Chinese-American Engineers and Scientists Association of Southern California



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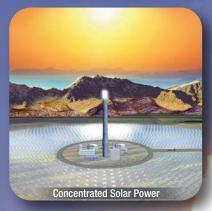
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CESASC 50<sup>th</sup> Anniversary Gala *April 22, 2012* Millennium Biltmore Hotel Los Angeles

50th Year Special Edition Journal つ い 五十週年紀念特刊 〜 Pratt & Whitney Rocketdyne congratulates the Chinese-American Engineers and Scientist Association of Southern California on the occasion of its 50th annual convention.

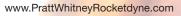






We provide Clean Energy solutions. Our experience spans 50 Years of Rocket Engine and Energy Experience.







Pratt & Whitney Rocketdyne

# CESASC 50<sup>th</sup> Year Special Edition Journal 南加州中華科工學會五十週年紀念特刊

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# A Message from CESASC 2011-2012 Board of Directors

April 22, 2012

Dear Honorable Guests, CESASC Members and Friends:

It's a distinct honor to welcome you to the CESASC 50<sup>th</sup> Anniversary Gala in celebrating together for a half century experiences and achievements of Chinese-American engineers and scientists, for their growth, contribution, and excellence.



Members of CESASC 2011-2012 Board of Directors with Congresswoman Dr. Judy Chu

Words can't express our deepest gratitude to many individuals who have contributed so much towards CESASC's development since 1962. As **"Retrospect and Prospect"** is the theme of our 50th Milestone Anniversary, we are honored to invite Henry Chi, Dr. Lois Chi, Dr. Shu Chien, Dr. Yuan-Cheng Fung, Dr. Charles Sie, Mr. John Sie, Dr. John Tu and Dr. Theodore Wu to serve on the CESASC 50th Honorary Committee. In addition, a CESASC 50th Anniversary Gala Event Committee has been formed since 2010 summer to initiate planning of the 50th Convention. Special thanks go to Gala Committee members George Chao, Shirley Ho, Elizabeth Kay-Im, Wei Kao, Munson Kwok, Suellen Kwok, Shan Lee, Tung-Po Lin, Edward Liu, Yiu Man So, and Jason Wen for their wise counsel and guidance during the past two years.

To publish the CESASC 50th Special Edition, over 30 writers including our former presidents, board & committee members, as well as CESASC supporters and friends, have devoted countless hours to including CESASC's history into this milestone journal. From the summary of CESASC's first 50 years to the highlights of five separate decades, and from the outlines of CESASC major functions to the new generation related topics, the Special Edition will be a major historical resource for the development of CESASC's future. Special appreciation is extended to Dr. Liping Yan, the Editor in Chief, for his dedicated effort for this historical publication!

During the CESASC 50th Convention and Awards Ceremony, we are honored to have Dr. Shu Chien, University Professor of UC San Diego, as our Keynote Speaker. The CESASC Lifetime Achievement Award and Achievement Award will be presented to Dr. Li-San Hwang and Dr. Cun-Yu Wang, respectively. Furthermore, Dr. Jiin-Jen Lee, Suellen Cheng, Li-Jean Wang and Cecilia Yu will be the recipients of CESASC Appreciation Awards. Additionally, we will continue to present scholarships to undergraduate and graduate students. Congratulations to all honorees!

On behalf of CESASC, we would like to thank all of our sponsors, board and committee members, and volunteers. Without their generosity, dedication, and hard work, the success of CESASC's 50th Convention would not have been possible.

Thank you all for coming and may you have a memorable evening!

**Retrospectively and Prospectively**,

Syrato

Shirley Ho, M.S. (張翠姝) Chairwoman of the Board (2011-2012) CESASC 50<sup>th</sup> Gala Event Committee Chair

Jason J. Wen, Ph.D., P.E. (溫俊山) President of CESASC (2011-2012) CESASC 50<sup>th</sup> Convention Chair



#### The Secretary of Energy Washington, DC 20585

April 2012



Greetings to friends at the 2012 Chinese-American Engineers and Scientists Association of Southern California!

Congratulations to CESASC for 50 years of outstanding service and commitment to the fields of engineering, science, and public service. I feel particularly connected to the success of this organization, as my father served as its President in 1968 and received the CESASC Achievement Award in 1988.

Professional seminars and workshops like those of CESASC showcase the impressive achievements of Chinese-American engineers and scientists, and provide an important bridge between the professionals across the Pacific. I wish to congratulate Dr. Li-San Hwang, this year's Lifetime Achievement Award Recipient and Dr. Cun-Yu Wang, this year's Achievement Award Recipient.

While I will not be able to join you this year, please accept my best wishes for a joyful celebration of 50 years of success.

Sincerely,

Sun Chn

Steven Chu





### OFFICE OF THE GOVERNOR

April 22, 2012

# Chinese-American Engineers and Scientists Association of Southern California

Congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) for 50 years of service in Southern California.

I commend CESASC and the Board of Directors for your commitment to the exchange of science and engineering knowledge and for providing engineering expertise, professional knowledge and services to technologists throughout Southern California. The Achievement Awards and youth scholarships you provide encourage creativity, inventiveness, and innovation among all technical professionals and continue to look toward a future of technology and the participation of Chinese-Americans in it.

I thank those who have worked hard to produce tonight's event. Best wishes for every future success.

Sincerely, Jerry Kloun Edmund G. BROWN JR.



### JOHN CHIANG California State Controller



April 22, 2012

Chinese-American Engineers and Scientists Association of Southern California

Dear Friends:

I am honored to extend greetings to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) as it celebrates 50 years of success.

Since 1962, CESASC has built strong partnerships and enhanced economic growth opportunities for its members and Southern California communities. Through innovative programs, informative discussions and education, CESASC has expanded its prominence throughout engineering and science sectors. Through its scholarship program, CESASC remains committed to the higher education of engineering and science students.

This year, CESASC pays tribute to Dr. Shu Chien, Dr. Li-San Hwang and Dr. Cun-Yu Wang for their work as engineering and science pioneers. I congratulate all of you for receiving the CESASC 2012 Achievement Award for your contributions to your field and our greater community.

I wish all involved in CESASC's 50<sup>th</sup> Anniversary celebration many more years of success.

JOHN CHIANG California State Controller

Very truly yours,

STATE CAPITOL, ROOM 4090 SACRAMENTO, CA 95814 TEL (916) 651-4028 FAX (916) 323-6056

DISTRICT OFFICE 2512 ARTESIA BLVD., SUITE 320 REDONDO BEACH, CA 90278 TEL (310) 318-6994 FAX (310) 318-6733

WWW.SEN.CA.GOV/LIEU SENATOR.LIEU@SENATE.CA.GOV

April 22, 2012



CHAIR LABOR AND INDUSTRIAL RELATIONS

MEMBER APPROPRIATIONS ELECTIONS AND CONSTITUTIONAL AMENDMENTS INSURANCE VETERANS AFFAIRS



Dear Friends:

Please accept my warmest wishes as the Chinese-American Engineers and Scientists (CESASC) celebrate their 50<sup>th</sup> Anniversary Gala, Dinner and Dance: "Retrospect and Prospect."

I commend CESASC Board Members and members for their continuing efforts and commitment to the Chinese-American community and the promotion of technology professions. For fifty years, CESASC has been a dynamic leader in helping those in technology professions by providing career and educational advancement opportunities, technical exchange, fellowship, mentorship and community service. CESASC promotes scientific and technical knowledge exchange with peers around the world. It is important that we support the sciences and technology professions so that we continue to grow these industries which are California's competitive advantages.

CESASC's leadership, achievements and outstanding contributions to the global community serve as an inspiration to everyone. Thank you for all your hard work and dedication.

Congratulations and best wishes!

Sincerely,

W. Tren

**TED W. LIEU** SENATOR, 28<sup>th</sup> DISTRICT

STATE CAPITOL P.O. BOX 942849 SACRAMENTO, CA 94249-0049 (916) 319-2049 FAX (916) 319-2149

DISTRICT OFFICE 205 SOUTH CHAPEL AVENUE SUITE B ALHAMBRA, CA 91801 (626) 382-0049 FAX (626) 382-0048

www.assemblv.ca.gov/eng

April 22, 2012

MIKE ENG ASSEMBLYMEMBER, FORTY NINTH DISTRICT Ms. Shirley Ho **Chairperson of Board of Directors Chinese-American Engineers and Scientists** Association of Southern California (CESASC) 5474 West 76th Street

COMMITTEES Chair, Banking and Finance Business, Professions, and Consumer Protection Education Health Transportation

SELECT COMMITTEES High Speed Rail for California Immigration and the Economy Inland Empire Transportation Issues Procurement State School Financial Takeovers Workforce Development within the Developmentally Disabled Community



**Dear Shirley:** 

Los Angeles, CA. 90045

It is with great pleasure that I congratulate the Chinese-American Engineers and Scientists Association of Southern California's (CESASC) for hosting the 50th Anniversary "Retrospect and Prospect" Gala on April 22, 2012 at the Millenium Biltmore Hotel, in the City of Los Angeles.

Assembly

California Legislature

I especially commend CESASC and the Board of Directors for their continuing commitment to fostering the beneficial exchange of science and engineering knowledge and for providing engineering and professional knowledge and services to many technologists in Southern California. By celebrating the best role models through the Achievement Awards and Youth Scholarships, you encourage creativity, inventiveness, and innovation among all technical professionals, crucial to our society at this moment in history.

On behalf of the 49th Assembly District, I commend your commitment and dedication. Best wishes and good luck to your organization.

Sincerely,

mike End

MIKE ENG Assemblymember, 49th District





April 22, 2012



Ms. Shirley Ho Chairperson, Board of Directors Chinese-American Engineers and Scientists Association of Southern California 5474 West 76<sup>th</sup> Street Los Angeles, CA 90045

Dear Ms. Ho:

On behalf of the City of Los Angeles, I would like to extend my congratulations for the 50<sup>th</sup> Anniversary of the Chinese-American Engineers and Scientists Association of Southern California.

Thank you very much to the Chinese-American Engineers and Scientists Association of Southern California for your outstanding commitment and leadership in fostering the beneficial exchange of science and engineering knowledge and services to many technologists in Southern California.

I commend your efforts, successes, and dedication. I am proud to partner with the Chinese-American Engineers and Scientists Association of Southern California in improving the quality of life in the City of Los Angeles.

I extend my best wishes for a wonderful and memorable celebration.

Very truly yours,

ANTONIO R. VILLARAIGOSA Mayor



200 North Spring Street • Los Angeles, California 90012 Phone: (213) 978-0600 • Fax: (213) 978-0750 Email: mayor@lacity.org

B



DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT CORPS OF ENGINEERS P.O. BOX 532711 LOS ANGELES, CALIFORNIA 90053-2325 January 13, 2012

Office of the Commander and District Engineer

Shirley Ho, M.S. Chairwoman of the Board Chinese-American Engineers and Scientists Association of Southern California 11959 Mayfield Avenue, Unit #5 Los Angeles, California 90049

REPLY TO ATTENTION OF



Dear Ms. Ho:

I wish to extend my sincere congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) for your 50 years of dedication to the development of Chinese-American scientists and the recognition of their contributions to the field of science and engineering.

This year's theme, Retrospective and Prospective, forms not only the foundation of the scientific method, but is also the basis upon which CESASC was built and thrives.

This anniversary, as in years past, provides an opportunity to look back upon and celebrate the accomplishments CESASC members have made over the past 12 months. It offers a forum to acknowledge the ingenuity, the persistence and the collaboration that is necessary to successfully develop and implement engineering solutions that will benefit our community, our nation and the world. It's important that you do so.

Perhaps even more important, though, is to acknowledge the efforts of CESASC to look ahead, to assess engineering challenges, to brainstorm and to plan, not only for the specific engineering challenge of the moment, but for the future of the art of science itself.

Throughout my professional career, and even before that from my upbringing, I have been taught that above nearly all our other obligations is the importance of "Taking Care of People". I believe and adhere to this principle so strongly that I have added it to the Corps motto and established it as the guiding principle of the Los Angeles District: "Building Strong and Taking Care of People!".

It gives me a great deal of satisfaction to know that "Taking Care of People" is also foremost among the goals of CESASC. Through your Leadership Development and Mentor programs and the scholarships that are made possible by the generous contributions and efforts of your members, you are helping develop scientists who will bridge not only with their counterparts around the Pacific Rim, but also with future generations of scientists whose contributions to mankind I can only dream about.

I commend you on your history, your enthusiasm and your professionalism and for the many contributions your members and honorees have made to society. Make no mistake, however, as significant and beneficial as your achievements have been thus far, your greatest accomplishments will be realized in the future.

Thank you for allowing me to be a part of your celebration, and best wishes for a successful 2012.

#### "Building Strong and Take Care of People!"

Sincerely

R. Mark Toy, P.E. Colonel, US Arm Commander and District Engineer

425 North Los Angeles Street | Los Angeles, CA 90012 | TEL: 213 485-8484 | FAX: 213 485-0428 | www.camla.org



**ÎÎ** 

22 April 2012

Ms. Shirley Ho CESASC Chairwoman of the Board, 2011-2012 CESASC 50<sup>th</sup> Convention Chair Chinese-American Engineers and Scientists Association of Southern California 11959 Mayfield Avenue, Unit #5 Los Angeles, CA 90049

Dear Ms. Ho,

It is a great honor for the Friends of the Chinese American Museum to congratulate the Chinese-American Engineers and Scientists Association of Southern California during its 50<sup>th</sup> Milestone Convention, Awards, and Scholarship Fundraiser. Having recognized CESASC with its 2011 Excellence in Science and Engineering Award, FCAM upholds a deep respect for the achievements, history and mission of your organization.

The CESASC Achievement Awards, technical symposiums, scholarship and youth programs, industrial relations networks, and international advancement cooperation programs have served to develop the capabilities of Chinese-American Engineers and Scientists since 1962. FCAM is thankful for its relationship with CESASC and looks forward to new opportunities to present Chinese-American contributions to the advancement of science and technology in the United States since the Second World War.

FCAM's current exhibition, "Breaking Ground: Chinese American Architects in Los Angeles, 1945-1980," underscores the importance of preserving the stories of Chinese-American contributions to Southern California history and culture. We commend you for preserving this history and making it known to everyone.

With sincere regards,

Al Soo-Hoo President

Michael Durhemin

Michael Duchemin Interim Executive Director

# **UCLA** Engineering

#### HENRY SAMUELI SCHOOL OF ENGINEERING AND APPLIED SCIENCE

Department of Materials Science and Engineering

3111 Engineering V Box 159510 Los Angeles, CA 90095-1595

March 26, 2012

Ms. Shirley Ho Chair of Board Chinese–American Engineers and Scientists Association of Southern California 5474 West 76<sup>th</sup> St. Los Angeles, Ca 90045

Dear Ms. Ho:

It is with great pleasure that I extend my heartfelt congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) on the occasion of your 50<sup>th</sup> annual convention. Your scheme for this year, "Retrospect and Prospect", is particularly visionary in illustrating your accomplishments for the last half of a century.

As a member of the CESASC Scholarship Foundation back in 1980s when it was established, I have had the chance of observing the growing impact of CESASC activities to your members in advancing their careers, promoting technical exchanges and professional networking. In 2010, CESASC co-sponsored with UCLA and successfully held the 2<sup>nd</sup> International Symposium on Materials and Enabling Nanodevices (ISMEN) at the California NanoSystems Institute at UCLA. Many faculty from top ranked universities and major corporate R&D leaders from US, Taiwan, Hong Kong, Japan and China had attended the symposium. As the principle program organizer, I extend my sincere appreciation to CESASC for its support of the 2<sup>nd</sup> ISMEN Symposium in 2010, as well as to its continuing support for the 3<sup>rd</sup> ISMEN Symposium in 2012.

I commend CESASC for its continuing efforts in promoting scientific and technical information exchanges, providing scholarships and serving as a platform for promoting networking among academic institutions, industries, government agencies and your members. I offer my best wishes for a successful 50<sup>th</sup> anniversary celebration.

Sincerely,

J.-M. Yang Professor and Chair Department of Materials Science and Engineering University of California, Los Angels



2 Bingjiaokou Hutong, Beijing 100088, China Tel: +86 10 5930 0264, Fax: +86 10 5930 0140 E-mail: info@cae.cn, http://www.cae.cn

### 致美国南加州中华科学家工程师学会 成立50周年的贺信

#### 美国南加州中华科学家工程师学会:

值此南加州中华科学家工程师学会成立50周年之际,我谨 代表中国工程院表示热烈祝贺!

半个世纪以来,南加州中华科工学会积极组织和依靠华裔 科技界的专家学者,通过举办丰富多彩的科技研讨和学术交流 活动,为在美华裔科技人士和学子们提供了一个互相交流、增 进友谊、加强合作的有效平台,取得了显著成绩,在美国社会 产生了重要影响,为华裔科学家和工程师在美国的发展和进取 起到了积极作用,对中国科技的发展和经济建设、对促进中美 科技交流做出了积极贡献。

衷心祝愿贵会在今后的发展中取得更大的成绩,为中美两 国加强科技交流、深化科技合作作出更大的贡献。

周济 中国工程院

2012年3月31日

April 5, 2012



Ms. Shirley Ho, M.S. Chair of the Board Chinese-American Engineers and Scientists Association of Southern California (CESASC) 11959 Mayfield Ave., Unit #5 Los Angeles, CA 90049

Dear Ms. Ho and the CESASC Board:

On behalf of the Industrial Technology Research Institute, it is my pleasure to congratulate you on the occasion of the 50<sup>th</sup> CESASC Annual Convention featuring "Retrospect and Prospect".

In the past fifty years CESASC has made significant contributions to the promotion of interests, aspirations and professional advancement among Chinese-American engineers and scientists. I am glad that during this course CESASC and ITRI have had several constructive and fruitful collaborative activities, in the form of conference co-organizing and symposium keynote speech, expecting to enhance knowledge sharing particularly with respect to the process and mechanism of turning technology into business.

In a fast-pace economic re-structuring time, we look forward to continuing cooperation between CESASC and ITRI, to enable a further synergistic exchange which will benefit the future science and technology development.

Sincerely yours,

Fyro Min Skyn

Jyuo-Min Shyu, Ph. D. President Industrial Technology Research Institute Hsinchu, Taiwan



# **Editor's Note**

This special edition journal is a special gift dedicated to CESASC 50<sup>th</sup> anniversary. Retrospection of CESASC's glorious history is of great significance for the CESASC golden 50<sup>th</sup> anniversary celebration. Keeping accurate records of CESASC's events and people is a treasured heritage that we can pass on to the future. I am honored to be involved in preparing this gift!

The first CESASC event I participated in was the 1987 Technical Symposium, which was held on March 28, 1987 in the Westin Bonaventure Hotel. Since then CESASC has been always a part of my life. I did not miss any one of CESASC annual technical symposiums in the past quarter century. It's my great joy to witness this year's grand convention with the publication of this journal.

