive a short report or notice about the drinking water quality from their local water suppliers, called the consumer confidence report or drinking water quality report, that tells where your water comes from and what's in it. Most large- and mid-size cities have their annual water quality reports posted in their municipal or utility websites. You can find the report by Google or by calling the utilities/city. Cities with population grate than 100,000 are required by USEPA to provide URL (to the report) for consumers to view the report on line at:

http://cfpub.epa.gov/safewater/ccr/index.cfm?OpenView you can search your local water quality report by entering the state, city/town name, and the zip code on search windows.

The poor quality of tap water in China is almost as infamous as the air pollution. Packing a camping water filter is an alternative to dependency on bottled water, and is a better idea than using chlorine drops or iodine tablets. The latter only eliminate microorganisms, while an EPA-approved camping water filter will eliminate both microorganisms and pollutants.

2. Should I buy bottled water?

Bottled water is becoming increasingly popular. Some municipal water systems which deliver water into people's homes for under 1/100 of a cent/gallon are now bottling their own water and selling it for more than a dollar for a 20-ounce bottle which comes out to about \$6/gallon.

The public water supply is regulated by the U.S. Environmental Protection Agency (EPA). All municipal water systems serving 25 or more people are tested regularly for up to 118 chemicals and bacteria specified by the Safe Drinking Water Act (SDWA).

 $\frac{\text{http://www.health.state.mn.us/divs/eh/water/f}}{\text{actsheet/com/bottledwater.html}}$

3. How to judge the air quality when I visit to a city?

The air quality data are based on measurements of ozone and fine particles (also known as PM2.5). PM2.5 is a mixture of small particles and liquid droplets smaller than 2.5 microns in diameter. PM2.5 is released when coal, gasoline, diesel fuels, wood and other fuels are burned. Children and adults who participate in extended physical activity and people with respiratory and cardiovascular diseases are especially vulnerable to the harmful effects of air pollution. https://apps.health.state.mn.us/mndata/air For real time air quality index in China. Visit: http://aqicn.org/city/beijing/

4. Do I need a high quality respirator when I travel to China?

If you have asthma or have concern about allege or asthma, by all means, use a high quality respirator (such as 3M 1860 Medical Mask, 3M Dust Respirator or 3M 8000 mask) to protect yourself, however, if you are over all healthy and don't like the idea of wearing a respirator or mask, a bandanna or light scarf can makes it possible to screen out some of the filth in the air, and at the same time is not as obtrusive as a respirator mask.

http://traveltips.usatoday.com/packing-tips-travel-china-11230.html

5. How do I know an item/toy that may be toxic and harmful to me and children?

http://www.healthystuff.org/faqs.healthierprod.php

6. Simple facts of plastic and waste recycle?

The average American generates over 4 pounds of trash every day and about 1.5 tons of solid waste per year. Over 75% of waste is recyclable, but we only recycle about 30% of it. So please Recycle, Reuse and Reduce.

http://www.dosomething.org/actnow/tipsandto ols/11-facts-about-recycling# http://www.epa.gov/osw/conserve/materials/pl astics.htm



Ambient Air Quality Standards

	Δveraging California Standards ¹ National Standards ²			2			
Pollutant Averaging Time		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃)	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet Photometry	_	Same as	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 μg/m³)		0.075 ppm (147 μg/m ³)	Primary Standard		
Respirable	24 Hour	50 μg/m ³	Gravimetric or	150 μg/m ³	Same as	Inertial Separation	
Particulate Matter (PM10) ⁸	Annual Arithmetic Mean	20 μg/m³	Beta Attenuation	_	Primary Standard	and Gravimetric Analysis	
Fine Particulate	24 Hour	-	_	35 μg/m³	Same as Primary Standard	Inertial Separation	
Matter (PM2.5) ⁸	Annual Arithmetic Mean	12 μg/m ³	Gravimetric or Beta Attenuation	12.0 μg/m ³	15 μg/m³	and Gravimetric Analysis	
Carbon	1 Hour	20 ppm (23 mg/m ³)	N 5:	35 ppm (40 mg/m³)	_	N 5:	
Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)		Non-Dispersive Infrared Photometry (NDIR)	
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	()			(INDID)	
Nitrogen Dioxide (NO ₂) ⁹	1 Hour	0.18 ppm (339 μg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 μg/m³)	1	Gas Phase	
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)		0.053 ppm (100 μg/m ³)	Same as Primary Standard	Chemiluminescence	
	1 Hour	0.25 ppm (655 μg/m ³)	Ultraviolet Fluorescence	75 ppb (196 μg/m ³)	_		
Sulfur Dioxide	3 Hour	_			_	0.5 ppm (1300 μg/m³)	Ultraviolet Flourescence; Spectrophotometry
(SO ₂) ¹⁰	24 Hour	0.04 ppm (105 μg/m³)			0.14 ppm (for certain areas) ¹⁰	_	(Pararosaniline Method)
	Annual Arithmetic Mean	1		0.030 ppm (for certain areas) ¹⁰	-		
	30 Day Average	1.5 μg/m ³		_	_		
Lead ^{11,12}	Calendar Quarter	ı	Atomic Absorption	1.5 μg/m ³ (for certain areas) ¹²	Same as	High Volume Sampler and Atomic Absorption	
	Rolling 3-Month Average	1		0.15 μg/m ³	Primary Standard	332 133	
Visibility Reducing Particles ¹³	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape		No		
Sulfates	24 Hour	25 μg/m³	Ion Chromatography		National		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence		Standards		
Vinyl Chloride ¹¹	24 Hour	0.01 ppm (26 μg/m³)	Gas Chromatography				