Many people deserve acknowledgment for their great contributions to this journal. I would like to thank my wife, Lihua Qiu (邱利華), for her understanding and support. I extend my appreciation to all members of CESASC Board of Directors, especially Shirley Ho (張翠姝), whose enthusiasm and spirit of service are remarkable and inspiring. Without the contributing authors' efforts, this journal's publication would not be possible. My deep gratitude goes to all of them.

May all of us continue to serve as we are making the history of CESASC's next 50 years. May CESASC be a blessing to our community forever!

Ang Jun

Liping Yan (顏利平), Ph.D., P.E. Editor in Chief



### **Generation Dialogue between Present and Future**

April 22, 2012 (Sunday) 2:00pm – 4:00pm

As part of the CESASC 50<sup>th</sup> Convention, CESASC will hold a special daytime program **Generation Dialogue between Present and Future** from 2:00pm to 4:00pm on April 22. The program is designed to provide a unique mentoring opportunity in a form of open panel discussion for young students in the early stages of their academic and career endeavor. The panelists are composed of CESASC Achievement Awardees and other well-established Chinese Americans in the field of science and engineering, who represent the present, and CESASC Scholarship recipients with great potentials who represent the future. The event is free and open to the public.



**CESASC 50<sup>th</sup> Anniversary Gala** For the Benefit of CESASC Scholarship Foundation "Retrospect and Prospect"

> Sunday, April 22, 2012 Crystal Room, Millennium Biltmore Hotel

#### Program

#### 5:00 p.m. Registration/No-Host Bar

Banquet	
Masters of Ceremonies	Elizabeth Kay-Im, Dr. Munson Kwok
	Shirley Ho & Shan Lee
	Henry & Lois Chi
	Slideshow
"Recognition of Past Presidents"	Slideshow
Dinner	
Entertainment I: Ballroom Dance	Dr. Benjamin Kwan & Monika Dubovska
Entertainment II: HIP-HOP Dance	Kaba Kids
President Remarks	Dr. Jason Wen
Introduction/Keynote Speech	Dr. Munson Kwok/Dr. Shu Chien
"Life and S	cience"
Dr. Shu Chien (	·錢 煦博士)
•	
University of Califor	rnia, San Diego
Award Presentations	CESASC Board
Lifetime Achievement A	Award Presentation
Dr. Li-San Hwang	(黃立三博士)
Former CEO and Chairm	an, Tetra Tech, Inc.
Achievement Awar	d Presentation
Dr. Cun-Yu Wang	(王存玉博士)
No-Hee Park Endowed I	Professor and Chair
Division of Oral Biolo	gy and Medicine,
School of Dentistry, University	of California, Los Angeles
Corporate Awards Presentation	Shan Lee
Scholarship Awards Presentation	Dr. Yutao He
Appreciation Awards Presentation	Shirley Ho & Dr. Jason Wen
2012 Board Installation	Shirley Ho
Entertainment III: Tenor Solo	Yaowen Hong
Entertainment IV: Face Mask Changing	Xiaoren Liu
Dance/DJ	Philip Entertainment Production Inc.
	Masters of Ceremonies         National Anthem/Welcome



# **CESASC 50<sup>th</sup> Convention Keynote Speaker**



#### Dr. Shu Chien (錢煦院士)

University Professor and Y.C. Fung Professor of Bioengineering and Medicine Director, Institute of Engineering in Medicine University of California, San Diego

Dr. Shu Chien received his medical degree from National Taiwan University and Ph.D. (Physiology) from Columbia University. He was a faculty at Columbia University (Physiology) until 1988 when he came to University of California, San Diego (UCSD), where he is University Professor and Y.C. Fung Professor of Bioengineering and Medicine and Director of the Institute of Engineering in Medicine (IEM). The IEM has the mission of applying engineering concept and technology to enhance medical research and the delivery of healthcare. Dr. Chien is also Director of the UC System-wide Bioengineering Institute of California that synergizes the bioengineering activities among the ten UC campuses, including annual symposia.

Dr. Chien has made seminal contributions to advancing the integrative approach of research at the interface of biology, medicine and engineering. His primary areas of research are cardiovascular regulation, molecular and cellular bioengineering, endothelial cell mechanotransduction, and regulation of stem cell fate by the microenvironment. He is the author of over 500 peer-reviewed scientific articles and the editor of eleven books.

Dr. Chien has been Presidents of the American Physiological Society, Microcirculatory Society, International Society of Biorheology, and Biomedical Engineering Society, as well as the Federation of Societies of Experimental Biology (FASEB) and American Institute of Medical and Biological Engineering (AIMBE). He was Chair, Co-Chair or Honorary Chair of the First World Congress of Biomechanics (1990), Biomedical Engineering Society Annual Meeting (1997), International Congress of Physiological Sciences (2005), International Congress of Biorheology (2005), 7<sup>th</sup> Congress of Federation of Asian & Oceanian Physiological Societies (2011), and IEEE EMBS Meeting (2012).

Dr Chien is an Honorary Member of four professional societies, including being the only living honorary member of the Chinese Association of Physiological Sciences and IEEE Engineering in Medicine and Biology Society. He is a Fellow of IAMBE, American Institute of Medical and Biological Engineering, Biomedical Engineering Society, and American Society of Mechanical Engineers. He has been bestowed Honorary Doctoral Degrees by Columbia University and five universities in China Mainland and Taiwan, and is an Honorary Professor at nine universities.

Dr. Chien has received numerous awards and honors, including the Melville Medal (twice), Landis Award, ALZA Award, Zweifach Award, Galletti Award, Poiseuille Medal, and the Founders Award of the National Academy of Engineering. He was selected as Asian American Engineer of the Year (2005), LEE Kwan Yew Distinguished Visitor (2008), and recipient of Taiwan's National Health Medal (1998), and Presidential Science Prize (2009). He is a Laureate of U.S. National Medal of Science, receiving the medal from President Obama in October 2011.

Dr. Chien is one of eight scientists who are Members of all three U.S. National Academies (National Academy of Sciences, National Academy of Engineering, and Institute of Medicine), as well as the American Academy of Arts and Sciences. He is also a Member of Academia Sinica in Taiwan and a Foreign Member of the Chinese Academy of Sciences in Beijing.



# **CESASC 50<sup>th</sup> Anniversary Gala** Lifetime Achievement Award Recipient



Dr. Li-San Hwang (黃立三博士) Former CEO and Chairman Tetra Tech, Inc.

Dr. Li-San Hwang received his B.S. in Civil Engineering from National Taiwan University, and his M.S. from Michigan State University in 1962. He received his Ph.D. in Civil Engineering from the California Institute of Technology in 1965.

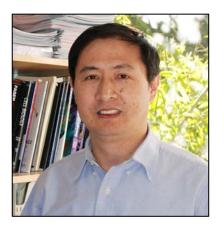
Dr. Hwang joined Tetra Tech in 1967. In a short time, Dr. Hwang was able to secure many projects and attracted many talented engineers. In 1974, Dr. Hwang was named Vice President. Under his leadership, Dr. Hwang's division developed numerous unique models to solve complex environmental and water resource problems, notably tsunami generation and propagation, storm surge and coastal flooding, ecological issues, and watershed management. These models were instrumental in solving the complex problems faced by clients.

In 1982, Tetra Tech was acquired by Honeywell. Subsequently, Honeywell incorporated the company's defense-related business into its principal business. The Water Management Group left in Tetra Tech was managed by Dr. Hwang. Later he expanded the business into coastal pollution discharge and hazardous waste management. In 1987, Dr. Hwang was named President and CEO of Tetra Tech. In the following year, Dr. Hwang led a "management buy-out" of Tetra Tech from Honeywell. As an independent company, Tetra Tech's business grew rapidly, with revenue doubling from \$25 million to \$51 million in three years. To finance the company's growth and pay off existing bank debt, Tetra Tech went public in 1991.

After the company went public, Dr. Hwang led Tetra Tech to consistent strong growth, and increased profitability and return on investment. As a result, Tetra Tech was named by *Forbes*, *Fortune* and *Business Week* as one of the "Best Small Companies" a total of eight times. By 2003, Tetra Tech's revenue exceeded \$1 billion, and *Engineering News Record* (ENR) ranked Tetra Tech as the largest environmental consulting firm in the United States. From the "management buy-out" in 1988 until Dr. Hwang's retirement in 2006, the company's stock price increased 84-fold due to Tetra Tech's exceptional results and continual growth over that period.

Dr. Hwang published extensively. He was one of the world's leading experts in tsunamis, and served as an advisor to numerous government and professional society committees. Dr. Hwang received numerous professional awards, including the Entrepreneur of the Year Award for the Los Angeles region, and achievement awards from CESASC and the Monte Jade Science and Technology Association.

# **CESASC 50<sup>th</sup> Anniversary Gala Achievement Award Recipient**



# Cun-Yu Wang, D.D.S., PH.D. (王存玉博士)

Associate Dean for Graduate Studies No-Hee Park Endowed Professor Chair, Division of Oral Biology and Medicine, School of Dentistry University of California at Los Angeles

**Cun-Yu Wang**, D.D.S., Ph.D., is the Associate Dean for Graduate Studies and No-Hee Park Endowed Professor and Chair, Division of Oral Biology and Medicine, School of Dentistry, University of California at Los Angeles. Dr. Wang received his dental and medical training from both Peking University and Nanjing University. In 1990, he came to Forsyth Institute as a postdoctoral fellow to study oral inflammation and bone resorption. He went to the University of North Carolina at Chapel Hill to study Ph.D. in Molecular Biology and Genetics in 1995. He started his independent research career at The University of Michigan School of Dentistry in 1999. He was recruited to UCLA in 2007.

Dr. Wang works in three major areas related to human health: 1) Molecular signaling and therapeutics of cancer; 2) Molecular regulation of oral inflammation and infection; and 3) Molecular control of adult stem cell properties and craniofacial regeneration. He has made a landmark discovery on the regulation of cancer cell death by NF- B, a transcription factor associated with inflammation and immune responses. His work has been published in the very best journals including *Science, Cell, Nature Medicine, Cancer Cell, Nature Cell Biology, Lancet*, and *Nature Biotechnology*.

Wang is among the most highly-cited dentist scientists at the national and international levels. In 2005, National Institute of Dental and Craniofacial Research (NIDCR) recognized Wang's work by endowing him with a MERIT (Method to Extend Research in Time) Award to support his ongoing investigation in oral cancer. He has served on a variety of NIH study sections, and currently he is the charter member of the NIDCR Board of Scientific Counselors. He has also been the recipient of the 1999 IADR Young Investigator Award, the 2006 IADR/GlaxoSmithKline Innovation in Oral Care Award, the 2003 and 2009 IADR/AADR William J. Gies Award in Biological Research and the 2009 IADR Distinguished Scientist Award.

During his career, Wang has mentored over 30 students, postdoctoral fellows and visiting scholars, eight have started their independent academic careers in United States, China, and Korea. He was elected to the Institute of Medicine of National Academies which is one of the highest honors in medicine and public health in the United States in 2011.

CESASC Golden 50<sup>th</sup> Anniversary Celebration

# **CESASC 50<sup>th</sup> Anniversary Gala Corporate Award Recipients**

Jet Propulsion Laboratory/Caltech, Raytheon, Torrance Memorial Medical Center





Chi-Jiun Albert Chang (張其鈞)

Graduate Student, Political Science, UCLA



Jonathan Hsu (許瑞德)

Undergraduate Student, Mechanical Engineering, UCLA



Haodong Chen (陳吴東)

Graduate Student, Molecular, Cellular, and Integrative Physiology, UCLA



Kevin Daiqi Linghu (令狐代祺)

Graduate Student. Mathematics and Applied Mathematics, Caltech



Jun Deng (鄧君)

Graduate Student, Molecular, Cellular, and Integrative Physiology, UCLA



Xianting Ding (丁顯廷)

Graduate Student, Mechanical & Aerospace Engineering, UCLA



Jingran Ma (馬景然)

Graduate Student, Chemical Engineering, USC



Tong Qiu Yan (顏 瞳)

Undergraduate Student, Anthropology and Microbial Biology, UC Berkeley

CESASC would like to express its sincere thanks to the following donors for their generous support:

- Henry & Lois Chi (\$2,000) •
- Amy Emmendorfer (\$500)
- Li-San & Anne Hwang (\$2,000)
- Simon & Li Kung (\$300)

- Jiin-Jen & Sage Lee (\$1,000)
- Jin & Sharon Tso (\$200)
- Timothy & Cecilia Cc Yu (\$1,000)
- Southern California Edison (\$1,000)





Professor Jiin-Jen Lee (李錦珍教授) Professor and Director of the Foundation for Cross Connection Control and Hydraulic Research University of Southern California

Professor Jiin-Jen Lee was born in Hou-Lung, Taiwan. He earned a B.S. degree in civil engineering from National Taiwan University. He came to the United States in 1964 and earned a M.S. degree in 1966 from Utah State University specializing in hydraulics and water resources engineering. He earned his Ph.D. degree in civil engineering in 1969 from California Institute Technology (Caltech) specializing in hydraulics, water resources, and coastal engineering. After one year of post-doctoral work at Caltech, he joined the faculty of civil and environmental engineering at the University of Southern California (USC) in 1970. He is currently serving as a Professor of Civil and Environmental Engineering at USC. Professor Lee has been an excellent educator having been awarded numerous department-wide and school-wide teaching awards at USC. He was also awarded a teaching award for the Pacific District (comprising 26 universities) by Chi Epsilon, the Honor Society of the American Society of Civil Engineers.

In July 1984, in addition to his academic duty, Dr. Lee was appointed the Director of the Foundation for Cross Connection Control and Hydraulic Research at USC (FCCCHR). He has been the longest serving director since 1984. FCCCHR is well known in water industry nationwide as a leading authority in the cross connection control field. Currently FCCCHR has more than 900 sustaining members throughout the country including various water agencies from cities, counties, states and federal agencies as well as private water companies. They established the standard accepted nationwide for the backflow preventers used in the protection of water distribution system.

For more than thirty years, Professor Lee has been active in serving CESASC as Board Member, Committee Chairman, as well as Organizer of Technical Symposiums. He has also served as secretary and board member of the CESASC Scholarship Foundation.





Ms. Cecilia "Cc" Yu (李詠娟女士) Director on the Peninsula Friends of the Library Board

Cecilia "Cc" Yu has over 30 years of professional experience in the electric power generation industry and environmental protection programs. She was a Senior Engineer at Bechtel Power Corporation designing and managing the construction of power plants. At CKY Incorporated, she was a Program Manager handling environmental programs. Ms. Yu was a licensed Professional Engineer in the State of California. She is a member of the American Society of Mechanical Engineers and Sigma Xi.

Ms. Yu received a BS degree (honor) from the University of California at Berkeley. Her MS degree in Environmental Engineering was from the University of Southern California.

Currently, Ms. Yu is a Director on the Peninsula Friends of the Library Board. She chaired the first Gala event for the Palos Verdes Library District. About 500 people attended the event.

In 2005, Ms. Yu was appointed to the State of California Board for Geologists by the Speaker of the Assembly. She served on the board for 2 terms.

Her active community involvement with diverse groups and events was recognized by the County of Los Angeles Department of Mental Health. She was honored by the South Bay Culture Association.

Ms. Yu served and led in various positions in her children's school PTAs. She chaired a carnival for the South Bay Chinese School attended by 1,000 people. She served as the Chair of the Board for the South Bay Culture Association. She was a member of the National Charity League with her daughter and a member of Los Compadres with her son.

Ms. Yu was in a White House Delegation of goodwill ambassadors who met with prominent women in Asia. She chaired an all-day self-development conference for professional women under a grant from the Department of Education for the Organization of Chinese-American Women. She served as Vice-President for that organization. Ms. Yu set up the Neighborhood Watch Program for her community. She represented her neighborhood as an Advisory Member to the Sherriff Department.

During her professional formative years, Ms. Yu was active in CESASC serving in various capacities. In the 1980s, she travelled twice to China with the CESASC technical exchange tour. In CESASC, she came across many role models who inspired her to aspire to high level of professionalism and involve actively in the community. Ms. Yu tirelessly promoted the formation of the CESASC Scholarship Foundation. She believes that it is a way for CESASC to give back to the community and develop leaders for the next generation.

Ms. Yu and her husband, Tim, are married for 38 years. They raised 2 sons and a daughter in Palos Verdes. One just graduated and two are still in college majoring in Engineering.





Ms. Li-Jean Wang (王麗真女士) Vice President, C & J Sci-Tech Corp.

Ms. Li-Jean Wang graduated from Peking University in 1963 majoring in Chemistry (6 years curriculum). After graduation, she worked as an engineer at Research Institute of China Ministry of Light Industry for 17 years. Due to her significant contribution, she received two major awards, National Science & Technology progress Award, and Excellent Science & Technology Achievement Award of the Ministry of Light Industry.

From 1980 to 1991, Ms. Wang worked at the University of Southern California (USC) as a senior research scientist in Chemical Engineering Department and Electrical Engineering Department. She received an IEEE Technical Achievement Award for her contribution to an outstanding technical paper in 1987.

Ms. Wang is a CESASC lifetime member. She has participated in CESASC programs since 1986. In 1989, as president of Peking University Alumni Association of Southern California (PUAASC), together with CESASC, she organized a successful welcome banquet in honor of President of Peking University, Professor Din Shisun. It was the first joint event between CESASC and an organization whose members are from Mainland China. In 1994 and 2002, Ms. Wang served as a Co-Chair of CESASC conference committee. She also served as a member of Nomination committee and Bylaws committee from 2005 to2008. Ms. Wang has dedicated herself to promote the communication and establish network between CESASC and various research institutes and associations in Mainland China. With her outreach ability, she persistently encouraged scientists and engineers from mainland China to join CESASC. In 2002, she received the CESASC Appreciation Award.

Ms. Wang is one of the founding members of the PUAASC, was the president for multiple terms and actively participated in all activities since 1985. She was the Chairwoman of the board and is currently the director of the board of PUAASC. She also serves on the board of directors of the Peking University Alumni Association. She is a recipient of the Peking University's Outstanding Alumni Award and the Peking University Alumni Service Award.





### Ms. Suellen Cheng (鄭舒蘭女士)

Board Member and Executive Director Emeritus Chinese American Museum

Suellen Cheng is a curator and Museum Director at El Pueblo de Los Angeles Historical Monument. She received a M.A. in American Studies at Tamkang University, Taiwan, Republic of China. She is responsible for the development and operations of several house museums at the Monument. She is one of the City's key authorities for the history of Los Angeles. At age 26 she arrived at UCLA with a Fulbright scholarship to study American history and graduated from UCLA with a M.A. in History.

For over 30 years, Suellen Cheng has been working for the recognition and advancement of Chinese Americans in California. She has been one of the leading developers of the Friends of the Chinese American Museum at El Pueblo de Los Angeles Historical Monument. Through her leadership with the staff's and Friends' efforts, the Chinese American Museum is establishing its stature in fulfilling its mission to serve and share the rich history, heritage and culture of the Chinese American in the US, and specifically in the Greater Los Angeles area. She enjoys working as community volunteer and has served on many organizations including the Chinese American Citizens Alliance, Chinese Historical Society of Southern California, Los Angeles City Historical Society, Friends of Chinatown Library, Las Angelitas del Pueblo, and CESASC.

She was responsible for developing over a dozen exhibits for El Pueblo and for the Chinese American Museum and served as a consultant for media and museums including KCET, KCRW, KSCI, and the Autry Museum of Western Heritage. Between 1998 and 2000, she and her husband were the Executive Producers of a traveling exhibit, *Heading East: Californian Asian Pacific American Experiences*, a traveling exhibit that celebrated California's sesquicentennial. They were both awarded together the UCLA Asian American Studies Center's Peace & Justice Award, the KCET Local Hero of Year award, and Miriam Matthews Award from Los Angeles City Historical Society, Chinatown Public Safety Association, Organization of Chinese Americans, and Chinese American Citizens Alliance for their work as a team on their community works. She has also received special recognitions from the City of Los Angeles, Los Angeles Central City Optimist Club and Los Angeles Chinese Chamber of Commerce.

Suellen has served in various CESASC committees since 1980. Her managerial skills in directing various functions were essential for the present success of CESASC. Suellen's ample community outreach experiences have successfully motivated our young generations. She has been a great helper to her husband, Dr. Munson Kwok who was CESASC's President from 1998 and 1999 and has been quite active in the CESASC Scholarship Foundation for many years.



### Entertainment I: Ballroom Dance



Performed by Benjamin Kwan, M.D. (關正機醫師) Monika Dubovska

### A Foxtrot – Tango Medley

**Dr. Benjamin Kwan's** interest in ballroom dancing has extended for over a quarter of a century. He has taken years of lessons on all 4 disciplines of ballroom dancing, i.e. American smooth, American rhythm, international standard and international Latin from multiple teachers including 3 U.S. Champions. He has participated in numerous ballroom dance competitions with his teachers in the pro/am category, starting from bronze then moved up the levels to silver in Latin and gold in rhythm and standard with many 1<sup>st</sup> places and several top student awards. But he achieved his highest honor in American smooth, obtaining 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> places in the final rounds of pro/am American smooth championships (highest level in pro/am competitions) at multiple dance competitions including the California Open, California Star Ball and the U.S. National pro/am American smooth ballroom championship.

For the last decade, he concentrated in dance shows and has been invited to perform in multiple private parties, civic, alumni and professional organizational events including that of CESASC. Tonight's performance will be a return engagement to commemorate CESASC's 50<sup>th</sup> anniversary.

Professionally, Benjamin Kwan, M.D. is a board certified ophthalmologist. He obtained his M.D. degree from Washington University in St. Louis. He is a past president of the Chinese Physicians Society of Southern California. He is also a past president of a national organization, the Chinese American Ophthalmological Society of which he still serves as its executive vice president. He is currently a faculty volunteer at UCLA with the title of Clinical Professor of Ophthalmology.

#### Monika Dubovska

Monika was born and raised in Czech Republic. By the age of 16, Monika was one of the top dancers in the country and traveled to many competitions throughout Europe! Since moving to United States in 2001, Monika made finals and won many competitions throughout the country such as Texas State Challenge, San Diego Dancesport Championships, Colorado Star Ball Championships, American Star Ball Championships in New Jersey, Nevada Star Ball in Las Vegas and Desert Classic Championships in Palm Desert. Most recently, Monika became the Professional Rising Star Latin Champion at the 2009 Emerald Ball! Monika has been teaching ballroom dancing for 10 years and she specializes in all four ballroom styles.



# Entertainment II: Hip Hop Dance Performance By Kaba Kids

Founded by Cio Malonzo (Kaba Modern 1999-2005), Kaba Kids (est. 2005) is the youth division within the KM Family under Kaba Modern and KM Legacy. Brought together by its passion for the art of dance, Kaba Kids is blessed by the graces of family and thrives on the strength of its artistry, having earned such awards as 1st place at Maxt Out 2007 and 2nd place at The Bridge Juniors 2010. Kaba Kids is driven to cross all boundaries through artistic expression, humility, constant growth, and respect for all people.

### **Performers:**

Nicole Maybir, Rachel Querido, Sabrina Belen, Karun Tran, Ernest Belen, Joshua Son



CESASC Golden 50<sup>th</sup> Anniversary Celebration





### **Entertainment III: Tenor Solo**

Performed by: Mr. Yaowen Hong (洪耀文醫師)

烏蘇里船歌 (Boat Song of Wusuli, Heilongjiang Folk Song) **O Sole Mio** (Neapolitan Song, Eduardo di Capua)

**Mr. Yaowen Hong** is a tenor, acupuncturist, vocal therapy specialist and TV and broadcasting voice consultant.

Mr. Hong has given many successful recitals in China and U.S.A, garnered top prizes in professional competitions, published numerous articles in the area of vocal therapy and singing skills, and was named in the Who's Who of Music in Modern China.

He is a colorful figure in the vocal and vocal therapy arena from a diligent voice student's anguish of damaging one's voice because of flawed outdated voice training techniques to a known high "C" note tenor and vocal therapist.

He uses Pharyngeal Voice Theory to cure thousands of those with various vocal problems including famous classical, operatically, popular singers, news anchors, radio personalities and laymen alike. Those vocal diseases he successfully cured can be the common vocal ailments (hoarseness, pharyngeal edema, inflammation and pain) and even some stumped conventional medicine, such as functional vocalization disability, vocal cord nodules and paresis, vocal muscle weakness, masculine female voice, feminine male voice, vocal tremor and coarseness.

As a license acupuncturist, he combines Chinese medicine with the western conventional one to continue his research and practice as a vocal therapy specialist. He can sing in very different styles from conversional operas to Chinese folk songs.

歌唱家洪耀文醫師早年畢業於中國高等音樂院校,留校任教,專門教授聲樂 藝術及音樂理論等課程達十多年之久。在美中兩地多次成功舉行獨唱音樂會,在 北京聲樂研究所為"如何安全獲得男高音'High c'高音速效法"的研究取得成功,任 廣州咽音學會會長,以咽音法治愈數千嗓音病患,使啞嗓死嗓重獲新"聲",是廣 播電視學會嗓音顧問,入選中國當代音樂家名人大辭典。在美獲醫學學位後考取 加州醫師執照,在中西醫結合治療學會舉行"嗓音病的中西醫結合治療"專題講座 獲同行好評,在"洪耀文診所"開展"構建歌唱藝術身心良性機制,提高疑難雜症及 多發病療效"的研究工作,取得可喜成效。他能純熟地駕馭西洋歌劇和中國民歌這 兩種完全不同演唱風格。





Entertainment IV Facemask Changing 川劇變臉

Performed by Mr. Xiaoren Liu (劉小任先生)

Rapidity is the core in Sichuan Opera Facemask Changing and it differs from other Chinese folk art performances that use facemasks. In a fraction of a second, often less than 1/25 of a second so as to escape from the capture of a slow-mo camera, one facemask switches to another, or the mask remains while its color changes, which requires incredible talent and practices beyond average consideration. And as a visual, the rhetorical sudden change of a "face" speaks for itself as a comedy with passion rich enough to be a drama. In one word, the Sichuan Opera Facemask Changing is an artistry with exaggerated romanticism and an realistic drama combined. Choreography is another key element of the facemask changing performance. It is not dance, not musical play, neither acrobatic, nor gymnastic, unlike magic, unlike Kongfu, but it absorbs all above.

From ages 8 to 39, facemask changing Master Liu Xiao Ren has been performing for 32 years, carried over this unique facemask changing skill from the above seven generation. The name of Liu Xiao Ren, with his more than a dozen China National Awards, is a big sell. And his new production, "Sand" show is going to be performed in Las Vegas soon.

# 劉小任先生 簡介

劉小任先生是中國川劇變臉第八代傳人。在過去的42年中,從藝已經32年,曾獲得中國變臉金面具獎;目前是世界保持最快速度變臉人,每一秒鐘3張臉。曾為魔術師大衛·科波菲尔演出,令其嘆為觀止;曾代表中國出訪世界各地為各國總統演出。

# Chinese-American Engineers and Scientists Association of Southern California 南加州中華科工學會 (CESASC) www.cesasc.org

#### History and Mission

The Chinese-American Engineers and Scientists Association of Southern California (CESASC) was founded in 1962 as a non-profit professional organization. Its mission is to serve as a platform to enrich their competence through technical conferences and workshops, to showcase their accomplishments through its annual Achievement Awards, to broaden their career perspectives through global and local networking, and to protect their interests and rights through organizational efforts. In 2011, CESASC was honored by the Chinese American Museum (CAM) as the recipient of the *Excellence in Science and Engineering Leadership Award* during CAM's 15<sup>th</sup> Annual Historymaker's Awards Banquet.

#### **CESASC** Achievement Awards

Since 1969, CESASC has presented Achievement Awards to recognize the individuals who have made significant contributions to engineering and science, or those with distinguished professional career in the United States. Our previous award recipients included Nobel Laureates, members of US National Academy of Sciences, National Academy of Engineering and Institute of Medicine, Corporate and University executives, members of Committee 100, as well as public officials.

#### **Technical Symposiums**

In an effort to promote technology advancement for its members, CESASC has sponsored annual Technical Symposiums pertaining to various technical areas since 1986. These conferences have provided a forum for top researchers around the world to exchange ideas and findings about the latest advances in science and technology. In 2010, CESASC further co-sponsored with UCLA to host an International Symposium on Materials for Enabling Nanodevices (ISMEN). The success of this conference enabled CESASC to establish models for future collaboration with academic institutes in the United States.

#### Scholarship and Youth Programs

The enrichment of youth program has been our important goal for many years. The CESASC Scholarship Foundation was created as a companion charitable non-profit organization to CESASC for raising funds for scholarships and educational programs. The Foundation has enabled CESASC to award five to ten scholarships annually to undergraduate and graduate students. The scholarship recipients, who are future technical and community leaders, have also been invited to participate in and present their research work in our annual Technical Symposiums. In order to strengthen leadership skills for our young generation, we have further developed a series of Leadership Development and Mentor programs.

#### **Industrial Relations**

CESASC brings together all segments of engineering and science by reaching out prominent industrial companies in Southern California. Through its technical symposiums, leadership programs, and seminars, CESASC has been able to broaden the base of its membership, expand networking platform, and provide needed services to its members. The support and sponsorship from the industry have made CESASC as one of the most influential Chinese-American professional organizations in the US.

#### **International Advancement Cooperation Programs**

Since the late 1980s, CESASC has organized numerous global cooperation activities to promote information exchange among engineering professionals. During the past years, CESASC has accomplished mutual visits for government officials, university and industry leaders from the Pacific Rim countries or areas including China, Hong Kong, Taiwan, Singapore and Thailand. In acknowledgement of the contributions to these international cooperation programs, CESASC was recognized by the late Congressman George E. Brown, Jr., former Chairman of the House Committee on Science and Technology of the US Congress, during his Keynote address at CESASC's Technical Symposium in 1994.

#### 南加州中華科工學會簡介

# Chinese-American Engineers and Scientists Association of Southern California (CESASC)

南加州中華科工學會(CESASC)成立於 1962 年,為一非營利專業團體,並係南加地區歷史 最悠久、組織最完善的華美科技學會之一。這個由任職於南加州多所大學及高科技企業公司的 華裔專業人士聯合組成的科技組織,多年來致力於會員間的專業互動、科技交流、會員及團體 權益福祉的維護,以及就業與教育相關資訊分享。2011 本會更榮獲華美博物館 (Chinese American Museum) 第十五屆歷史締造者傑出科學暨工程獎 (Excellence in Science and Engineering Leadership Award)。

年會中的專題演講人及成就獎得主均為一時之選,包括諾貝爾獎得主楊振寧博士、李政道 博士、丁肇中博士、李遠哲博士及高錕博士、美/中/台兩岸三地國家科學/工程/醫學學院及中央 研究院院士吳健雄博士、吳耀祖博士、朱經武博士及錢煦博士、以及美國前勞工部趙小蘭部 長、加州大學伯克利分校(UC Berkeley)校長田長霖博士、加州大學聖巴巴拉分校(UC Santa Barbara)校長楊祖佑博士、《時代》雜誌 1996 年度人物(TIME Magazine Man of the Year)何 大一博士等。此外,中/港/台科技界著名科學家及政要多人亦曾應邀出席本會學術交流及在年會 中發表專題演講。

本會於 1986 年首度推出大型科技研討會,為日後成立的華美科技組織樹立了新的楷模。 研討會囊括的範圍甚廣,從航空太空到資訊科技、從環保運輸到生物醫學、從光電、建築到電 子商務、以及近來益受重視的管理科學、奈米科技等項目,均令與會者受益良多。年度研討會 中也常邀請主流公司以演說、座談、展覽等方式為參加者提供科技界的最新動態。為加強與美 國學界的合作交流,本會更與加州大學洛杉磯分校(UCLA)聯合主辦"奈米材料和應用元件國 際研討會"(International Symposium on Materials Enabling),深獲好評。

鼓勵青少年的參與是本會成立至今的主要目標,1987 年 Scholarship Foundation 獎學金基 金會成立,在會員及社區熱心人士的慷慨捐助下,定期為大學部或研究所的在學學生頒發績優 及清寒獎學金,得獎同學並應邀在科技研討會中就其科研成果發表演說。此外,本會亦多次舉 辦青少年科工競賽,獲得學子及指導教師的大力支持。值得一提者,1986 年獎學金得主、布朗 大學(Brown University) 二年級學生廖敏妃同學(現為 Professor and Director of UCLA Brain Tumor Program, UCLA Medical School),更於 2006 年以其在醫學界的傑出表現榮獲本會成就 獎,給予本會及獎學金基金會莫大的鼓勵。

八十年代末,本會曾致力於全球合作計畫,藉以推展科技交流。歷年來,屢為太平洋地區的中、港、台、星、泰及美國的產、官、學界專業人士組成科技互訪團。此外,為培育科技人才並發展科技教育,本會亦曾協助吳家瑋校長籌集資金與網羅人才,創辦香港科技大学。美國前國會議員及國會 House Committee on Science and Technology 前主席 George E. Brown, Jr.,曾在本會 1994 年科技研討會的專題演講中,特別表彰科工會對亞太地區科技交流所做的貢獻。

籌備年會及科技研討會所需經費至鉅,幸歷年來獲得多所主流公司企業及基金會的大力贊助,本會方能在全體理、幹事羣策羣力下,藉由科技研討會、獎學金計劃、領導才能培訓及專題討論會等活動,積極吸收新血,拓展交流平台,並逐步發展成為南加州甚具影響力的華美科技組織。2012年欣逢本會成立五十週年,擬將舉辦多項活動,以示慶賀。



# **CESASC Former Presidents**

1962 Henry Chi (戚文祥) 1963 Norman Au (區毅民) 1964 Tung-Hua Lin (林同驊) 1965 C. M. Wong (王頌明) 1966 Frederick Liu (劉繼福) 1967 Theodore Wu (吳耀祖) 1968 Ju-Chin Chu (朱汝瑾) 1969 Lewis Au (區鯉騰) 1970 Wellington Loh (陸孝同) 1971 Paul Yeh (葉雹) 1972 Paul Leung (梁佩璐) 1973 Tung Po Lin (林同坡) 1974 Steven Tang (唐紹曾) 1975 K. C. Chiang (蔣光祺) 1976 Peter Dai (戴廣勳) 1977 John Chan (陳乃豪) 1978 Shou S. Kwong (鄺紹壎)

1979 Charles P. Wang (王正平) 1980 Tennyson Wang (王滇聲) 1981 Han C. Leung (梁漢宗) 1982 Sui-An Fung (馮綏安) 1983 Shih Y. Chen (陳仕元) 1984 Frank Wang (王鴻恩) 1985 Chieh Sun (孫黔) 1986 Shui-Lin Chao (趙瑞麟) 1987 Sherman Yu (于善元) 1988 Chih-Ming Ho (何志明) 1989 Wei H. Kao (高為雄) 1990 Edward Liu (劉漢忠) 1991 Catherine Kwan (寧克嘉) 1992 George Chao (趙家鈞) 1993 T.J. Wang (王泰傑) 1994 Eastwood Im (嚴貴方) 1995 Kung Yao (姚琨)

1996 Elizabeth Kay Im (郭怡珊) 1997 Tientsai Yang (楊添才) 1998 Munson Kwok (郭民生) 1999 William Chang (張靖生) 2000 Sheng-Rong Lin (林勝榮) 2001 Edward Liu (劉漢忠) 2002 Edward Liu (劉漢忠) 2002 Charles Wang (王啟明) 2003 Charles Wang (王啟明) 2004 Shirley Ho (張翠姝) 2005 Shan Lee (李珊) 2006 Sikun Lan (藍思堃) 2007 Sikun Lan (藍思堃) 2008 David K. Lee (李嘉民) 2009 Wensheng Zhou (周文生) 2010 Yiu Man So (蘇耀民) 2011 Jason Wen (溫俊山)

# CESASC Life Members (As of April 13, 2012)

Arlen, Michael Chan, Leo K. P. Chan, Steven Chan, Thomas K. Chang, David D. Chang, Milton Chang, Ning-Wu Chang, William Chao, George Chao, Pong Chao, Shu-Kong Chen, Jia Ming Chen, Peter W. Chen, Philip Chen, Shiuan Chen, Wendy H. D. Chen, Y. Kenneth Chi, Henry W.S. Chi, Lois Wong Chin, Lester P. Chiang, Albert C. L. Chiang, Martin Chien, Raymond Dai, Peter K. Ding, Tony Y.

Fan, Jerry Gao, Youping He, Yutao Ho, Chih-Ming Ho, Dean Ho, Shirley Hsiai, Tzung Hsieh, Albert Hsu, Albert Hsu, Alex Hsu, Hui Pin Huang, George Y. Huang, John Huang, Sheng-He Im, Eastwood Im, Elizabeth Kay Kao, Wei H. Ko, Denny Kwan, Catherine Lan, Sikun Lee, Alfred Lee, Hugh Lee, Hui-An Lee, Jiin-Jen Lee, Shan

Leung, Paul Lim, Wah L. Lin, Jimmy H. Lin, Sheng-Rong Lin, Trye-Lin Lin, Tung-Po Liu, Dankai Liu, Edward Liu, Paul I. Liu, Robert W. Liu, Wai-Min Loh, W. H. T. Lou, Elizabeth Lou, Michael C. Mak, Danton K. Mar, Nelson T. Miao, David Sie, Charles Sun, Chieh Sun, George Tang, Yupai L. Teng, Albert R. H. Teng, Evelyn Teng, Ta-Liang Tsai, Mark F.