See footnotes on next page ...

California Air Resources Board (6/4/13)

- 1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole
- 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24hour PM2.5 standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 10. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
 - Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

California Air Resources Board (6/4/13)





US EPA and California Drinking Water Standards

(US EPA Standard / California Standard)

Contaminant		MCL	PHG (MCLG)
Microbiological C			
U		e than 5.0%	
Bacteria		ples are pos	
	a routine sample and a repeat		
Fecal coliform and <i>E</i> .	sample are total coliform		
coli	positive, and one of these is		
	also fecal coliform or <i>E. coli</i>		
	posi	itive	
E. coli		0	(0)
Fecal Indicators			
(enterococci or			
coliphage)		TT	n/a
Turbidity		TT	n/a
Giardia lamblia			
Viruses			
Heterotrophic plate			
count bacteria	Surf	face water tr	eatment = TT
Legionella			
Cryptosporidium			
Radioactive Contamina			
Gross Beta particle activ	/ity	4.470	(0)
(millirem/yr)/(pCi/L)		4/50	(0)
Strontium-90 (pCi/L)		8	0.35
Tritium (pCi/L)		20,000	400
Gross Alpha particle		1.5	(0)
activity (pCi/L)	r \	15	(0)
Combined radium (pCi/		5	(0) ^(b)
Uranium (ug/L)/(pCi/L)		30/20	0.43
Ú	c Col	ntaminants 1	0.6
Aluminum (ppm)		1	0.6
Antimony (ppb)		6 10	20
	Arsenic (ppb)		0.004
Asbestos (MFL)		7	7
Barium (ppm)		1	2
Beryllium (ppb)		4	1
Cadmium (ppb)		5	0.04
Chromium (ppb)		50	(100)
Copper (ppm)		AL = 1.3	
Cyanide (ppb)		150	150
Fluoride (ppm)		2.0	1
Lead (ppb)		AL = 15	
Mercury[inorganic](ppb)	2	1.2

Contaminant	MCL	PHG (MCLG)
Nickel (ppb)	100	12
Nitrate (ppm) (as NO3)	45	45
Nitrite (ppm)	1 (as N)	1 (as N)
Perchlorate (ppb) – CA only	6	6
Selenium (ppb)	50	30
Thallium (ppb)	2	0.1
Synthetic Organic Conta	minants inc	luding
Pesticides and I	Herbicides	
2,4-D (ppb)	70	20
2,4,5-TP [Silvex] (ppb)	50	25
Acrylamide	TT	(0)
Alachlor (ppb)	2	4
Atrazine (ppb)	3/1	0.15
Bentazon (ppb)	NA/18	200
Benzo(a)pyrene [PAH] (ppt)	200	7
Carbofuran (ppb)	40/18	1.7
Chlordane (ppb)	2/0.1	30
Dalapon (ppb)	200	790
Di(2-ethylhexyl) adipate		
(ppb)	400	200
Di(2-ethylhexyl) phthalate		
(ppb)	6/4	12
Dibromochloropropane		
[DBCP] (ppt)	200	1.7
Dinoseb (ppb)	7	14
Dioxin [2,3,7,8-TCDD]		
(ppq)	30	0.05
Diquat (ppb)	20	15
Endothall (ppb)	100	580
Endrin (ppb)	2	1.8
Epichlorohydrin	TT	(0)
Ethylene dibromide [EDB]		
(ppt)	50	10
Glyphosate (ppb)	700	900
Heptachlor (ppb)	0.4/0.01	8
Heptachlor epoxide (ppb)	0.2/0.01	6
Hexachlorobenzene (ppb)	1	0.03
Hexachlorocyclopentadiene		
(ppb)	50	50
Lindane (ppt)	200	32
Methoxychlor (ppb)	40/30	0.09
Molinate [Ordram] (ppb)	NA/20	1