Tsai, Pin Fun Tsiang, T. H. Tso, Jin (Sharon) Wang, Charles C. Wang, Li-Jean Wang, T. J. Wen, Jason Wong, Jimmy Woo, Chai Wei Woo, Jer Kury Wu, C. H. Timothy Wu, Marven Pan Wu, Tim Yan, Liping Yang, Tien Tsai Yao, Kung Yee, Henry Yeh, Paul P. Yen, Charles C.S. Yin, Mingsong Yu, Pet Yu, Sherman Zhai, Endi Zhang, Peter Zhu, Konrad S.



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### CESASC Former Officers and Directors 1962-2011

Year	Chairman	President	Vice-President	Secretary	Treasurer	Directors
1962		Henry Chi		Sherwin Chan	Charles Yen	
1963		Norman Au		Yi-Jin Liu	James C. Liu	
1964		Tung-Hua Lin		Eugene Tsao	Lewis Au	
1965		Chung-Ming Wong		Frederick Liu	Wellington Loh	
1966		Fred Liu	V. H. Ho	Sherman Yu	David Huang	
1967		Theodore Wu	Tung Po Lin	Kam Wong	Sheng To Chu	
1968		Ju Chin Chu	Kam L. Wang	Chia Huan Lee	Sai Fu Lee	Theodore Wu, F. F. Liu, C.M. Wong
1969		Lewis L.T. Au	Tung Po Lin	Margaret Tan	Sui-An Fung	Ju-Chin Chu, Theodore Wu, Fred F. Liu
1970		Wellington Loh	Paul Yeh	C. P. Tung	Huang Chao	Lewis Au, Ju-Chin Chu, Theodore Wu
1971		Paul Yeh	Jim Gee	Ming Moy	C. W. Chien	Wellington Loh, Lewis Au, Ju Chin Chu
1972	Paul Leung	Paul Leung	Stu Y. Lee	K. C. Chiang	Paul Lem	Tung-Hua Lin, Henry Chi, Kam L. Wong
1973	Kam L. Wong	Tung-Po Lin	Raphael E. Ting	Wen Ling Kuo	Irving Chen	Henry Chi, Paul Leung
1974	Kam L. Wong	Steven Tang	Lois Chi	Wen Ling Kuo	Sam Gee	Paul Leung, Tung Po Lin
1975	Tung Po Lin	K. C. Chiang	John N. Chan	Peter K. Dai	David W. Kwan	Paul Leung, Steven S. Tang
1976	Tung Po Lin	Peter Dai	S.S. Kwong	Teresa Sun	David Liu	Steven S. Tang, K. C. Chiang
1977	Peter Dai	John Chan	Lily Wang	Charles Wang	Tenly Fong	Steven S. Tang, K. C. Chiang
1978	K. C. Chiang	S. S. Kwong	Louise Huang	Heeman Wong	Tenly Fong	Peter Dai, John Chan
1979	Peter Dai	Charles Wang	Catherine Kwan	Tennyson Wang	Sherman Yu	John Chan, S. S. Kwong
1980	Charles Wang	Tennyson Wang	Jay C. Chen	Roger Fan	Housen Lee	John Chan, S. S. Kwong
1981	Charles Wang	Han C. Leung	Munson Kwok	Jay C. Chen	Fleur W. Yano	S. S. Kwong, Tennyson Wang
1982	Tennyson Wang	Sui-An Fung	Timothy Kar Yu	William Chang	Fleur W. Yano	Han C. Leung, Charles Wang



### CESASC Former Officers and Directors 1962-2011

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Year	Chairman	President	Vice-President	Secretary	Treasurer	Directors
1983	Tennyson Wang	Shih-Yuan Chen	Timothy Kar Yu	Grace Hu	Fleur W. Yano	Sui-An Fung, Han C. Leung
1984	Sui-An Fung	Frank Wang	Lois Chi	D. N. Yin	T. S. Fu	Shih-Yuan Chen, Han C. Leung
1985	Shih-Yuan Chen	Chieh Sun	Shui-Lin Chao	Sherman Yu	Daniel Wong	Sui-An Fung, Frank Wang
1986	Chieh Sun	Shui-Lin Chao	Sherman Yu	Chih-Ming Ho	Edward Liu	Sui-An Fung, Frank Wang
1987	Frank Wang	Sherman Yu	Chih-Ming Ho	Tom Sun	T. J. Wang	Shui-Lin Chao, Chieh Sun
1988	Chieh Sun	Chih-Ming Ho	Wei Kao	Pong Chao	Y. S. Wang	Shui-Lin Chao, Sherman Yu
1989	Sherman Yu	Wei Kao	Edward Liu	Wennie Wu	Richard Sheng	Shui-Lin Chao, Chih-Ming Ho
1990	Chih-Ming Ho	Edward Liu	Tom Sun	Wai-Min Liu	Richard Sheng	Wei Kao, Sherman Yu
1991	Wei Kao	Catherine Kwan	Kung Yao	T. C. Wang	Richard Sheng	Chih-Ming Ho, Edward Liu
1992	Edward Liu	George Chao	Philip Chen	Gan-Tai Tseng	Albert Hsieh	Wei Kao, Catherine Kwan
1993	Edward Liu	T. J. Wang	Eastwood Im	Elizabeth Kay	Albert Hsieh	George Chao, Chih-Ming Ho, S.R. Lin, Kung Yao
1994	George Chao	Eastwood Im	Kung Yao	Elizabeth Kay	Michael Chan	Wei Kao, S. R. Lin, T. J. Wang, T.T. Yang
1995	Sherman Yu	Kung Yao	Michael Chan	Philip Chen	Elizabeth Kay-Im	Eastwood Im, Munson Kwok, Jiin-Jen Lee, S. R. Lin, T. J. Wang, T. T. Yang
1996	Kung Yao	Elizabeth Kay-Im	John Chen	T. J. Chou	Rosalind Lee	Eastwood Im, Munson Kwok Jiin- Jen Lee, Sherman Yu
1997	Eastwood Im	Tientsai Yang	Munson Kwok	C. Y. Chang	Pin Fun Tsai	Elizabeth Kay-Im, Jiin-Jen Lee Sheng-Rong Lin, Kung Yao
1998	Elizabeth Kay-Im	Munson Kwok	Jiin-Jen Lee	Shen Li	Tiffany Chiu-Mou	Michael Chen, S. R. Lin T.T. Yang, Kung Yao
1999	Wei Kao	William Chang	Sam Feng	Shen Li	Tiffany Chiu	Munson Kwok, Michael Chan, T. T. Yang, Charles Sie, Elizabeth Kay-Im

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### CESASC Former Officers and Directors 1962-2011

Year	Chairman	President	Vice-President	Secretary	Treasurer	Directors
2000	Munson Kwok	S. R. Lin	Kang Wang	Barbara Nakamura	Shen Li	William Chang, Sam Feng, Wei Kao Charles Sie
2001	Munson Kwok	Edward Liu			Shen Li	William Chang, Henry Chi, Sam Feng, Wei Kao, S.R. Lin, Charles Sie
2002	William Chang	Charles Wang	Liping Yan	Muriel Ho	Shen Li	Amy Chen, Henry Chi, S. R. Lin Charles Sie
2003	William Chang	Charles Wang	Liping Yan	Muriel Ho	Shen Li	Amy Chen, Henry Chi, Charles Sie
2004	Charles Wang	Shirley Ho	Shan Lee Liping Yan		Shen Li	William Chang, Elizabeth Kay-Im Edward Liu, Charles Sie
2005	Shirley Ho	Shan Lee	Sikun Lan	Konrad S. H. Zhu	Linda Chen	Elizabeth Kay-Im, Charles Sie Charles Wang, Liping Yan
2006	Shan Lee	Sikun Lan	Christine Xu	David K. Lee	Linda Chen	Shiuan Chen, Shirley Ho Elizabeth Kay-Im, Konrad Zhu
2007	Shan Lee	Sikun Lan	David K. Lee	Manwai Szeto	Jennifer Feng	Jia Ming Chen, Shiuan Chen, Will Chou Manwai Szeto. Wensheng Zhou, Konrad S. H. Zhu
2008	Sikun Lan	David K. Lee	Wensheng Zhou	Manwai Szeto Ying Zhang	Crystal Chen Manwai Szeto	Jia Ming Chen, Katherine He Wei Kao, Jason Wen, Fonda B. Wu
2009	Wei Kao	Wensheng Zhou	Yiu Man So	Ying Zhang	Manwai Szeto	Youping Gao, Katherine He, Sikun Lan, David K. Lee, Jason Wen, Fonda B. Wu
2010	Shirley Ho	Yiu Man So	Jason wen	Yutao He	Manwai Szeto	Joseph Chen, Youping Gao, David K. Lee, Allison Tong, Xu Yin, Wensheng Zhou
2011	Shirley Ho	Jason Wen	Yutao He	Youping Gao	Manwai Szeto	Joseph Chen, Shan Lee, Yiu Man So Allison Tong, Mingsong Yin, Xu Yin, Wensheng Zhou

# 2011-2012 CESASC Organization

#### **Board of Directors**

#### Chairwoman of Board: Shirley Ho

President: Secretary: Directors: Jason Wen Youping Gao Joseph Chen, Allison Tong, Wensheng Zhou

Vice President:Yutao HeTreasurer:Manwai SzetoShan Lee,Yiu Man So,Mingsong Yin,Xu Yin,

#### 50<sup>th</sup> Anniversary Gala Honorary Committee

Mr. Henry Chi & Dr. Lois Chi Dr. Shu Chien Dr. Yuan-Cheng Fung Dr. Charles H. Sie Mr. John J. Sie Dr. John Tu Dr. Theodore Y. Wu

#### **Committees**

#### **CEASC 50<sup>th</sup> Anniversary Gala Event Committee**:

Shirley Ho\*, George Chao, Suellen Cheng, Elizabeth Kay-Im, Wei Kao, Munson Kwok, Shan Lee, Tung-Po Lin, Edward Liu, Jason Wen

#### **Convention Committee**:

Jason Wen\*, Suellen Cheng, Yutao He, Elizabeth Kay-Im, Manwai Szeto

#### Honors and Awards Committee:

Shirley Ho\*, Elizabeth Kay Im, Jiin-Jen Lee, Wei Kao

#### **Special Day Program Committee:**

Yutao He\*, Yiu Man So, Jason Wen, Mingsong Yin

#### Scholarship Committee:

Yutao He\*, Jane Dong, Dean Ho, Sheng-He Huang, Dankai Liu, Yiu Man So, Jason Wen

#### Membership Committee:

Manwai Szeto, Mingsong Yin

#### **Bylaw Committee:**

Wei Kao\*, Shirley Ho, Munson Kwok, Shan Lee, Edward Liu, Jason Wen

#### Nomination Committee:

Shirley Ho\*, Elizabeth Kay-Im, Wei Kao, Shan Lee, Yiu Man So, Lijean Wang, Jason Wen

#### **Fundraising/Advertisement:**

Shan Lee\*, Youping Gao, Shirley Ho, Manwai Szeto, Xu Yin, Jason Wen, Sherman Yu

#### Journal Committee:

Liping Yan\*, Shirley Ho, George Chao, Wei Kao, Catherine Kwan, Munson Kwok, Edward Liu, Manwai Szeto, Mingsong Yin

#### **Publicity and Public Relations:**

Philip Chen\*, Joseph Chen, Shirley Ho, Alex Hsu, Teresa Hsu, Munson Kwok, Jason Wen

#### Webmaster and IT:

Mingsong Yin\*, Manwai Szeto

\* Committee Chair

CPA: Saykin Foo Co-Historians: Lois Chi, Shirley Ho Legal Counsel: Bill Hsiang



# 2011-2012 CESASC Scholarship Foundation Organization

#### **Board of Directors**

Chairman of Board: Directors: Shan Lee Yutao He, Jason Wen

# LUNGORNIA - CHINESE MILINE CONTROL

#### **Officers**

President:Edward LiuVice President:Shirley HoSecretary:Jiin-Jen LeeTreasurer:Munson Kwok

# 2012-2013 CESASC Organization

#### **Board of Directors**

Chairman of the Board: TBD		
President:	Yutao He	
Vice President:	Liping Yan	
Secretary:	Youping Gao	
Treasurer:	Manwai Szeto	
Directors:	Directors: Joseph Chen, Alex Hsu, Sheng-He Huang,	
	Shan Lee, Nancy Lin, Dankai Liu, Yiu Man So, Jason Wen, Mingsong Yin	





### CESASC Convention Keynote Speakers 1969-2012

1969	Wallace W. Booth	1990	Mayor General William S. Chen
1970	Walter F. Burke	1992	Hon. Julia Chang Bloch (張之香)
1971	William B. Bergen	1993	Dr. David S. C. Chu (朱思九)
1972	Richard F. Walker	1994	Hon. Frederick F. Y. Pang
1973	Dr. Yu-Hsiu Ku (顧毓琇)	1995	Dr. Henry C. Lee (李昌鈺)
1974	Prof. T. Y. Lin (林同棪)	1996	Dr. Henry T. Yang (楊祖佑)
1975	Bruce H. Billings	1997	Mr. Gareth C. C. Chang (張鎮中)
1976	John Stuart Foster, Jr.	1998	Dr. David Ho (何大一)
1977	Mr. Steven W. Leong	1999	Dr. Yu-Chong Tai (戴聿昌)
1978	Dr. Samuel C. C. Ting (丁肇中)	2000	Mr. John S. Chen
1979	Dr. Joseph T. Ling	2001	Dr. Yuan Tseh Lee (李遠哲)
1980	Dr. Chen Ning Yang (楊振寧)	2002	Mr. John Chiang (江俊輝)
1981	Madam Anna Chennault (陳香梅)	2003	Dr. Chih-Ming Ho (何志明)
1982	Dr. Chien-Shiung Wu (吳健雄)	2005	Dr. Henry T. Yang (楊祖佑)
1983	Dr. Yuan-Cheng Fung (馮元禎)	2006	Prof. Fujia Yang (楊福家)
1984	Dr. Hua Lin	2007	Mr. John J. Sie (謝誠剛)
1985	Dr. Eberhard Rechtin	2008	Mr. Wing T. Chao (趙永濤)
1986	Theodore J. Wong (黃華焦)	2009	Dr. Mau-Chung Frank Chang (張懋中)
1987	Rear Admiral Ming. E. Chang	2010	Dr. Leroy Chiao (焦立中)
1988	Dr. Shu Chien (錢 煦)	2011	Dr. Frank Hsia-San Shu (徐遐生)
1989	Elaine L. Chao (趙小蘭)	2012	Dr. Shu Chien (錢煦)

# CESASC Achievement Award Recipients 1962-2012

Lifetime Achievement Award Recipients:

1993	Dr. Yuan-Cheng Fung (馮元禎)	1998	Dr. Shu Chien (錢 煦) and
1994	Dr. Tung-Hua Lin (林同驊)		Dr. Henry C. Lee (李昌鈺)
1995	Dr. Theodore Y. T. Wu (吳耀祖)	2001	Eric G. Lean (林耕華)
		2012	Dr. Li-San Hwang (黃立三)

CESASC Golden 50<sup>th</sup> Anniversary Celebration



#### Achievement Award Recipients:

1969	Dr. Chen-Dau Lee (李政道)	1980	Dr. Hsu Chang
	Dr. Cho-Hao Li (李卓浩)		Mr. Andrew Chi
	Dr. Yu-Hsiu Ku (顧毓琇)		Mr. James Dao
	Dr. T. Y. Lin (林同棪)	1981	Dr. Robert Huang Dr. San-Chiun Shen (沈善炯)
1970	Dr. S.S. Chern (陳省身)	1901	Dr. Charles Kuen Kao (高錕)
	Dr. Sze-Tsen Hu (胡世楨)	1982	Dr. Fred Lee
	Dr. Shu Ten Li (李书田)	1962	Mr. Tom T. Tang
	Dr. Tung-Hua Lin (林同驊)		Dr. Chia-Wei Woo (吳家瑋)
	Dr. Wellington Loh (陸孝同)	1983	Dr. Gilbert Y. Chin
1971	Dr. Yuan Cheng Feng (馮元禎)	1700	Dr. Yuen Ron Shen (沈元壤)
	Dr. Theodore Y. T. Wu (吳耀祖)		Chinese Engineers & Scientists of Rockwell
	Dr. Sunney I. Chan (陳長謙)		International Space Systems Group
	Dr. Tai Te Wu (吳大德)	1984	Dr. Shao-Chi Lin (林紹基)
1973	Dr. Lois Wong Chi (戚王爾樂)		Dr. George C. Sih (薛昌明)
	Dr. Loh-Seng Tsai (蔡乐生)		Dr. Chang L. Tien (田長霖)
	Mr. Yu-Chiu Yang (杨裕球)		Dr. Shing-Tung Yau (邱成桐)
	Dr. Edith Ju-Hwa Chu (朱汝华)	1985	Dr. Norman N. Au (区毅民)
	Dr. Chia-Shun Yih (易家訓)		Dr. Tailor G. Wang (王贛駿)
1974	Dr. Chieh-su Hsu (徐皆苏)	1986	Dr. Yuan T. Lee (李遠哲)
	Mr. Paul Leung (梁佩璐)		Dr. Pauline Lo Alker (梁佩玲)
	Dr. Fredrick Liu (刘继福)		Dr. Charles H. Sie (謝正剛)
	Dr. William C. W. Mow (毛昭寰)	1987	Rear Admiral Ming E. Chang (錢明)
	Dr. Samuel S. C. Yen (阎守之)		Dr. Gong-Jen Su (蘇國楨)
1975	Dr. Lewis Li-Tang Au (區鯉騰)		Dr. Yeu-Tsu Margaret Lee (李倪雨珠)
	Dr. Ven Te Chow (周文德)		Mr. Reginald G. Low (李振英)
	Dr. Ruth Wu Hsiung (熊武琪華)		Dr. Shih-Yuan Chen (陳仕元)
	Dr. Ernest S. Kuh (葛守仁)	1988	Dr. Paul N. Yu
1976	Dr. Ben C. Wang (王本昌)		Dr. Ju Chin Chu (朱汝瑾)
	Mr. Kam L. Wong (黄淦亮)		Dr. Julius T. Tou (竇祖烈)
	Dr. Abraham T. Lu (卢德全)	1989	Abraham M. S. Goo (古懋萱)
	Dr. Stephen W. Tsai (蔡为仑)		Albert C. H. Wong (黃朝虹)
1977	Dr. Hung Cheng (鄭洪)		Thomas C. K. Yuen (袁志坤)
	Dr. Thomas H. Lee (李天和)	1990	Dr. Milton Chang (張茂德)
	Dr. Robert T. Poe (蒲大邦)		Dr. Samuel W. Ing (應偉興)
	Dr. Teh Fu Yen (晏德福)	1991	Professor Li Zhi Fang (方勵之)
	Dr. Carl W. Chen		Mr. Lee Liu
1978	Mr. Theodore W.J. Wong ((黃華焦)		Lt. Governor S. B. Woo (吳仙標)
	Dr. Ta-Liang Teng (鄧大量)	1992	Dr. David S. C. Chu (朱思九)
1979	Dr. Stanley B. Dong		Dr. Fu-Kuen Lin (林福坤)
	Mr. Ying-Nien Yu		Dr. David Huang (黃孝宗)
	Mr. Henry W.S. Chi (戚文祥)		Dr. Shi-Tsan Wu (吳式燦)