		PHG
Contaminant	MCL	(MCLG)
Oxamyl [Vydate] (ppb)	200/50	26
PCBs [Polychlorinated		
biphenyls] (ppt)	500	90
Pentachlorophenol (ppb)	1	0.3
Picloram (ppb)	500	500
Simazine (ppb)	4	4
Thiobencarb (ppb)	NA/70	70
Toxaphene (ppb)	3	0.03
Volatile Organic Co	ntaminant	S
Benzene (ppb) - US/CA	5/1	0.15
Carbon tetrachloride (ppt)	500	100
1,2-Dichlorobenzene (ppb)	600	600
1,4-Dichlorobenzene (ppb)	75/5	6
1,1-Dichloroethane (ppb)	5	3
1,2-Dichloroethane (ppb)	5/0.5	400
1,1-Dichloroethylene (ppb)	7/6	10
cis-1,2-Dichloroethylene (ppb)	70/6	100
trans-1,2-Dichloroethylene		
(ppb)	100/10	60
Dichloromethane (ppb)	5	4
1,2-Dichloropropane (ppb)	5	0.5
1,3-Dichloropropene (ppb)	NA/0.5	200
Ethylbenzene (ppb)	300	300
Methyl-tert-butyl ether (ppb)	NA/13	13
Monochlorobenzene (ppb)	100/70	200
Styrene (ppb)	100	0.5
1,1,2,2-Tetrachloroethane		
(ppb)	NA/1	0.1
Tetrachloroethylene (PCE)		
(ppb)	5	0.06
1,2,4-Trichlorobenzene (ppb)	5	5
1,1,1-Trichloroethane (ppb)	200	1000
1,1,2-Trichloroethane (ppb)	5	0.3

Constituent	Secondary MCL
Aluminum	200 ug/L
Color	15 Units
Copper	1.0 mg/L
Foaming Agents [MBAS]	500 ug/L
Iron	300 ug/L
Manganese	50 ug/L
Methyl-tert-butyl ether [MTBE]	NA / 5 ug/L
OdorThreshold	3 Units

		PHG
Contaminant	MCL	(MCLG)
Trichloroethylene [TCE] (ppb)	5	1.7
Toluene (ppm)	1/0.15	150
Trichlorofluoromethane (ppb)	NA/150	700
1,1,2-Trichloro-1,2,2-		
trifluoroethane (ppm)	NA/1.2	4
Vinyl Chloride (ppb)	2/0.5	50
Xylenes (ppm)	1.750	1.8
D11 C .1 D 1 . 11 C		

Disinfection Byproducts, isinfectant Residuals, and Disinfection Byproduct Precursors

Distiljection Byp	or ottifier a recent	5015
Contaminant (CCR units)	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]
TTHMs [Total		
Trihalomethanes] (ppb)	80	n/a
Haloacetic Acids (ppb)	60	n/a
Bromate (ppb)	10	0.1
Chloramines (ppm) (as		
$[Cl_2)]$	MRDL = 4.0	MRDLG = 4
Chlorine (ppm) (as Cl ₂)]	MRDL = 4.0	MRDLG = 4
Chlorite (ppm)	1.0	0.05
Chlorine dioxide (ppb)	MRDL =	MRDLG =
(as ClO ₂)]	800	800
Control of DBP		
precursors (TOC)	TT	n/a

Key
AL = Regulatory Action Level
MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

PHG = Public Health Goa

 $SMCL = Secondary\ MCLl$

TT = Treatment Technique

Constituent	Secondary MCL
Silver	100 ug/L
Thiobencarb	1 ug/L
Turbidity	5 Units
Zinc	5.0 mg/L
Total Dissolved Solids	1,000 mg/L
Specific Conductance	1,600 μS/cm
Chloride	500 mg/L
Sulfate	500 mg/L

Regulation Resources
Code of Federal Regulations (CFR)