1993 D			
1770 0	Dr. Alfred Y. Cho (卓以和)	2004	Dr. Allen Y. Chao (趙宇天)
D	Dr. Denny Ko (柯如甦)		Dr. Kuo-Nan Liou (廖國男)
D	Dr. Jean Chen Shih (陳錦虹)		Dr. Peter S. Pao (鮑 塞)
1994 D	Dr. Louise T. Chow (周芷)		Dr. Robert K. Yu (于寬仁)
D	Dr. Wah L. Lim (林華寧)	2005	Dr. Hsien K. Cheng (鄭顯基)
1995 D	Dr. Paul Ching-Wu Chu (朱經武)		Ms. Shirley Young (楊雪蘭)
D	Dr. Li-San Hwang (黃立三)	2006	Professor Fujia Yang (楊福家)
D	Dr. Ying-Chu Lin (吳林穎珠)		Dr. Linda M. Liau (廖敏妃)
1996 D	Dr. Irvin S. Y. Chen (陳紹虞)		Dr. Man-Chung Tang (鄧文中)
D	Dr. David T. Shaw (蕭台戈)	2007	Mr. John J. Sie (謝誠剛)
D	Dr. Henry T. Yang (楊祖佑)		Ms. Heidi Shyu (徐若冰)
1997 D	Dr. The-Lung Ku (顧德隆)		Dr. Xiaodong Wang (王曉東)
Ν	Ar. John Tu (杜紀川)	2008	Mr. Wing T. Chao (趙永濤)
Ν	Ar. David Sun (孫大衛)		Dr. Robert P. Lin (林伯中)
1998 D	Dr. Hsin-Kang Chang (張信剛)		Dr. Terence Tao (陶哲軒)
D	Dr. David Ho (何大一)	2009	Dr. Mau-Chung Frank Chang (張懋中)
1999 D	Dr. Helena R. Chang (梁 容)	2010	Dr. William Yeh (葉文工)
D	Dr. Yu-Chong Tai (戴聿昌)		Mr. William Wang (王蔚)
D	Dr. Peter K. Wu (吳國恩)		Dr. Leroy Chiao (焦立中)
2000 D	Dr. John S. Chen	2011	Dr. Peter Chen, President (陳政)
D	Dr. Alexander C. Liang (梁建齊)		Dr. Xiang Zhang (張翔)
2001 D	Dr. Jim C. I. Chang (張敬義)		Dr. Frank Hsia-San Shu (徐遐生)
D	Dr. Derek Cheung (張大凱)	2012	Dr. Cun-Yu Wang (王存玉)
D	Dr. Chih-Ming Ho (何志明)		

#### Young Achievement Award Recipients:

1997 Ms. Pauline Ts'o (曹予真)

2008 Dr. Vincent Gau (高振智)

#### **CRESASC Service Award Recipients:**

Irving Chen (1972), Dr. Paul Leung (梁佩璐/1972), Ellen Wong Lem (1972), Ellen Y.S. Chung Au (1972), Dr. Shou Soon Kwong (鄺紹壎/1975), Dr. K.C. Chiang (蔣光祺/1980), Dr. S.A. Fung (馮綏 安/1981), Dr. Tsun-Sen Fu (符尊森/1983), Da Nien Yin (殷大年/1984), Lewis Li-Tang Au (區鯉騰 /1986), Shih-Yuan Chen (陳仕元/1987), Herman S. D. Yang (楊勝德/ 1988), Dr. Catherine Kwan (寧 克嘉/1988), Dr. Wei Kao (高為雄/1988), Dr. H.E. Frank Wang (王鴻恩/1990), Dr. Chien Sun (孫黔 /1991), Edward Liu (劉漢忠/1992), Shirley Ho (張翠姝/2008) and Dr. Kung Yao (姚琨/2011).

#### **CRESASC Corporate Award Recipients:**

Aerospace Company (2005), JPL (2005), The Boeing Company/Rocketdyne (2005), TRW (2005), Rocketdyne (2010)



#### Summary of CESASC's First 50 Years

By Henry Chi (戚文祥), CESASC Founder

#### Introduction

When I first arrived in Los Angeles in the spring of 1948, we graduate students, attended classes in temporary, bungalow-style buildings at USC. Post-war LA was a city of 2 million, with the aircraft industry all but gone. There wasn't much going on except for the fine weather and glamorous Hollywood industry. By the time UCLA had its first chancellor in 1951, the Chinese population was still subject to the Chinese Exclusion Act of 1882. (We still had to deal with discrimination in housing, employment and immigration). Even though a classmate of mine could buy an acre lot in Palos Verdes for \$2,000 and a beachfront home in Manhattan Beach for \$5000, there were many other areas that remained "unavailable" to us for years to come.

#### Sputnik and Apollo

On October 4, 1957, the Russians launched the first Sputnik into space. This endeavor captured the world's attention and caught the Americans off guard. The U.S. government quickly answered the challenge with the Apollo program on May 25, 1961. The program was expertly executed and accomplished its goal on July 20, 1969. The space program attracted hundreds of thousands of people to Los Angeles, ushering in the Space Age.

#### Chinese Engineers and Scientists in Southern California–Where They Came From

In 1946, at the conclusion of WWII, the Chinese government started sending new college graduates abroad to further their studies. Approximately more than 5,000 people arrived in the U.S., spreading from coast to coast. By 1960 the times were beginning to change, especially for the Chinese community. After the Korean War and the passing of Acts of Congress in 1949, '50, '52, '53 and '56, laws affecting Chinese foreign students had a dramatic effect. Now armed with advanced degrees and highly-educated backgrounds, the migration to Southern California to work for booming aerospace companies began in earnest.

On the heels of this, CESASC came into being in 1962. We had over 100 members, which swelled to 325 in 1966. We were all relatively new immigrants with similar backgrounds – it was a joyful and enthusiastic period in our lives and we were thrilled at the opportunity to get together and make a difference.

#### What CESASC Members Accomplished

Most of our members worked at many prestigious companies and institutions over the years. The aerospace companies that were located in Southern California included:

- Lockheed in Burbank
- North American Aviation in L.A., Canoga Park, Downey, Huntington Beach



- Douglas in Long Beach
- Northrup and Garrett Corp. in Hawthorne
- Hughes Aircraft Co., TRW, Litton and thousands of other subcontractors.

Some like Quantum Dynamics are owned by Chinese engineers. What a difference a generation makes. Members were/are involved in research and teaching at many universities and colleges such as:

- UCLA., USC and CIT
- Cal State University of Long Beach, Los Angeles, Northridge, Fullerton, Dominguez Hills and others. (This eventually led to the formation of the Chinese American Faculty Association in August of 1969).

#### What CESASC Has Accomplished in Its First Half Century (1962-2012)

We can proudly highlight:

- 1. The uniting of Chinese-American engineers and scientists in Southern California.
- 2. Our help in eradicating the early discriminatory images of Chinese.
- 3. Our contribution of knowledge and expertise to the aerospace industry, and the honor of having so many members working for companies such as JPL, Boeing, Raytheon and others.
- 4. Our continuing efforts to promote friendly relations with China, Taiwan and Hong Kong, etc.
- 5. How we paved the way for next generations, and emphasized the necessary roles engineers and scientists will play in the future.
- 6. Our warm and genuine family atmosphere that CESASC has always encouraged. Our members promote various programs that include family picnics, an annual convention, and technical seminars, just to name a few.

#### **Final Words**

As a CESASC member and founder, there are two ladies that come to mind as I remember the past 50 years. One is my wife Lois for encouraging me to start CESASC, always there as guide and co-worker. Also, to Shirley Ho, with her leadership and foresight she will lead and set the stage for CESASC's next 50 fruitful years.

We all know the world will continue to evolve and change. That said, Southern California will always have its beautiful, spring-like weather and fabulous movie stars. And we will always demand and need the talent of a few good men, and women, who are gifted Chinese-American engineers and scientists.

#### **One Giant Step: 1962-1971**

By Dr. Theodore Yao Tsu Wu (吳耀祖), CESASC President (1966)

In late 1961, *Mr. Henry and Lois Chi* invited a few friends with common desires and convictions to their house. This group of friends succeeded in bringing forth a new association, dedicated to the common goal of enhancing personal and professional development, and promoting the capacity to make worthy contributions to society and the public. This newborn "baby" was originally called the *Chinese Engineering Society of Southern California*, membership being then limited to engineers only, until it was enlarged in 1967 to the present name to embrace scientists as well. Mr. Chi was named the first president, with Mr. Tien Sou Chan and Dr. Charles CS Yen helping as secretary and treasurer. Soon the membership was raised to 102 in 1962.

In 1963, *Norman Au*'s remarks in his inaugural speech had become so well known that many famous people such as Mr. Stuart Leighton and Gen. Claire L. Chennault all have adopted Chinese names, just as we have English names in addition to our Chinese one. In 1963, the newsletter became a regular publication and served effectively as the nucleation force between 261 members.

The founding period was followed by the next one which we may call the consolidating and romantic period. During this period we had three devoted presidents, *Dr. T. H. Lin (1964)*, *Dr. Chung Ming Wong (1965)*, *Dr. Frederick F. Liu (1966)*, and their officer teams. From then on, the membership had grown steadily to 369, in 1968, 428, 1969, and becoming 230 in 1970. The Association was registered with the State of California as a non-political and nonprofit organization in 1966; and was enlarged in 1967 to include both engineers and scientists in the United States and abroad.

By 1967, when *Dr. Theodore Yao Tsu Wu* was president, the Association evolved into a developing stage with the motto, "To inspire more members to become increasingly active in the Association affairs with each sharing a more uniform responsibility." A Youth program was started most successfully under the leadership of Kam L. Wong and Ms. Paul I. Wang. The youth generation of our members' families has derived benefit from this popular program. A scholarship fund program was initiated with the great help of Dr. Shen To Chu and Dr. Tung Po Lin. One of the early generous donors was Mr. George Chin, president of the Cathay Bank of Los Angeles.

The full swing of this developing period was on the way right from the inauguration day of the 1968 President *Dr. Ju Chin Chu*. He launched an ambitious program and created nearly 20 operating committees to delegate functions of the administration. Much of the accomplishments were harvested that year, including a membership drive, monthly dinner meeting, youth program, scholarship program and a technical aid program which extended professional assistance to Singapore, UNESCO, and other areas. The attendance of the 1969 convention reached 469. For the first time four achievement awards were presented, and **CESASC** *DEBUTE* **journal** was published as well. While *Dr. Lewis L.T. Au* served as the 1969 President, the installation of regional chairmen was a great accomplishment aside from major events and various activities. These regional chairmen fulfilled missions of recommending new members, collection dues and donations, distributing announcements, checking input for the 1969 directory, and urging members to attend all programs.

Dr. Paul P. Yeh was designated acting president upon Dr. Wellington Loh's declination to serve functionally as president. Dr. Yeh was then elected as president in 1971. During these difficult years, CESASC actually had as many activities as it currently does and more attendees participated in our conventions and programs. However, the crisis of engineering profession greatly affected many CESASC members. CESASC Welfare and Employment Committee and the Directors contacted AIAA, IEEE, local companies, The White House, Department of Defense, and even Taiwan for Employment information and assistance. Therefore, our members had opportunities to meet Prime Minister C.K. Yen (嚴家淦), Vice-Premier Chiang Chin Kuo (蔣經國), Ministers Y.C. Sun (孫運璿), K.T. Li (李國鼎) and Y.S. Tsiang (蔣彥士) at bimonthly technical meetings and special occasions.

In spite of these challenges, as long as enthusiasm, cooperation and teamwork, three CESASC's key words, will continue to guide us, we believe that challenges can be turned into opportunities during our next decade.







#### Growing Pains: 1972-1981

By Dr. Tung Po Lin (林同坡), CESASC President (1973)

Our 2<sup>nd</sup> decade began in 1972 while *Paul Leung* served as President. The Board and legal counselor updated the CESASC Bylaws. All board meetings were open to members. Through such open forums, our decision-making could be shared with all members. Co-sponsored by a Bi-monthly Technical Dinner Committee and newly created *Industrial Relations Committee*, a dinner meeting was attended by more than 20 executives from local industries. Also, we were successful in placing a number of our members with several major corporations in Southern California.

Then between 1973 and 1974, *Dr. Tung-Po Lin*, the 1973 President and his team organized five bimonthly meetings. Discussion topics included "Energy Generation," 'Rapid Transit System," "Industrial Development in Taiwan," "Medical Development in China," and "Freelance Engineering." Two new committees, *Community Relations and Special Programs*, were also formed this year. A pioneering computer program, by Alfred Hsieh, to print out mailing labels saved us a lot of manual work. Co-organized by Dr. Tung-Po Lin and *Steven Tang*, the 1974 President, CESASC arranged a Peking Opera benefit performance to raise scholarship funds in April of 1974. The Technical Programs Committee also published some members' technical papers abstracts in the newsletters resulting in increased technical information exchanges among members. The Newsletter Committee further published Chinese articles in handwritten Chinese characters.

Due to the complexity of technology interwoven with other considerations of human values, gaps in communication existed among engineers and scientists and between the technical profession and general public. While *Kuang-Chi Kiang* served as the 1975 president, our activities emphasized the improvement of communication among scientist and engineers, and presentation of technical discussion information to the public through technical meetings and seminars. In order to achieve CESASC objectives, *Peter Dai*, the 1976 President, and CESASC officers provided a forum for fellow members to air their concerns relative to the *Equal Employment Opportunity and Affirmative Action Programs*. CESASC also established a liaison with the *Organization of Chinese-Americans (OCA)* through which we were able to sponsor a high school student of Chinese ancestry from this area to participate in *Presidential Classroom Program* in Washington D.C.

When John N. H. Chan became the 1977 president, we held a very informative affirmative-action-dinner meeting at which we had panelists from various government agencies to explain our rights in regards to better employment and business. In addition, we managed to raise some money through the participation in the Los Angeles County Lotus Festival at Echo Park. Then through the leadership of the 1978 President, *Shou Soon Kwong*, CESASC had its first ever sightseeing group tour to mainland China. Chaired by Dr. Charles Wang and assisted by Dr. George Shen, this wonderful trip attracted 26 CESASC members and families to join the team. Additionally, the Technical Program Committee and the Travel Committee co-organized an energy conservation symposium in Las Vegas. This program was very well received by our members too.

Under the direction of *Dr. Charles Wang*, the 1979 president, the technical meeting that was jointly sponsored by *AIAA and CESASC* in honor of the delegation from the *Chinese Aeronautics and Astronautics Society from Beijing, China,* was very exciting and informative. This was the first time CESASC jointly sponsored a program with a nationwide professional Society. With *Dr. Chen Ning Yang*'s keynote presentation (楊振寧博士 1957 Nobel Laureate), the 1980 Convention was a great success. In addition, the special meeting called in honor of the delegation of the *Chinese Institute of Engineers (CIE)* from Taiwan was very successful too. While *Tennyson Wang* served as CESASC 1980 President, Madam Anna Chennault (陳納德將軍的夫人 陳香梅女士) was invited to be the Keynote Speaker of our 19<sup>th</sup> Convention. The Achievement Award recipients included *Dr. San-Chun Shen* (沈善炯博士) and *Dr. Charles Kuen Kao* (高錕博士), 2009 Nobel Laureate. Through the leadership of *Han C. Leung*, the 1981 president, CESASC co-sponsored a fundraising party with the *Organization of Chinese Americans* for the *Asian Pacific American Advocates of California*. We also accommodated an educational tour to Chinatown sponsored by the *Historical Society of Southern California*.

CESASC's 2<sup>nd</sup> decade ended with a successful 20<sup>th</sup> Convention. We were most fortunate to have *Professor Chien-Shiung Wu* (吳健雄博士) as our keynote speaker. The enthusiasm of our supporters and the dedication of our Board/Committee members guided us to an even more successful 3<sup>rd</sup> decade.



# **Photo Recaptures (2): 1972-1981**

Row 1 (L-R)	L1: Paul Leung, 1972 President L2: Tung-Po Lin, 1973 President L3: Steven Tang, 1974 President L4: Dr. Ernest Kuh, 1975 Achievement Award recipient, with Steven Tang and Henry Chi
Row 2 (L-R)	L1: Peter Dai, 1976 President L2: George Chao, D. N. Yin, Dr. Cheng Ning Yang (楊振寧), Noble Laureate & 1980 Keynote Speaker; Charles P. Wang, 1979 President and Lily Wang, 1977 Vice President L3: Tennyson Wang, 1980 President; Lily Lee Chen (李婉若), Master of Ceremony; Madam Anna Chennault (陳香梅), 1981 Keynote Speaker; Paul Yeh, Convention Chair; and Charles P. Wang, Chairman of the Board
Row 3 (L-R)	<ul> <li>L1: 1981 Achievement Award recipients Dr. Charles Kuen Kao (高錕), 2009 Nobel Laureate, and Dr. San-Chiun Shen</li> <li>L2: Supporters at 1981 Convention</li> <li>L3: Henry Chi, Terry Leung, Han C. Leung, 1981 President; Dr. Yuan, Chia-Lieu, Dr. Chien-Hsiung Wu (吳健雄), 1982 Keynote Speaker and Charles P. Wang</li> </ul>
<b>Row 4 (L-R)</b>	L1: 1981 China Group Tour Report L2: Scholarship Presentation by Roger Fan L3: Accommodated an Old Chinatown Tour in 1981 for students of China



### **Going Global: 1982-1991**

By Dr. Catherine Kwan, CESASC President (1991)

#### 1982 President, Sui-An Fung

Two technical meetings were held on timely subjects - space shuttle and home computers. Unprecedented picnics and youth Christmas caroling were held.

#### 1983 President, Shih Yuan (Mike) Chen

Had the largest number of scholarship recipients, 72 applicants and 15 awards.

#### 1984 President, Frank Wang

The name was changed from Chinese to Chinese-American Engineers and Scientists Association of Southern California (CESASC) so that we are more mainstream. Frank was instrumental in the establishment of the CESASC Scholarship Foundation for tax deduction of donations.

#### 1985 President, Chieh Sun

100 new members joined CESASC. Over \$20,000 seeds money was raised for endowment fund for the Scholarship Foundation. Organized the first Youth Engineering and Science Project Contest which encouraged our young members to participate and to be involved in science and engineering.

#### 1986 President, Shui-Lin Chao

This was the silver anniversary of CESASC. A one day Technical Conference and Industry Exhibition was held with 50 speakers participating in 8 sessions. Many companies joined in the exhibition. This was the first time CESASC held such an activity. The convention was also the best attended event with over 1,000 people.

#### 1987 President, Sherman Yu

The Technical Program and Special Program Committee jointly organized a lecture tour to Taiwan on the subject of communication satellites. In order to serve the younger generation, one session in the Technical Conference was devoted to career awareness in science and engineering.

#### 1988 President, Chih-Ming Ho

To further focus the effects in cultivating the young Chinese American professionals, a new Youth committee was formed to encourage young professionals to join CESASC. \$35,000 was raised for the Scholarship Foundation.

#### 1989 President, Wei H. Kao

Highest number of members achieved. Regional Committees formed, extended services to members reside in rim of LA. June 4<sup>th</sup> incident occurred in China, CESASC voiced concerns timely, and Dr. Ding She Shun, President of Peking University, attended as Keynote Speaker in our 1st joint program with China. Technical Conference included unprecedented sessions with speakers in social science, art, culture, entertainment, and literature.

#### 1990 President, Edward Liu

The Far East Technical Tour to Taiwan, Hong Kong, Singapore and Thailand was a resounding success. CESASC initiated in advancement of international cooperation in science, education, economic and technical exchange programs.

#### 1991 President, Catherine Kwan

First female president was elected. CESASC 30<sup>th</sup> Convention and many committees were chaired by female engineers and scientists. A Career Planning Conference was held to help members during this economic recession.

#### **Photo Recaptures (3): 1982-1991**



 Row 4 (L-R)
 L1: Speech by C. C. Chao at a 1991 Technical meeting "Aerospace Industry in Taiwan" L2: 1991 Far East Technical Tour Poster Display
 L3: T. J. Wang, Catherine Kwan, 1991 President; Tom Sun and Pong Chao at the 1991 Technical Symposium



#### Cyber Space and Beyond: 1992-2001

By Dr. George Chao (趙家鈞), CESASC President (1992)

I was the CESASC president for 1992-1993, the start of the 4<sup>th</sup> decade since 1962. There were three technical seminars in this period which increased the awareness of the technology advancements in the U.S., PRC and ROC. By collaborating with the Organization of Chinese-American Entrepreneurs' Advisory Network (OCEAN), CESASC conducted a career opportunity workshop. The day time technical sessions of the annual technical conference were well attended by over 800 engineers and scientists from local industries and overseas organizations. The keynote speech was given by *Dr. K. Y. Chu* (朱光亞), president of the prestigious China Association for Science and Technology (中國科學技術協會). In the following year (1993-1994), under the leadership of *T. J. Wang*, CESASC co-sponsored a joint seminar with the Asian American Economics Development Enterprise to create employment opportunities. Other events include hosting the "Pacific Rim Business Adventure Workshop" and conducting career planning and improvement activities.

1994 was a very challenging year. The continuous corporate layoffs had negative impacts to both our members as well as CESASC. *Dr. Eastwood Im*, president for 1994-1995, led the effort to create the CESASC Job Opportunity Database in which people can obtain updated listing of job openings in various companies electronically. He also helped organize a workshop to study the pros and cons of working overseas. *Prof. Kung Yao* served as the president for 1995-1996. Among various activities, he helped establish a homepage on the World-Wide-Web, with a host ID of cesasc.org. It has provided information on upcoming CESASC activities as well as Employment Database for use of our members. In 1996-1997, CESASC continued with various broad and diverse activities under the leadership of *Elizabeth Kay-Im*. Activities included seminars on Modern Portfolio Theory, China AE-100 project and the outstanding speech by the well known forensic scientist, *Dr. Henry C. Lee*. In 1997-1998, CESASC promoted the importance of technical and social exchange under the presidency of *Dr. Tientsai Yang*. A seminar on stock and mutual fund investments, an Industrial Technology Conference with the Industrial Technology Research Institute of Taiwan and a seminar on key technology developments in China were well organized, well attended and received. In particular, the large-scale medical seminar co-sponsored with the Torrance Memorial Medical Center was the first of its kind in CESASC's history.

As stressed by **Dr. Munson Kwok**, president of 1998-1999, CESASC played as a role model for many new Chinese-American societies in Southern California. The CESASC heritage and legacy have been witnessed by many of us who have an American dream. Within **Bill Chang**'s term (1999-2000), CESASC continued the tradition in conducting many activities to further educate its members and its community in the new technology. He and his staff organized seminars on Y2K, Inventions and Enterprises, Venture Capital and Intellectual Property, Consumer Affairs and LA Airport Planning Strategy. A seminar on Breaking Through the Glass Ceiling co-sponsored with several local societies, such as the Society of Women Engineers, started the activities for the new millennium year under the presidency of **Dr. Sheng-Rong Lin**. He later invited **Dr. Yuan Tseh Lee**, 1986 Chemistry Nobel Laureate and President of Academia Sinica, to give a keynote speech at CESASC annual convention to share his vision of what the future holds for science and technology in the new millennium.

The most significant event of the final year (2001-2002) of this 10-year period was the 40<sup>th</sup> Annual CESASC Convention and Banquet Gala. A quote from *Edward Liu*'s president speech for the convention goes, "Our Fortieth Anniversary is an auspicious and important milestone for our organization, but it is also an important milestone for our entire Chinese American community because it highlights the marvelous successes and astonishing talents that America has reaped and enjoyed during these four decades of open immigration and intellectual interchanges." All the members of CESASC should be proud of our accomplishments in this decade.

### **Photo Recaptures (4): 1992-2001**



#### **Innovation toward Tomorrow: 2002-2011**

By Edward Liu, CESASC President (1990; 2001; 2002) and Shirley Ho, CESASC President (2004)

In kicking off CESASC's fifth decade, a look back on the last decade provided as an auspicious and important milestone for not only our organization, but also the entire national Chinese American community because it was able to highlight the marvelous successes and astonishing talents that Chinese-American scientist and engineers have been able to accomplish. Examples include **Dr. Steve Chu**, the Nobel Laureate and current US Secretary of Energy, whose father, **Dr. Ju-Chin Chu** served as President of CESASC in 1968. In 2009, **Dr. Charles Kuen Kao**, a CESASC achievement award recipient in 1981 also received the Nobel Prize in physics.

During 2002-2003, CESASC's presidents, **Edward Liu** and **Dr. Charles Wang**, were able to continually provide a place for Chinese-American engineers and scientific professionals to collaborate and gather. Both CESASC's 40<sup>th</sup> Convention in 2002 and Joint-Convention with **CAST-LA** in 2003 encompassed the empowerment of technology and human life through the Chinese-American innovation.

When **Dr. Charles Wang** served as president during 2003-2004, CESASC was able to implement the vision of technological advancement throughout the 21<sup>st</sup> century. The participation of the Vietnamese Association for Computing, Engineering Technology and Science (VACETS) in our 2004 Technical Symposium enabled CESASC to expand our services to other Asian professional associations. In 2004 President **Shirley Ho's** term, **CESASC** introduced our first **Student/Postdoctoral Poster Session** which highlighted major advances in a wide scope of fields, and enabled the young researchers from a variety of disciplines to better understand the potential of integrative research that will inevitably shape the future course of innovation. In addition, CESASC's financial status was significantly strengthened during this transitional period.

Through the leadership of 2005 president **Shan Lee**, and the 2006 Technical Symposium, CESASC reached out to and focused on the most prominent industry sectors in Greater Los Angeles area, including aerospace and defense, entertainment and media, information technology, life science, engineering and earth sciences, and high-tech industries. In addition, **Dr. Linda Ming-Huie Liau**, Director of Neurosurgical Oncology at UCLA Medical Center and a CESASC scholarship recipient in 1986, received CESASC's 2006 Achievement Award, earning public recognition for the CESASC Scholarship program which has been active since 1985. While **Dr. Sikun Lan** served as the 2006 President, CESASC significantly increased the regular and life membership size through a dozen year-around activities including JPL Day, CESASC Night at Google, City of Hope Tour, Chinese New Year Member Gathering, Taiwan Job Fair, Health and Finance Seminar, etc. In the same year, a **CESASC Yahoo Group** was created that linked all members by email.

From 2007-2009, despite the global economic crisis, CESASC's presidents **Dr. Sikun Lan** and **David Lee** were able to generate awareness and connections through Walt Disney, HSBC and the Bank of East Asia. Adding these corporations to our list of sponsors has allowed CESASC to further our goals and activities, ultimately striving to create new educational and networking programs to serve our members and the understanding to unite Chinese-American professionals.

While **Dr. Wensheng Zhou** served as president during 2009-2010, CESASC, along with UCLA, successfully co-sponsored a three-day long International Symposium on Materials for Enabling Nanodevices (**ISMEN**). In an effort to benefit our members, CESASC further sent representative to attend the **Global Down Syndrome Foundation's** annual major fundraiser. The 2010 president **Yiu Man So** was subsequently able to engage in various activities to benefit our new generation and community at large. The **Leadership Development Series** conducted by **Dr. Jiin-Jen Lee** and the collaboration with **Chaminade College Preparatory and Hope Chapel Academy High School Robotic Teams** through the KSCI/TV 18 LNY Festival were all very well received.

Between 2011 and 2012, CESASC President **Dr. Jason Wen** and the CESASC Board fully supported the **CESASC 50<sup>th</sup> Anniversary Gala Event Committee** to conduct a successful 50<sup>th</sup> Convention on **April 22, 2012.** Meanwhile, CESASC continued to organize Water Treatment Plant Tours, and enhance outreach programs for the Chinese-American student associations in the Southern California.

Throughout the past decade, CESASC has left a legacy that emphasizes on the growth and maturity of our community and its impact on technological development in America. We invite you to join CESASC and our commitment to the spirit of innovation in science and engineering.



# **Photo Recaptures (5): 2002-2011**

Row 1 (L-R)	L1: 2003 Joint Technical Symposium with CAST-LA (旅美科協) L2: Charles Wang (L1), 2003 President and William Chang (L3), 2003 Chairman of the Board at the Installation with Shirley Ho, 2004 President L3: Dr. Henry T Yang (楊祖佑), Keynote Speaker of 2005 Convention
Row 2 (L-R)	L1: Hans Ku, Luncheon Keynote Speaker of 2006 Technical Symposium L2: Henry Chi with 2005 President Shan Lee (L1) and 2006 President Sikun Lan (L3) at the Installation L3: Keynote presentation by Prof. Fujia Yang(楊福家) at the 2006 Convention
Row 3 (L-R)	<ul> <li>L1: GOOGLE Tour in 2007</li> <li>L2: 2008 President David K. Lee with speakers at the Technical Symposium</li> <li>L3: 2010 Luncheon Keynote Speaker William Wang (L2) with Wei Kao (L1), Chairman of the Board;</li> <li>2009 President Wensheng Zhou (L3) and Yutao He (L4), Technical Symposium Chair</li> </ul>
Row 4 (L-R)	<ul> <li>L1: Silent Auction session in 2011 Convention</li> <li>L2: Shirley Ho, 2010 Board Chair, joined Yiu Man So (L2), 2010 President, and Dr. Jiin-Jen Lee (L3), Keynote Speaker of a Leadership Development Seminar held on 12/04/2010</li> <li>L3: 2011 President Jason Wen with CESASC Founder Henry Chi</li> </ul>







### Photo Recaptures: 2011-2012



2012 & 2011 Presidents with Congresswoman Dr. Judy Chu



CESASC Board Members Gathered to Review Our New Website on Oct. 22, 2011



CESASC Family at 2012 Chinese New Year Gathering Event



CESASC Sponsored a Tour to Hyperion Wastewater Treatment Plant



2012 CESASC Student Scholarship Winners at Convention



CESASC Members at CAM Award Ceremony on Sept. 22, 2011



CESASC and Other Local Association Leaders at a Community Event in 2012



CESASC Booth at Asian American Harvest Moon Festival at Arcadia Park







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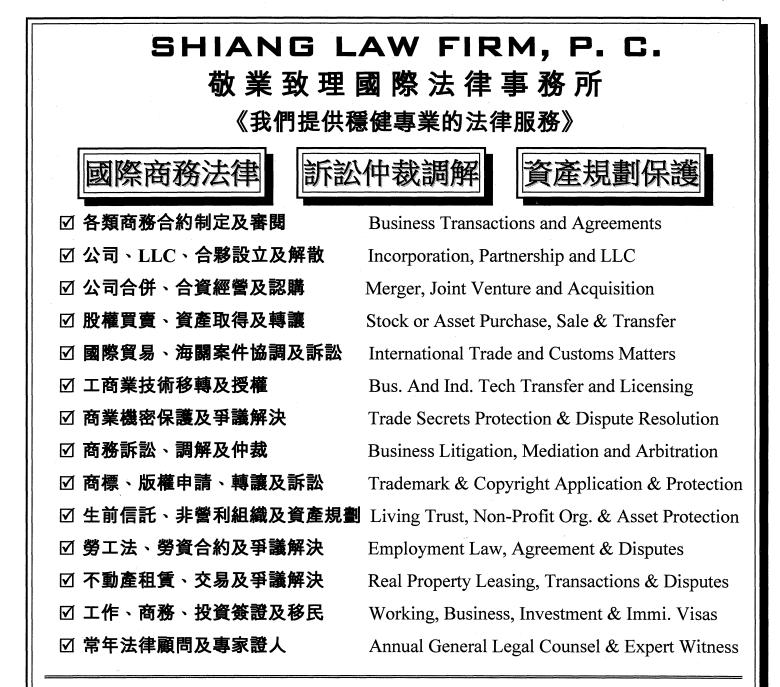
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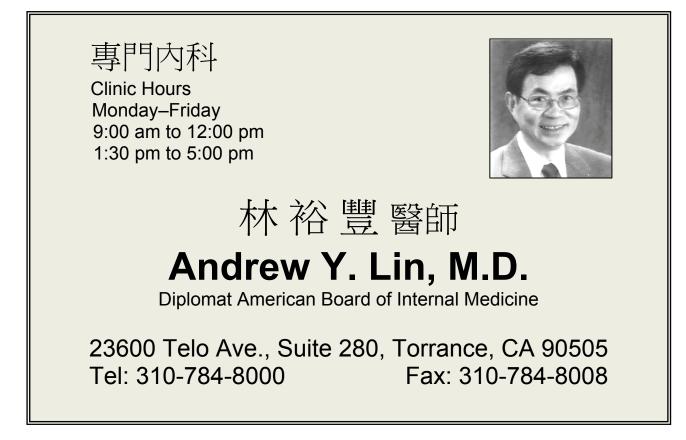
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#### 1970-1971: The Difficult Years for Scientists and Engineers and Our Association

By Dr. Paul P. Yeh (葉雹), CESASC President (1970-1971)

I had the pleasure of serving as the Acting President of 1970 and the President of 1971. My dual presidency was due to the resignation of Dr. W.H.T. Loh, President-elect for 1970, who decided to resign for health reasons in March 1970.

At that time, the large scale lay-offs by the aerospace industries in Southern California greatly affected many CESASC members. We felt the needs to serve and consequently 17 committees were formed. We contacted AIAA, IEEE, local companies, The White House, Department of Defense, and even the Republic of China for employment information. Col. Duquesne Wolf, Assistant for R & D Manpower, Department of Defense and Grant L. Hansen, Assistant Secretary, R & D, Department of the Air Force agreed to help. Vice Premier Chiang Ching-Kuo of ROC also expressed his concern during his visit to Los Angeles and invited over 60 CESASC members to attend a reception.

The 1970 Youth Committee had many activities including beach party, dinner dance aboard the Carnival cruise ship, hay ride, and square dancing, and a Christmas Party. The Bimonthly Meeting Committee had many outstanding speakers to talk at five meetings with advanced technical topics.

The 1971 Annual Convention was held at the Sheraton Universal Hotel on February 20, 1971. Dr. Chieh Chu served as Convention Chairman. A technical symposium was conducted by Dr. Fred Liu. The keynote speaker, Mr. William Bergen, Group President of North American Rockwell, made a report on the Apollo 14 moon landing.

The 17 Operating Committees continued from 1970. Every committee chairman tried to help unemployed members to find jobs. We even created a corporation and arranged a visit to the Republic of China by four members of the association for a fact finding mission.

The status of CESASC as a non-political corporation was carefully observed. Contacts between visitors from other countries and association members were limited to an individual or corporation basis. Visitors from Singapore and the Republic of China were numerous. Members had opportunities to meet Prime Minister C.K. Yen, Vice-Premier Chiang Chin Kuo, Ministers Y.C. Sun, K.T. Li and Y.S. Tsiang at various bimonthly technical meetings and special occasions. They sent us a list of Urgently Needed Personnel in Taiwan,

The crisis of the engineering profession has come and gone. Engineers and scientists are again in great demand even in today's recession. Looking back to those difficult years, it is noted that we actually had as many activities as now and more young members participated in Youth Programs. For example, 600 people attended the annual picnic and hundreds of members and family went to the youth parties. It is hoped that all the former members will rejoin CESASC and help to attract new members.



# **The Turning Point**

By Tennyson Wang (王滇聲), CESASC President (1980)

To recall significant CESASC activities in 1980, two particular events came to mind: Technical Meetings and Annual Convention.

Even though CESASC is an apolitical Southern California technical organization, the officers and the members are individuals with their own political aspirations. The technical meetings become political inspired when we wanted to know "Who is coming to dinner." The recognition of the Peoples Republic of China (PRC) on the mainland, the uprising economic success of the Republic of China (ROC) in Taiwan, and the awareness of the Taiwanese to establish their own identity had become the political shadows behind the planning process and affecting the effectiveness and the attendance of our technical meetings, when we were trying to reach out to our fellow Chinese scientists and engineers worldwide. We were at a cross road walking on thin lines straddling between three understandable sentiments, if not allegiances. The issue was not only who to associate with, but also how to properly address the invited Chinese guests from abroad.

Our attempt to provide catalyst to host joint technical meetings between PRC and ROC were unsuccessful. However, Lee Guoding and Sun Yuenxuan, the forerunners of the Taiwan science and technology development programs were amongst our invited guests. Dr. Qian Xuesen of PRC declined our annual convention speaker invitation; Madame Anna Chennault was an inspiring Keynote Speaker.

Mindful of memories of CESASC annual conventions, each of which was the highlight of the yearly activities. The speech making had become a legacy and hallmark of the CESASC conventions. At a convention years ago, the first speaker went back to the podium did a "Double Take" after the last speaker had already bid good night.