Regulations.gov
California Code of Regulations (CCR)
California Legislative Info





Environmental Website List

<u>U.S. EPA</u> Regional Office Locations Region 9 U.S. EPA Staff Directory	www.epa.gov www.epa.gov/aboutepa/where.html www.epa.gov/aboutepa/region9.htm cfpub.epa.gov/locator/index.cfm	(415) 947-8000
Cal/EPA Air Resources Board Department of Pesticide Regulation Department of Toxic Substances Control Office of Environmental Health Hazard Assessment State Water Resources Control Board Los Angeles Regional Water Quality Control Board Cal/EPA-wide Staff Directory	www.calepa.ca.gov www.arb.ca.gov www.cdpr.ca.gov www.dtsc.ca.gov oehha.ca.gov www.swrcb.ca.gov www.swrcb.ca.gov/rwqcb4 www.calepa.ca.gov/StaffDirectory/	(916) 323-2514 (800) 242-4450 (916) 445-4300 (916) 324-1826 (916) 324-7572 (916) 341-5250 (213) 576-6600
Energy Agencies International Energy Agency (IEA) U.S. Energy Information Administration U.S. Department of Energy California Energy Commission Vehicle Fuel Economy	www.iea.org www.eia.gov www.energy.gov www.energy.ca.gov www.fueleconomy.gov	(202) 586-8800 (202) 586-5000 (916) 654-4287
Other California Departments and Local Agencies California Department of Water Resources California Department of Public Health Department of Resources Recycling and Recovery California Local Air District Directory South Coast Air Quality Management District	www.water.ca.gov www.cdph.ca.gov www.calrecycle.ca.gov www.arb.ca.gov/capcoa/roster.htm www.aqmd.gov	(916) 653-5791 (916) 558-1784 (916) 322-4027 (909) 396-2000
Chinese Agencies Ministry of Environmental Protection, China Taiwan Environmental Protection Administration Hong Kong Environmental Protection Department Macau Environmental Protection Bureau	www.mep.gov.cn www.epa.gov.tw www.epd.gov.hk www.dspa.gov.mo	
Associations Association of California Water Agencies California Air Pollution Control Officers Association Southern California Association of Governments American Lung Association Intergovernmental Panel on Climate Change (IPCC)	www.acwa.com www.capcoa.org www.scag.ca.gov www.lungusa.org www.ipcc.ch	(916) 441-4545 (916) 441-5700 (213) 236-1800 (202) 785-3355
Air Quality and Radiation Monitoring Air Quality Radiation	www.airnow.gov www.epa.gov/radiation/rert/radnet-da	ta-map.html

www.gpo.gov/fdsys/

www.regulations.gov www.calregs.com www.leginfo.ca.gov

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海外華人環境保護學會 (CIE-OCEESA) 2013 年度理事會

職務	姓名	Name	Affiliation	Photos
會長 (2013)	郭繼汾	Jeff Kuo	California State University, Fullerton, CA	
副會長 (2013)	溫俊山	Jason Wen	City of Downey, California	
財務/ 秘书長 (2013)	施凱閔	Kaimin Shih	University of Hong Kong	
理事 (2012-13)	范盛裕	Steven Fan	Los Angeles Hyperion Plant	
理事 (2012-13)	蔣晨陽	Sunny Jiang	University of California, Irvine, CA	
理事 (2012-13)	劉成均	Clark Liu	University of Hawaii	
理事 (2013-14)	曹晏	Yan Cao	Western Kentucky University, Kentucky	
理事 (2013-14)	陳飛	Fei Chen	Lawrence Berkeley National Lab., Berkeley, CA	
理事 (2013-14)	曾仲弘	John Tzeng	OC Waste & Recycling, Irvine, CA	
理事 (2013-15)	張守玉	Shoou-Yuh Chang	North Carolina A&T State University	
理事 (2013-15)	吳基銜	Eric Wu	CalEPA LA Water Quality Control Board	(m) you
理事 (2013-15)	吳知行	Jy-Shing Wu	University of North Carolina, Charlotte	
上届會長 (2012)	蕭台戈	David Shaw	State University of New York at Buffalo	
常務秘书長	洪永哲	Yung-Tse Hung	Cleveland State University, Ohio	





海外華人環境保護學會歷年會長 OCCEESA Presidents

1980	Robert H Howe *Deceased	侯希臨
1981	Howard Ju-Chang Huang	黃汝常
1982	Edward Shing-Ke Chian	錢興格
1983	Eugene Y. His *Deceased	席與錚
1984	Allen Chia-Chen Chao	趙家珍
1985	Yung-Tse Hung	洪永哲
1986	Charles Chi-Su Chou	周基樹
1987	James Wen-Chi Ku	谷文琦
1988	Wei-Chi Ying	應維琪
1989/9	o Lawrence Kong-Pu Wang	王抗曝
1991	Don Tsye-Lang Tang	唐次朗
1992	Chin-Pao Huang	黃金寶
1993	Thomas Shen *deceased	沈 鐸
1994	James Shia-Pin Whang	黃夏平
1995	Ching-Tzone Tien	田慶宗
1996	Jen-Tai Yang	楊仁泰
1997	Shoou-Yuh Chang	張守玉
1998	John Chao-Piao Huang	黃肇鑣
1999	Oliver Jing-Ching Hao	郝晶瑾
2000	Chang-Lu Lin	林昌爐
2001	Tsen-Cheng Wang	王增辰
2002	Anmin Liu	劉安民
2003	Edward T. Chen	陳天生
2004	Chein-Chi Chang	張建祺
2005	Yung-Sung Cheng	鄭永松
2006	Francis Hun-I Chang	張恆一
2007	Pao-Chiang Yuan	袁保強
2008	Clark Chen-Kun Liu	劉成均
2009	Wei-Yin Chen	陳惟寅
2010	Wei-Ping Pan	潘偉平
2011	Charles Qun Cheng	程 群
2012	David Shaw	蕭台戈
Execut	tive Director/1986-present	洪永哲
Deput	y Exec. Director/2012-present	劉安民

OCEESA LIFE MEMBER (as Aug. 1, 2013)



Chang, Shooh-Yuh	張守玉
Cheng, Roger	鄭均華
Chang, Ning-Wu	張寧武
Chen, Wei-Yin	陳惟寅
Cheng, Charles	程 群
Cheng, Yung Sung	鄭永松
Chou, Rebecca	許仙育
Fan, Steve	范盛裕
Fang, Herbert H.P.	方漢平
Fang, William D. Q.	方丹群
Huang, Chin-Pao	黄金寶
Huang, John C.P.	黃肇鑣
Hung, Yung-Tse	洪永哲
Jiang, Sunny	蔣晨陽
Koo, David	顧偉德
Ku, Wen-Chi (James)	谷文琦
Kuo, Jeff	郭繼汾
Liao, Paul	廖保和
Lin, Chang-Lu	林昌爐
Liu, Anmin	劉安民
Clark C.K. Liu	劉成均
Lu, James	呂政雄
Pan, Wei-Ping	潘偉平
Rezania, Lih-in Wang	王莉茵
Shaw, David	蕭台戈
Shih, Kaimin	施凱閔
Wen, Jason	温俊山
Wong, Joseph M.	黄鳴立
Yau, Richard	姚大凱
Ying, Wei-Chi	應維琪
Yuan, Pao-Chiang	袁保強
Zhang, Peter	章 華

Founding Documents of OCEESA & MTEPC

Professor Hung 洪永哲 spent numerous hours to collect valuable documents related to the founding of OCEESA and MTEPC. These documents are in its original raw form and contain many scanned pages. With limited space in this booklet, these documents will be uploading onto our website: www.OCEESA.Org.

The following is the highlight events of OCEESA in the past 33 years. Many events have been planned and successfully executed. We should thank the contribution of the past officers, directors and members.

OCEESA 大事記 Important Milestones of OCEESA Yung-Tse Hung, Ph.D., P.E., DEE 洪永哲

May 14, 1980 OCEESA was established at Purdue University, West Lafayette, Indiana, USA. First OCEESA annual membership meeting was held at Purdue University, West Lafayette, Indiana on May 14, 1980. The OCEESA annual meetings coincided with Purdue Industrial Waste Conference.

The association name was chosen by voting of members present, as Overseas Chinese Environmental Engineers Association (OCEEA) 中國旅美術成工程學會

OCEESA directors and officers were elected during the meeting.

Dr. Robert Hsi-Lin Howe 侯希臨 was elected as First OCEESA President from May 1980 to May 1981. Dr. Howard Ju-Chang Huang 黃汝常 was elected as OCEESA Vice President from May 1980 to May 1981. Dr. Charles Chi-Su Chou 周基樹 was elected as Secretary-Treasurer from May 1980 to May 1981. OCEEA newsletters were published in 1980.

May 13, 1981: Second OCEESA annual membership meeting was held at Purdue University, West Lafayette, Indiana, USA. Dr. Howard Ju-Chang Huang 黃汝常 was elected as OCEESA President

Dr. Edward Shing-Ke Chian 錢興格was elected as OCEESA President from. Dr. Kuo-Chung Tsai 蔡國鈞 was elected as Secretary-Treasurer

May 12, 1982: Third OCEESA annual membership meeting was held in Room 320, Stewart Center, Purdue University, West Lafayette, Indiana on May 12, 1982. Dr. Edward Shing-Ke Chian 錢興格was elected as OCEESA President. Mr. Eugene Y. Hsi 席與錚was elected as OCEESA Vice President Dr.

Yung-Tse Hung 洪永哲was elected as Secretary-Treasurer.

May II, 1983: Fourth OCEESA annual membership meeting was held at Purdue University, West Lafayette, Indiana. Eugene Y. Hsi 席與錚was elected as OCEESA President from. Dr. Allen Chia-Chen Chao 趙家珍was elected as OCEESA Vice

President. Dr. Yung-Tse Hung 洪永哲continued his second year as OCEESA Secretary-Treasurer.

May 9, 1984: The 5th OCEESA annual membership meeting was held at Purdue University, West Lafayette, Indiana. Dr. Allen Chia-Chen Chao 趙家珍was elected as OCEESA President. Dr.