Our annual convention was without exception, after a variety of oral presentations, little time was left for the anxious disciples of "Arthur Murray" (I am really out of date) to take the floor show their stuff.

Those were the days!



# 1987: CESASC's 25<sup>th</sup> Year Anniversary Celebration

By Dr. Shui Lin Chao (趙瑞麟), CESASC President (1986-1987)

During the period of President Ronald Reagan's administration, 1982-1989, the so called Reagonomics era, the country's economy was booming and industries were rapidly expanding. Southern California, where a large agglomeration of defense contractors resided, took the opportunity and accelerated their recruitment effort. The favorable job market environment presented great career opportunities for Chinese-American college graduates, especially those majored in science and engineering with advanced degrees. Large number of Chinese-American professional joined companies including Aerospace, JPL, TRW, Rockwell, TRW, Boeing, Northrup, Hughes, and local universities such as UCLA, USC, Cal State. It was under that booming and exciting atmosphere, the year of 1987 was considered the right timing for CESASC to expand its activities to benefit our members.

As the President of that year, I am proud to note that the Annual convention held in 1987 celebrated CESASC's 25<sup>th</sup> year anniversary with several record breaking events.

We had a day-time Technical Conference, organized and led by Wei Kao, John Chen and TT Yang. There were eight technical sessions with speakers from Taiwan and mainland China, in addition to US. At the time when political implications were of great concerns and direct communications were basically forbidden, the meeting provided an open platform which facilitated technical leaders and officials from Taiwan and the Mainland China to engage. Looking back, this event has illustrated one of the many forward-looking attributes of CESASC. The successful event attracted more than 1,000 attendees.

The evening convention was organized by Cathy Kwan and Frank Wang. The convention also had more than 1,000 participants. The keynote speaker was given by the highest ranked Chinese-American in US military, Rear Admiral Ming Chang who was also the Commander of the *USS Independence* Carrier Battle Group deployed in Mediteranean Sea, Atlantic and Indian Oceans.



1987 Keynote Speaker and Achievement Award Recipient

Rear Admiral Ming E. Chang

(錢明將軍)



### The 1989 Technical Symposium and the 40<sup>th</sup> Anniversary Celebration in 2002

By Dr. Wennie Wu (吳慧怩)

#### The 1989 Technical Symposium, pioneering co-sponsorship with JPL/CIT

In 1988 when CESASC approached me to chair the 1989 Technical symposium, I was a researcher at JPL/CIT and I had just given talks in Europe about my work in subnanotechnology, optical computing, etc. I first boldly made the attempt to invite JPL to co-sponsor the symposium. Dr. Terry Cole, JPL's Chief Technologist generously agreed and I then accepted the chairwomanship. This pioneering co-sponsorship not only solved the problem of manpower and resources, but also enhanced the status of the Chinese American science and technology organization, helping it to merge into the mainstream.

To set up this symposium with zero budgets, I diligently worked overtime for almost a year to make sure things were as perfect as possible. I went to various meetings all over the area to publicize the event. I pushed hard to publish the proceedings with each speaker's abstract and biography. Prof. Paul Chu (朱經武) was the keynote speaker and the event was so popular that all of the seats and even all of the standing room were taken. There were 10 sessions and more than fifty speakers; each speaker was the leader in his/her field. In the session on Both Cultures, Yan Lu (盧燕) and 郭小莊 gave talks and Joan Chen (陳沖) participated. Attendees numbered near a thousand technological scholars and experts. This was unprecedented. The door ticket was eight dollars per person including luncheon at the Bonaventure Hotel. Round-tables had to be added, all the way to the elevator doors. Even without selling advertisements, just the ticket sale yielded a financial surplus.

#### The 40<sup>th</sup> Anniversary Celebration Convention in 2002 with technical leaders from Taiwan since the ruling party changed and those from Mainland China watching a Sino and US co-starring musical together for the first time

In early March 2002, two senior directors of CESASC called me repeatedly, asking me to chair the convention for the 40<sup>th</sup> anniversary celebration, to be held on March 30. For such a short notice and given zero budgets, I had to consider for a week, and decided to dedicate myself for its significance. Only three weeks were left to prepare. It was intensive work day and night and every second counted. The ruling party in Taiwan at the time was the Democratic Progressive Party. It was the first time that technical leaders from Taiwan since the ruling party changed and those from Mainland China met in America to attend a convention together.

For the convention, I wrote and produced an original musical "Asian American Adventures" presented by one hundred artists of Chinese and American performing groups and technologists for computer image display. Yan Lu (盧燕), who acted in "the Last Emperor," "2012,"etc., was the leading actress. Lu is a voting member of the Academy Award. We gave an award to Lu. I wrote on the plaque: Lu's true face stunning, Yan's whisper moving. (盧山真面驚天秀, 燕語呢喃動地情). In her acceptance speech, she said: "I have received numerous awards, but this one is most treasured."

This convention, with the technical leaders from Taiwan since the ruling party changed and those from Mainland China meeting for the first time, hopefully would help promote the long-term peace, progress and prosperity.



#### **CESASC 1997 Medical Seminar With Torrance Memorial Medical Center**

By Dr. Tientsai Yang (楊添才), CESASC President (1997-1998)

To expand the importance of technical and social exchange, on December 3, 1997, under the sponsorship of Torrance Memorial Medical Center (TMMC), a medical seminar was organized by CESASC to promote health awareness.

As one of the top 100 hospitals in the nation, TMMC has provided an array of medical (healthcare) services to the South Bay community. We were deeply honored to have them featured as part of CESASC's technical programs. Special thanks go to *Sally Eberhard*, Vice-President, Planning & Marketing, and *Kathryn Joiner*, Director of Community Service Programs, for their enthusiastic support.

The seminar was organized and chaired by **Ms. Shirley Ho**. Shirley was not only a co-chair person of CESASC technical committee of 1997-1998, but also the Liaison of Community Relations & Heath Education of TMMC. With her dual positions, Shirley was an ideal person to undertake this joint community activity.

We were very fortunate to have two outstanding physicians of the medical staff, Dr. Simon Lo (盧 啓正醫師) and Dr. John Chia (賈愷生醫師) from TMMC to highlight "High Tech applications in Gastroenterology " and "Current Infectious Diseases."

A principal Gastroenterologist in TMMC and a clinical professor at the UCLA Medical School, Department of Medicine, Dr. Lo addressed exciting new development in the use of Endoscopy to diagnose and treat conditions involving the various organs of the digestive tract. Endoscope, or long, thin tubes which are threaded through the intestines, enabled Dr. Lo and other specialists to perform therapy or test the function of an organ without surgery. Dr. Lo was the co-director of the Advanced Therapeutic Endoscopy Center at TMMC.

An assistant clinical professor of the UCLA Medical School, Department of Medicine, and a principal doctor in Internal Medicine & Infectious Diseases in TMMC, Dr. Chia talked about antibiotic-resistant diseases organisms and the threat of resurfacing pathogens. In addition, he discussed new preventive vaccines, as well as promising new treatments for once infectious, such as HIV.

About 200 people participated in this seminar. The presentations were extremely informative. The talks lasted approximately two hours and were well received. To respond to the audience's desire for more questions, the Q&A session time was greatly extended. These talks greatly benefited not only members of CESASC but also the general community.



L-R: TT Yang, Dr. Simon Lo, Dr. John Chia, Kathryn Joiner, Shirley Ho and Eastwood Im

As a token of appreciation to the long term support from the Torrance Memorial Medical Center, CESASC members have also enhanced our interaction with Torrance Memorial by participating in the Torrance Memorial Annual Holiday Festival Fundraisers, attending the Community REPs Meeting and actively volunteering in various healthcare functions during the past years.

CESASC 50<sup>th</sup> Journal Editorial Committee



# **CESASC** Role in the Wenho Lee Case

#### By Carolyn Chan of CACA, Munson Kwok (郭民生) of CESASC and CACA, and

#### Charles Sie (謝正剛) of CESASC

On March 5 1999, Wenho Lee, an engineer at LANL (Las Alamos National Laboratory) was falsely accused of espionage for China. Chinese American engineers and scientists at the National Laboratories were experiencing racially biased and derogatory behavior against them. Discriminatory impact was felt in promotion and contracting decisions as well as in social situation. CESASC collaborated with Committee of 100 and CACA (Chinese American Citizen Association) in calling to the US public attention of the reckless and racist media attacks against the lovalty of Chinese Americans. On March 19, 1999, an open letter was sent to President Clinton calling for due process and guarantee of Wenho Lee's civil rights and expressed cautions against racial profiling, stereotyping and Asian bashing. On April 9, 1999, John Pedesta, President Clinton's chief of staff, met with representatives of the Asian American community at the White House and listened to the specific racially-related incidents that were occurring at the National Laboratories. On June 7, 1999, President Clinton invited representatives of Chinese-American engineer and scientists to share with him about the community sentiments during this difficult time. As suggested by President Clinton, Committee of 100 worked with CESASC in drafting a letter to him summarizing the critical contributions of Chinese American engineers and scientists to the US defense efforts. The letter is attached with this report. These depictions countered the vicious attacks by the "Cox Report" which questioned the potential royalty of all Chinese Americans.

On December 6 1999, Wenho Lee was arrested without bail for mishandling secret nuclear weapon materials. In a New York Times front page article entitled "Coalition Fears An Asian Bias In Nuclear Case" by James Sterngold on December 13, 1999, it included the following passage: ........"We're going to support him morally and monetarily," said Bill Chang, president of the Chinese-American Engineers and Scientists Association of Southern California, which has a thousand members. "I'm not saying he's not a criminal, but that this has to be proved beyond a reasonable doubt and the process has to be fair," Mr. Chang said. "From what I've seen so far, this looks like prejudice and overkill." "We've never done anything like this before, but I've been getting a lot of calls from our members," Mr. Chang said. "They're very scared and angry. They're really upset about what this means for them."

This calling for just treatment of Wenho Lee and respect the integrity of Chinese Americans were kept alive during the eighteen months period in which the espionage case was first tried in the mainstream media and then in the federal court that resulted in his release from a six month pre-trial solitary confinement. Federal Judge James Parker issued an apology to Wenho Lee for the unfair

treatment he received in the hands of the Federal Bureau of Investigation. CESASC played an important role in promoting public opinions in the mainstream press for a positive outcome of this unfortunate event.

> Charles Sie, CESASC Advisor and Committee of 100 Board Member, meeting with President Clinton on June 7, 1999





The Honorable William J. Clinton President of the United States of America The White House 1600 Pennsylvania Avenue, N.W. Washington, D.C. 20500

June 14, 1999

Dear Mr. President:

I am following up on the meeting we had on June 7<sup>th</sup> in discussing the enormous contributions of the Chinese American scientists and engineers made in the defense of this nation, but little has been publicized. Per your request, I'm citing a few examples to illustrate the point.

Chinese Americans have had a long history of participating and often playing key roles, in the design, development, and deployment of tactical and strategic defense systems. There are about 150,000 Chinese American scientists and engineers and of course they are not all in the defense industry. In most of the scientific or engineering establishments, related to national defense, about 10 to 15 percent of the technical staff are Chinese Americans, who are normally the ones involved with the critical technical details of the projects. As almost any defense industry insider would verify, the contributions of Chinese American scientists and engineers to advances in defense systems have been and will continue to be indispensable. Indeed, in many instances, the innovations and contributions of Chinese Americans have allowed the United States to retain preeminence in high technology weaponry.

In the early days of the cold war, many Chinese students came to this country as refugees from the Chinese Communist revolution. Due to the language barrier, most of them studied physical sciences and many of them went on to play pioneering roles in establishing the foundation of our missile program. Dr. Shao-chi Lin of then AVCO Research Laboratory and Professor H. K. Cheng of University of Southern California, established the physics of hypersonic flow, which enabled the successful re-entry of the ICBM's and spacecraft into the atmosphere. Another fundamental contribution came from Mr. Andrew Chi of NASA's Goddard Space Flight Center. Mr. Chi developed the Cesium-133 atomic clock, which is the heart of the GPS (Global Positioning System.) GPS is being widely used, both for military and commercial purposes such as guiding our tanks during the Desert Storm campaign and directing drivers in Hertz rent-a-cars. The work of stratified flow in hydraulics, established by Professor Ted Wu at Cal Tech, has contributed critically to our underwater warfare program.

The contribution of the Chinese-American scientists and engineers in more recent times, can be best exemplified by a letter from the commander of the U.S. Air Combat Command, commenting on the work of Ted Wong, President of the Missile System Group, Hughes Aircraft Company from 1985 through 1992. The letter stated "...Your career has advanced aerial warfare by an order of magnitude. We're the world's best combat air force, because of the contribution of Ted Wong and I can see and measure these contributions eventually in the air and on the flight line of Air Combat Command around the world. ..." One might easily recognize the critical role of our air superiority played in the Desert Storm campaign, and now in the Kosovo conflict.

Chinese American scientists and engineers are contributing toward our future weapon system as well. One example is the work of Professor Chih-ming Ho of UCLA, a pioneer in applying MEMS (Micro Electromechanical System) technology to the development of "smart wing" for our future fighter aircraft design. Professor Ho is also applying MEMS to develop a smart micro-bat for reconnaissance purpose.

I hope the above examples will give you some ideas about the contributions the Chinese American scientists and engineers that have been making toward our national defense. I'm sure we can find many more examples if we spend the time and efforts. If you have any question, you can reach me at 310 375-2348 or at <u>CHSie@aol.com</u>. Thank you for giving me the opportunity to recognize the contributions of few Chinese American scientists and engineers; I've always considered this group, as a whole, to be the unsung heros in the defense of our nation.

Sincerely yours,

Charles Sie

Vice Chair, Committee of 100 26561 Silver Spur Road Palos Verdes, CA 90275

cc: John D. Podesta, Chief of Staff Marybeth Cahill, Office of Public Liason Neal Lane, National Science Advisor



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劉漢忠 (Edward Liu), CESASC President (1990, 2001-02) 王麗真 (Li-Jean Wang), CESASC International Committee - China Affair Chairperson 楊添才 (Tien Tsai Yang), CESASC President (1997-1998)

南加州中華科工學會(CESASC)在半個世紀的歷史長河中,掌握科技脈動,肩負時代使命,引領 科技群倫,匯聚華裔精英,柄持學術精神,努力艱辛耕耘,對海峽兩岸三地的科技交流,不遺餘力,踏 實地完成了階段性的歷史任務,深受國際社會所肯定。

1978-1982 年王正平當任會長、理事長期間,科工學會應邀籌組科技訪華團五次訪問中國,創會會 長戚文祥夫婦等 26 位參加了中美建交前的首次訪問,其間科工學會備受中國科技界的歡迎與重視。並 應前中國國家最高領導人鄧小平先生的力邀,於 1980 年 5 月 5-8 日,科工學會會員與中國光學學會,上 海激光學會、北京光學學會在北京及上海聯合舉辨首屆"國際激光學學術研討會",由中國光學權威王大 珩任大會主席,科工學會會長王正平任大會副主席,有來自美國等 8 個國家的 100 多位激光專家和學者 及中國 160 多位激光科研工作者參加了會議。會議共宣讀論文 60 篇(中方 29 篇,外方 31 篇),舉行 5 個專題討論會,同時舉辦了國內外激光儀器展覽。共計 500 餘人應邀出席。學術交流,盛況一時,成績 沛然。此為中國改革開放後的首次國際性的學術交流,科工學會為中美科技交流做出了起首開路的貢 獻。

1980年代初,隨著台灣經科貿的發展及赴美留學、工作的工程技術人員日益增多,科工學會重視 台美兩地的華人科技界的交流活動,當時台灣資政李國鼎、孫運璿,和陳履安、夏漢民、郭南宏、魏哲 和等歷任國科會主委,以及 90年代末中央研究院長李遠哲,相繼出席科工學會大會,親臨推動台美兩 地科技交流,促進台美兩地科技合作與經貿發展,協助產官學界為台灣的技術、人才與資金提供實際的 資源;同時,科工學會成為台灣經科貿發展,在海外全面長期交流的平台。

隨著中美關係的發展,中國大陸赴美學人、學者漸增,擴大與中國的科技交流合作勢在必行。 1980年代中期,科工學會重視兩岸三地的華人科技界的交流活動,是當時不以政治為考量而以促進兩 岸三地的相互了解、推動科技合作為總目標的華美學術社團。在兩岸互動尚未正常化之歷史情況下,對 推動海峽兩岸三地間的交流起了一定的橋樑作用。

當年的理事會與熱心科工學會活動的中國國內新來的學人合作,邀請在洛杉磯的中國海外學人參加年會,同時也向中國三科(科技部,科協和科學院)等機構宣導、介紹科工學會立會宗旨,邀請中國國內的知名科學家和科技界領導人參加科工學會的重要活動。

1980年代後期,中國科技界多位著名科學家及領導人應邀出席科工學會學術交流及在年會上發表 主題講演,如譽為"中國原子彈之父"的中國科協主席朱光亞,國家科委副主任惠永正,國家科技部秘書 長石定環,北大校長丁石孫教授,錢三強教授,華羅庚教授,騰騰教授,謝希德教授,工程院付院長朱 高峰院士和武漢市市長周濟博士等。國家科委火炬辦公室領導及有關省的高新技術開發區負責人,北京 市科委等,均曾派代表參加過年會活動。科工學會亦曾指派馮綏安會長赴北京向錢學森博士頒發終生成 就獎。

1987年年會,科工學會成立 25週年慶,趙瑞麟任會長,高為雄任科技研討會主席,陳治宏、楊添 才等人分別負責會務,邀請了大陸科委的林自新與台灣的工業技術研究院院長張忠謀博士作研討會的主 講人,吸引海內外科技界近千人參加。

1989年高為雄任會長,孫祖洪為科技組組長期間,北京大學丁石孫校長於5月訪洛,應北大南加州 校友會會長王麗真建議,科工學會和北大南加州校友會及北大之友一起舉辦了歡迎丁校長晚宴及演講會 ,100多位科工學會會員參加,加州州務卿余江月桂特地前來為丁校長頒獎,可謂盛況,這是科工學會 第一次和中國大陸在美校友會聯合舉辦的活動,頗受社會矚目。

1990-1992年間,劉漢忠任會長,何志明、高為雄、於善元先後任理事長,科工學會曾致力於全球合



作計畫,藉以推展科技交流。期間,舉辦了"亞太地區科技經濟發展研討會和工業展覽會"。同年科工學 會亦多次組團訪問太平洋地區的中、港、台、星、泰,由在美的產、官、學界專業人士組成,前後三梯 次由王鴻恩,趙蜀剛,胡家倫等人分別領隊,共有 40 餘人參訪。為鼓勵培育科技人才,發展科技教育 為首要目標,學會亦曾協助吳家瑋校長籌集資金與人才,創辦香港科技大學。此外,科工學會為推展全 球科技與人才合作計畫,協助台灣國科會首次成立太空計劃室,對早期台灣衛星技術之提升及基礎的人 才培訓具有實質的貢獻。