Yung-Tse Hung 洪永哲was elected as OCEESA

Vice President Dr. James Wen-Chi Ku 谷文琦was elected as Secretary-Treasurer. Draft OCEESA constitutions and by-laws were distributed during annual meeting. The name of association was changed from Overseas Chinese Environmental Engineers Association (OCEEA) to Overseas Chinese Environmental Engineers and Scientist Association (OCEESA)

海外華人環境保護學會 First issue of OCEESA Journal was published in January 1984. Dr. Yung-Tse Hung was appointed as Founding Editor-in-Chief of OCEESA Journal in January 1984. He is still serving in the same position in 2013.





April 22, 1985: OCEESA application to Ohio Secretary of State for Non-Profit Corporation status was approved.

May 15, 1985: The 6th OCEESA annual membership meeting was held at Purdue University, with over 30 people attending. Dr. Yung-Tse Hung 洪永哲was elected as OCEESA President. Dr. Charles Chi-Su Chou 周基樹was elected as OCEESA Vice

President. Dr. James Wen-Chi Ku 谷文琦continued his second year as Secretary-Treasurer.

August 16, 1985: OCEESA application to IRS tax exempt status (IRS 501 c3) was approved by IRS on August 16, 1985. Starting 1985, OCEESA Journals and newsletters have been sent to NTIS (National Technical Information Services) for filing. They are available for purchase from NTIS.

1986: First OCEESA Best Paper Award competition (1986 OCEESA Best Paper Award competition) was held in 1986 based on M.S. or Ph.D. dissertation research conducted in universities in Taiwan and mainland China.

May 13, 1987: The 8th OCEESA annual membership meeting was held in Stewart Center, Purdue University, West Lafayette, Indiana, USA at 8:30 pm on May 13, 1987, with 11 people attending. Due to low attendance at the annual meeting, it was decided to elect OCEESA directors and officers by mail ballots. Dr. James Wen-Chi Ku 谷文琦was elected as OCEESA President

February 3-4, 1990: Dr. Don Tyse-Lang Tang, OCEESA Vice President in 1989-1990, attended CIE/USA National Council meeting on behalf of OCEESA, in San Francisco, California. The two representatives of are Dr. Lawrence Kong-Pu Wang 王抗曝, OCEESA President in 1989-1990 and

唐次朗, Dr. Sun-Nan Hong, OCEESA Director, was Chairman, National Council, CIE/USA, in 1989.

December 7-19, 1990: Lawrence Kong-Pu Wang 王抗曝, President Don Tsye-Lang Tang 唐次朗, OCEESA Vice President attended Modern Engineering and Technology Seminar (METS), Taipei, Taiwan. Dr. Wang also chaired environmental protection session. May 15, 1991: The 1991 Board of Directors annual meeting was held in Purdue University, West Lafayette, Indiana,

January 6-11, 1992: Seven members, including Dr. Ker-Chi Chang, Dr. Shoou-Yuh Chang 張守玉, Dr.

Chin-Pao Huang 黃金寶, Dr. John Chao-Piao

Huang 黃肇鑣, Dr. Don Tsye-Lang Tang 唐次朗,

Dr. Mu-Hao Sung Wang宋慕浩, Dr. Chieh Wu, attended National Development Seminar, from January 6-11, 1992, Taipei, Taiwan.

September 23-28, 1992: First Mainland-Taiwan Environmental Technology Seminar, Shanghai, China, co-sponsored by Tongji University, Shanghai, China, Cheng Kung University, Taiwan, and OCEESA.

July 3-5, 1993: Three OCEESA members, Dr. John Chao-Piao Huang 黃肇鑣, Mr. Anmin Liu 劉安民,

Dr. Don Tsye-Lang Tang 唐次朗, served as session chair, for 1993 North America Chinese Academic Conference, in Chicago.

December 11-20, 1994: Three OCEESA members, Dr. James Shia-Pin Whang 黃夏平, Dr. Don Tsye-Lang

Tang 唐次朗, and Dr. Ching-Tzone Tien 田慶宗, attended 15th Modern Engineering and Technology Seminar (METS) in Taipei, Taiwan. Dr. Tang is Vice Chairperson. Dr. Whang is session chairperson of environmental protection and energy session.

1994: A total of 24 regular members and 1 student member joined OCEESA as regular member and student member in 1994. This is the highest number of members joining OCEESA in one year in OCEESA history.

January 21-22, 1995: First International
Environmental Protection Conference, San
Francisco, California. Co-sponsored by OCEESA,
Chinese American Environmental Protection
Association, Mid-West Overseas Chinese
Environmental Engineers and Scientists
Association, Southern California Chinese American
Environmental Protection Association. Dr. James
Shia-Pin Whang 黃夏平 OCEESA President in 1994
was the organizer for OCEESA. Surplus of about
\$30,000 started OCEESA President's bank account.
The fund was used to help travel expenses for

OCEESA representatives to attend NC meeting, CIE/USA.

March 1995: Dr. Lawrence Kong-Pu Wang 王抗曝 OCEESA President in 1989-1990 was appointed as Senior Interregional Advisor, United Nations Industrial Development Organization, Industrial Sector and Environmental Division, Vienna, Austria. Dr. Wang is one of the highest ranking environmental officials of Chinese origin in the United Nations.

March 1995: Dr. Chang-Lu Lin 林昌爐, OCEESA member, was promoted to Assistant Deputy Minister, Nova Scotia Department of the Environment, Nova Scotia, Canada. Dr. Lin is one of the highest ranking environmental officials of Chinese origin in Canada.

September 1995: Dr. Paul Bao-Ho Liao 廖保和, OCEESA member, donated \$2000 toward travel subsidy for OCEESA members to attend 1995 MTETS (Mainland Taiwan Environmental Technology Seminar), Chung-Li, Taiwan.

December 16, 1996: A total of 17 OCEESA members attended the environmental management policy and environmental protection technology seminar at Taiwan National Environmental Protection Administration on December 16, 1996, 9 am to 5 pm. OCEESA members served as session chairs and made 10 paper presentations. The seminar was arranged by Dr. Jen-Tai Yang 楊仁泰 OCEESA President in 1996. OCEESA members received honorarium, which helped to pay most of travel expenses to Taiwan for attending 4th Mainland-Taiwan Environmental Technology Seminar, Chung-Li, Taiwan.

July 4-5, 1997: A total of 14 OCEESA members attended and presented papers at the 1997 International Chinese Sustainable development conference, Los Angeles. The conference was sponsored by Taiwan National Environmental Protection Administration and was organized by International Chinese Environmental Federation (ICEF) and Chinese Association for Sustainable Development.

July 21-22, 1997: Seven OCEESA members attended and presented papers at International Forum on Watershed Management: Policy, Science, and technology Charlottesville, Virginia. Dr. Shaw-Lei Yu余嘯雷 was the organizer of the forum. Dr. Jen-

Tai Yang 楊仁泰 OCEESA President in 1996 was the project officer of the funding agency, USEPA and gave opening speech at the forum.

May 26-30, 1998: 5th Mainland-Taiwan Environmental Technology Seminar, Nanjing, China, December 17-19, 1996. It was co-sponsored by Southeast University, Nanjing, China, Central Univ., Taiwan, and OCEESA.

May 7-11, 2000: Dr. Chang-Lu Lin 林昌爐, OCEESA President in 2000, attended Youth Commission Presidents' Conference in Taipei. September 16, 2000: Second OCEESA Round Table Meeting Washington, D.C.

October 14 to 26, 2001: The 5th SATEC, Sino-American Technology and Engineering Conference (SATEC'01), was held in China.

October 14-18, 2002: 8th Mainland-Taiwan Environmental Technology Seminar, Hsin-Chu, Taiwan. It was co-sponsored by Jiaotong Univ. Taiwan, Wuhan Univ, Wuhan, China.

September 5-6, 2003: 2003 Environmental Summit & Expo was held on September 5-6, 2003, Houston, Texas. Several OCEESA members attended the conference. It was organized by 陳天生.

October 2005: OCEESA Journal special issue was dedicated to the memory of Dr. Thomas To Shen

沈鐸 OCEESA President in 1993, who passed away on March 26, 2005.

March 31, 2007: OCEESA sponsored 2007 Asian American Engineer of the Year Award (AAEOY), Washington, D.C. Dr. Francis Hun-I Chang

張恆一, OCEESA President in 1996, was the organizer for the event. Surplus of \$13001.37 was transferred to OCEESA President's account with Bank of America account.

April 10-12, 2009: 2009 Urban Water Environment Symposium and Steering Committee Meeting of Mainland-Taiwan Environmental Protection

Conference, Tianjin, China. The conference was jointly organized by Tianjin Institute of Urban Construction, Tianjin, China, General Secretariat Office, MTEPC, Shanghai, China and OCEESA.

October II to 18, 2009: sponsored OCEESA Workshop and Meetings in Shanghai and Wuhan.



OCEESA cosponsored Joint East China University of Science and Technology-OCEESA Seminar, Shanghai.

March 16, 2011: OCEESA co-sponsored Mainland-Taiwan Air Quality and Climate Workshop, Kona, Hawaii, March 16, 2011.

November 7, 2011: OCEESA sponsored CHUMT-OCEESA Seminar, held at Chung Hwa University of Medical Technology, Tainan, Taiwan.

November 2-6, 2012: 15th Mainland-Taiwan Environmental Technology Seminar, Guilin, China. It was co-sponsored by Guilin Univ. of Science & Technology, Guilin, China, Cheng Kung Univ., Tainan, Taiwan, and OCEESA.



編後記 Editor's Note



I would like to thank all OCEESA members and friends who send in their professional career highlights and articles for the special issue. The dedicated services of special issue committee are greatly appreciated.

洪永哲

紀念專刊 - 編輯委員會

黃肇鑣 John C P Huang - Editor 洪永哲 Yung-Tse Hung - Coeditor 張守玉 Shoou-Yuh Chang Yung-Sung Cheng 鄭永松 程 群 Charles Qun Cheng 劉成均 Clark C K Liu 劉安民 Anmin Liu 蕭台戈 David Shaw (cover design) Jason Wen(format/printing) 溫俊山



首先謝謝編輯委員收集資料並 努力寫稿、再多謝許多會員提 供文稿供獻意見、使特刊有些 價值。就廣度來說我們有來自 美國東部的8位會員、中部和 南部址位、西部7位;加拿大

兩位、香港兩位、台灣和中國大陸各一位朋友、共 32 位,總共有 44 篇長短文稿。就深度來說: 有黃汝 常的 OCEESA 創辦前後的過程、有黃夏平為兩岸 環保交流出錢出力出時間的努力、有楊仁泰在美國 EPA 主持 Greater China 項目的策劃結果,還有鄭永 松和張守玉介紹中工會活動的詳情、劉成均寫了三 編大作、程群貢獻了四篇活動報道,駱尚廉和夏四 清寫海峽兩岸環境保護研討會之回顧、洪永哲花許 多時間收集了創建時的原始文獻和 16 位老會員的 資料。附錄中有溫俊山收集的環保法規和數據很值 得參考。

為編輯此紀念特刊和多位老會友再次連絡上、看了 許多寄來和保存的資料及相片、使我回憶起多年來 在美中台三地參加的研討會、深感人生時鐘向東移 了,對中國,我們嚮往它的大地和古老文明,以及 它釋放的潛力;對台灣,驕傲它人民的勤奮,以及 它旺盛的生命力;對美國,沈醉它四面八方的開放 與無所不在的人性尊嚴。

對年輕一代從事環保和科技界的朋友,也許我們可 以引用著名經濟學家高希均教授的話「美國提供了 孕育成長的氣候,台灣提供了參與的機會,大陸提供 了可以發展的舞台。不論身在何處,在人才快速流 動的扁平世界中,做為一個華人,中國人,台灣人,常常 提醒自己要儘量能擁有:中華情,人文心,世界觀。」 環保將是 21 世紀全球最重要的目標之一、希望藉 此洛杉磯的聚會、和海內外華人朋友共勉之。

黃肇鑣 2013-8-10

OCEESA Programs - MTEPC



CIE-USA SATEC Program















CIE-USA - METS Program



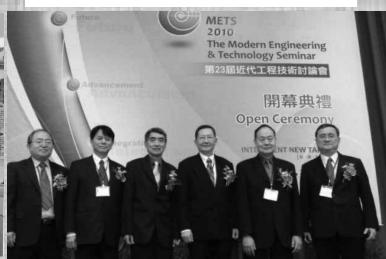
1970 孫運璿先生(左起第四位)親自到機場迎接 METS美方講員



2000 METS CIE-USA 召集人團隊拜訪孫運璿資政



METS-2000美方籌會 黃肇鑣(左三) 等人面見工研院院長李鐘熙



2010 METS 2010美方籌備委員 (左起 邱建興,方玉山,鄭永松,吳同慶, 陳錦江,林嘉孚)







CIE-USA AAEOY





Tel:301-738-8161 Fax:301-738-8163

融徵(全版、录版) 廣告業務代表、工商記書 主助積極,有經驗尤佳,需具合法身分 本報福利佳,特遇好,有醫療保險、 年假、401K 退休金、年終奠金等福利。

一月三十日,美洲中國工程師學會在華盛頓市區的Hotel Washington舉行年度頻獎晚宴。學會向第一位亞以太空科 學家王擴駿、前普林斯頓大學工學院院長靠潛光頻發傑出科技 獎。美國勞工部長趙小蘭到會祝賀,並發表演講。美洲中國工程 師學會本屆主席張恆一主持晚宴。

超小蘭在鼓詞時首先向護獎的主體 較等四位權出的工程師表示視實。始 接著說。今晚我想師談一點兒我們關家 的經濟,勞工部在拓展亞太齊發展機會 方面所驗的事情。分享一些看法,這沙 及到在我們的關家里今天所具有的發展 針針有報道說中國在今年一月進行

數。但是,這個群體卻不善於為自己學 取社會地位,蘇得應有的尊重。 針對有報道說中國在今年一月進行 了推吸在執衛屋的武器試驗,王體酸表