1993年,劉漢忠任理事長,趙家鈞任會長,中國科協主席朱光亞院士應邀出席科工學會年會並作 專題演講。

1994 年,王泰傑任會長,劉漢忠任理事長,中國國家科委副主任惠永正應邀出席科工學會年會並 作專題演講。年會舉辦了大型研討會和工業展覽會,由陳治宏任主席,李珊、王麗真、鄭振宜一起負責 ,邀請了科委火炬辦總工李臨西等三人和北京市科委主任為首的 33 人展覽團參加,盛況空前,給大家 留下深刻的印象。北京市科委代表團在科工學會理事長劉漢忠的協助下,續到 San Luis 參觀並作農業科 技項目交流,鄭振宜專程陪同前往 Detroit 參觀汽車工業展,使代表團訪美之行,滿載而歸。代表團盛 讚科工學會,"具有國際水準的組織","活動很有主流意識",及"誠意的合作"。美國前國會議員及國會 House Committee on Science and Technology 前主席 George E. Brown, Jr.,亦曾在本會 1994 科技研討會的 專題演講中,特別表彰科工學會對亞太地區科技及人才交流所做的貢獻。

1997年,楊添才任會長,於 10 月 25 日舉辦了光電通訊工業技術發展研討會。這項研討會以產品 化科技為主題,與台灣學術界和產業界交流。為此,我們邀請了台灣和南加州知名的學者專家來擔任各 項研討會的主講人。他們是工業技術研究院副院長林敏雄,加州洛杉磯分校電機系主任王康隆,前 TRW 公司半導體光電研究部經理許健健,台灣工研院電通所所長楊濬中,電子所所長徐爵民,航太中 心主任林渝寰,光電所所長刁國棟,台灣利翔航太電子公司總經理郭其忠,亞洲航空公司處長吳以正, TRW 公司電子系統部門的周培民與王暉,加大洛杉磯分校電機系教授劉佳明,張懋中和吳明強,在美 業者陳博莊,陳倜嶸,蔣文斌,李興中,施超和 R. Clark。同年 11 月 25 日,科工會又舉辦了一個"中國 重點科技的發展"研討會,由北京中國工程院副院長杜祥琬談"中國激光科技的發展和應用"與中國科學 技術拹會書記處書記張澤談"中國科拹的成立,組織和使命"。

2002 年時值科工學會 40 週年慶,成功地舉辦了兩岸三地高水平的學術交流活動。是年,劉漢忠繼 任會長,陳治宏任年會主席,吳慧怩、王麗真、洪肇奎、鄭振宜共同負責年會籌備,主題為"美國--亞洲 合作共贏發展"("Empower Asia + America Adventure")。邀請美國、香港、等地的學者專家與會,海 峽兩岸科技界的高層領導出席,推動兩岸三地科技交流與合作。研討會共有 11 個主題,分兩天進行。 美國 UCLA 科研副校長、著名納米技術專家何志明博士,前休斯公司副總裁、著名通訊專家方延昭博 士,香港理工大學工學院院長王康隆博士,前台灣教育部長暨前成功大學校長吳京博士、台灣林試所金 恆鑣博士,台灣交通大學校長張俊彥博士、西南交通大學周本寬校長及西安大學校長等同時出席,在會 上作了專題報告。大陸科技部秘書長石定環,工程院副院長朱高峰和武漢市市長周濟等率 20 餘人代表 團出席,台灣諮策會執行長林逢慶,國科委主任魏哲和也應邀率團參加,均在會上發表了主題演講。兩 岸科技官員首次面對面舉杯交談,在當時兩岸背景下實屬重大突破,會內會外兩岸三地的代表進行了認 真的、有成效的交流,在海內外及洛杉磯地區引起了巨大反響。海內外各大報紙紛紛報導、評論,並對 科工學會能突破兩岸政治前嫌,以一個民間學術社團組織,力邀兩岸三地產、官、學界,舉辦如此大型 而高水平的學術交流活動,特別給予嘉許與肯定。同時對日后海峽兩岸學術交流,以史為鑑,奠定了彼 此求同存異的信心基礎。

2005 年四月,台灣資策會梁中平主任,張曉姝組長應邀出席年會,梁主任在科技研討會中發表海 峽兩岸 E 化物流專題報告,為兩岸資訊科技應用交流作出見證。

科工學會在邁向 50 年里程碑之際,回顧過去,兩岸三地,政治繁複,交流艱辛。而今,歧見漸除, 合作倍增;繼往開來,互利共贏。全球華裔留美科技人才濟濟,為科工學會注入了新生力量。五十年 來,海外華裔科技精英,見證歷史,展望將來,新舊會員,與時俱進。科工學會為促進全球科技界的合 作與交流,必定將扮演更具國際觀及前瞻性的角色。真可謂:五十年科技春秋,科工會圓夢南加!



# **CESASC's Roles in Promoting Global Development of Science and Technology**

By Dr. Charles Sie (謝正剛), CESASC Advisor

CESASC has played critical roles in facilitating the development of science and technology in US, China and Taiwan. CESASC's fifty year history proceeded in parallel with the explosive growth of global enterprises based on science and technology. CESASC's members contributed much of their talents and knowledge in establishing the foundation for that growth especially in the early technology mecca of Southern California.

Dr. Charles Zheng-ping Wang (王正平), then President and Chairman of CESASC from 1978 to 1982 was invited to visit China five times. CESASC's founder, Henry Chi (戚文祥) with a group of 26 members visited PRC prior to its formal recognition by the US in 1979. These delegations were warmly and enthusiastically received by the Chinese scientific community in these early days of US-China exchanges. At the suggestion of PRC's paramount leader, Deng Xiaoping (邓小平), Wang helped PRC organizing its first ever international scientific conference, International Laser Science and Technology Conference (国际激光学学术研讨会) in Beijing from May 5th to May 8th, 1980 with 100 international participants (including US) and 160 from PRC. There were 60 papers presented at the conference; 29 from PRC and 31 from oversea. Deng Xiao-ping personally held a reception for the conference participants at the Hall of the People's Congress. These exchanges played pioneering roles in the ensuing economic and political relationship between US and PRC.

In the 1980's, Taiwan's National Science Council vigorously participated in CESASC's activities, through its Chairmen Li Kwoh-Ting (李国鼎), Sun Yun-Suan (孫運璿), Chen Lu-An (陈履安), Xia Han-Min(夏漢民), Kuo Nan-Hong (郭南宏) and Wei Che-Ho (魏哲和) as a platform for scientific/ academic exchanges and entrepreneurial collaborations between US and Taiwan. CESASC was commonly recognized as having contributed to Taiwan's emergence as a global IT bastion in the subsequent decades.

In the past fifty years, CESASC has played an important role in bridging the scientific communities across the Pacific and across the Straits. CESASC is looking forward to further contribute to the science and technology collaboration and exchange between US and China in the twenty first century.



**Photo 1**: Deng Xiaoping (left 2) with Charles Wang (left 3) in the Hall of People's Congress in Beijing, 1980



**Photo 2**: Chen Lu-An gave keynote speech at 1987 CESASC Convention



## **CESASC** Co-sponsored International Conference with Higher Education Institutes

By Dr. Wei Kao (高為雄), CESASC President (1989-1990)

*The 2<sup>nd</sup> International Symposium on Materials for Enabling Nanodevices ( ISMEN-II)* was held at the UCLA *California NanoSystems* Institute, September 8-10, 2010. The conference was cosponsored by CESASC, UCLA, ITRI and National Cheng-Kung University, and co-supported by Taiwan National Science Council, and the Science and Technology Division of TECO. Through the efforts of the then CESASC Chairman Dr. Wei Kao and President Dr. Wensheng Zhou, the Conference marked the first time in CESASC history that a fundamental science oriented conference was cosponsored by CESASC together with international higher education institutes. The conference provided a forum for top researchers around the world to exchange ideas and findings in areas of nano science and technology. Among the topics, nano-imprint, nano-contacts and nano-interconnects, nanocomposites, carbon nanotubes and graphene, solar cells, and bio-sensors were covered. The Conference was chaired by Prof. King-Ning Tu, a faculty of UCLA and an Academician of the Academia Sinica, and Prof. J-M Yang, a Dept Chairman of UCLA. More than 200 scientists from US, Taiwan, China, Japan, Hong Kong, and Europe attended the meeting. There were 13 world class scientists delivered session keynotes and an additional 40 papers presented. Over 40 graduate student research posters were also displayed.

As a result of the success of the 2010 conference, it was decided that the **3rd ISMEN-III Conference** will also be co-sponsored by CESASC, UCLA, National Chiao Tung University, Taiwan, ROC, Hong Kong University of Science and Technology and California Nano Systems Institute, August 27-29, 2012.

南加州中華科工學會於 2010 年 9 月 8-10 日在洛杉 磯加大校內的 California NanoSystem Institute,和洛杉 磯加大及成功大學聯合主辦了第二屆奈米材料和奈米 應用元件國際研討會。協辨單位尚有 CNSI 和台灣工 研院光電所。這次會議有世界級的 13 名科學家做主題 演講,四十位專家發表論文。出席還包括了現今世界 著名專家,如中國科學院院士曹勇和李述湯,台灣奈 米國家型科技計畫主持人吳茂昆,中研院院士杜經寧 ,HP 研發總經理 Stan Williams,加州理工學院 James



Heath,斯坦福大學納米研究室主任 Yoshio Nishi,華盛頓大學的 Alex KY. Jen,諾斯羅普格魯曼 研發副總 Dwight Streit,日月光研發總經理唐和明,喬治理工納米結構中心主任王中林,洛杉磯 加大電機系王康隆,材料科學系主任楊鎮銘教授,楊陽教授,台灣工研院光電所長詹益仁,加州 納米技術院主任 Paul Weiss 等。這次國際納米會議得到台灣國科會及洛杉磯台北經濟文化交流處 科技組的協助。專家們也決定第三屆(2012)納米國際研討會將繼續由 CESASC,洛杉磯加大,交 通大學,香港大學聯合主辦。



# Chinese American Museum 15<sup>th</sup> Historymakers Award Presentation

By Elizabeth Y. Kay-Im (郭怡珊), CESASC President (1996-1997)

The 15<sup>th</sup> Chinese American Museum's Annual Historymakers Awards Banquet took place on September 22, 2011, at the Westin Bonaventure Hotel Los Angeles. CESASC was one of the Historymaker Honorees for its outstanding contributions in science and engineering. There were 20 representatives from CESASC attended the event. CESASC looks forward to the opportunity of working in collaboration with Chinese American Museum (CAM) in developing joint projects, such as the special exhibition of achievements by the Chinese-American scientists and engineers in the American aerospace history.



**Right Photo**: Former President of CESASC Elizabeth Kay-Im (middle) accepted the award from Alfred H. Soo-Hoo, President of FCAM (left) and Los Angeles City Councilman Jose Huizar from Council District 14 (right) at the CAM 15<sup>th</sup> Historymakers Award Banquet.

Photo credit: Raymond Kwan



**Left Photo**: CESASC members presented at the CAM's 15th Historymakers Award Press Conference.

Front: Munson Kwok (L1), Edward Liu (L4) Back: Jason Wen (L3), Shirley Ho (L4)





**Left Photo**: CESASC Founders Henry and Lois Chi are proud supporters of the Chinese American Museum.



#### Chinese American Engineers and Scientists' Contribution to the Strategy Defense Initiative and Ending of the Cold War

By Dr. Charles Sie (謝正剛), CESASC Advisor

In 1999 when I was visiting the late Edward Teller, he asked me if I knew **Charles Wang** ( $\pm \pm \mp$ ) (CESASC president, 1979-1980) and his contribution to SDI (Strategic Defense Initiative, also Known as "Star Wars") which played an important role in the disembodiment of the Soviet Union and end of the Cold War. I confessed to him that I did not know. Now that CESASC in its 50<sup>th</sup> anniversary celebration asked me to write about the contribution of Chinese American scientists and engineers, especially in Southern California, I decided to talk to Charles Wang and find out the answer to Edward Teller's question so long ago.

Charles Wang was a laser physicist and was asked to chair and organize the Laser 85 Conference in 1984. He came up with the idea of focusing the conference on SDI, the centerpiece of which was the laser weapon system. Then President Ronald Reagan announced SDI in 1983 to defend against a Soviet nuclear missile attack in the environment of "Mutual Assured Destruction." Since Charles Wang was organizing the conference as an individual scientist without the sponsorship of his employer, the Aerospace Corporation, he had to personally garner the support of Lt. General J. Abrahamson, the head of SDI for such a conference. Since it was not sponsored by the US government, all presentations and discussions were not classified. The conference addressed all scientific aspects of SDI, and it was a huge success with 1,000 attendees including six Soviet scientists.

Charles Wang invited a group of laser experts to speak at the Laser 85 Conference that included the following Chinese Americans who had made pioneering contributions to the laser technology: R. Shen (沈 元讓) (UC Berkeley, non-linear optics); J. Yang (許健健) (TRW, semiconductor laser); R. Sze (Los Alamos National Lab, high power gas laser); F. Yu (Penn State University, laser optics); H. H. Szu (Naval Research Lab, excimer laser); C. Yang (王正鼎) (Ford Research Lab, non-linear optics); C. S. Liu (Westinghouse, metal vapor laser); C. Y. Wu and J. K. Chen (USC, laser optics); K. T. Tang (Western Research Lab, gas laser); and P. P. Ho (New York City College, ultra short laser).

The conference concluded with three important messages: the U.S. was serious about SDI; all key problems of SDI were technically solvable; and finally the cost of SDI implementation would be extremely high. Charles Wang received a telegram from President Reagan stating ".....In our quest for an effective, affordable alternative to mutual vulnerability, the topic matter of your conference will be critical to the SDI program. ..... the efforts of the Laser 85 Conference are vital to our national security." After the conference a few of the Soviet scientists confided to Charles Wang that the Soviet economy was in such desperate condition that there was no way they could afford an arm race with the U.S. These early messages about the U.S. efforts in SDI certainly played a role in convincing the Soviet leadership to throw in the towel and descalate the arm race in 1991. At that time, no one realized the far reaching implications of the Laser 85 conference, spear headed by Charles Wang, in opening up a coherent dialogue on SDI, which many believe contributed to the eventual collapse of the Soviet Union.



Charles Wang with Edward Teller at the Laser 85 Conference



### Leung, CESASC President, Named ASME Honorary Member

By Dr. S. R. Lin (林勝榮), CESASC President (2000-2001)

*Mr. Paul Leung* (梁佩璐), President of CESASC (1972), was named an Honorary Member of the American Society of Mechanical Engineers (ASME) in 1995.

The ASME is a 125,000-member worldwide engineering society focused on technical, educational, and research issues as well as establishing many industrial and manufacturing standards. Honorary membership is the Society's highest honor and its first honor. It is conferred *for distinguished service that contributes significantly to the attainment of the goals of the engineering profession*.

Mr. Leung's conferral was made during the Society's 1995 International Mechanical Engineering Congress and Exposition, November 12-17 in San Francisco. Mr. Leung is honored for "a lifetime of outstanding international contributions to the engineering profession in electric power generation and electric utility system planning, as well as engineering and economics; for distinctive contributions to the technical literature related to electric utility engineering and economics; and for enduring contributions to engineering education."

Mr. Leung received his M.S. in mechanical engineering from Rice University, Houston, Texas, in 1952. He joined the Bechtel Corporation, Los Angeles, in 1953, contributing to turbine cycle analysis and performance testing of power plants. In the 1960s, he began to teach power plant courses at UCLA and California State University, Los Angeles, as an adjunct lecturer. In 1965, Mr. Leung was named principal engineer at Bechtel and later a Bechtel Fellow, responsible for the economic optimization of electric utility systems. He worked in the international arena, most often in Japan, South Korea, Taiwan, Egypt, and Mexico, managing electric system planning projects. Mr. Leung is the second Chinese American receiving the ASME Honorary Membership after Chancellor Chang-Lin Tien of UC Berkeley.

Mr. Leung has served on the ASME Board and Committee on Performance Test Codes for nearly 20 years. He was awarded the ASME Prime Movers Award for best technical paper an unprecedented five times. Some of his methods have since become industry standards. He is a Life Fellow of ASME, also the recipient of the ASME Centennial Medallion, the ASME James H. Potter Gold Medal, the Outstanding Engineering Merit Award, and the Industrial Contribution Award from the California Society of Professional Engineers.

Mr. Leung retired from Bechtel in 1987. Motivated by a strong belief that engineers have a social responsibility to use their knowledge to improve society, he has since donated his time lecturing in China and Taiwan, under the auspices of the United Nations Development Program. His lectures emphasize the need to attain social, economic, and energy growth in an environmentally responsible manner.

Mr. Leung is one of CESASC's founding members. Besides serving as CESASC President in 1972, he was also the President of the CESASC Scholarship Foundation from 1991 through 1993. With Mr. Leung's leadership, the Scholarship Foundation filed for the non-profit organization status in California and we have enjoyed the tax exemption status since 1992. He is a life member and longtime supporter of CESASC. As a friend for nearly 40 years, I would like to salute Paul's great contributions to the US and the Chinese-American communities.



# Hold Up Half the Sky - Women in CESASC: Our Early Years

By Dr. Lois Chi (王爾樂), CESASC Founder and Vice-President (1974)

In 1962, racial bias against ethnic minorities was still in the air. In this climate, several determined young women began to hassle their husbands to start an organization for Chinese Engineers. The upshot was a potluck party held at the Chi residence with 14 people. In the same year, a formal meeting was held and **Henry Chi** was elected as the founding president, Charles Yen as secretary and T.S. Chen as treasurer. 103 members were recruited. The Chinese Engineers' Association of Southern California (CEASC) was born. With help from CEASC women, the 1<sup>st</sup> picnic was held at Griffith Park, 'Hollywood style." Then, a gala New Year's Eve party was held with 40 attendees.

Three years later, CEASC was officially incorporated in California. In 1967, CEASC became known as the Chinese Engineers and Scientists Association of Southern California (CESASC), joined by more women scientists. A special seal, designed by **Ken Wong**, was first seen on the 1968 membership directory cover. In 1974, the first woman officer, **Dr. Lois Chi**, was elected as vice-president. A year later, a youth program was started, with **Beatrice Wong and Margaret Wang** as committee co-chairs.

After much discussion, the "Chinese" of CESASC was finally changed to "Chinese-American" in 1977. In 1982, a record 700 flocked to the convention at the Bonaventure Hotel, drawn by Dr. **Chien-Shiung Wu** (Pupin Professor of Physics, Columbia University), the Convention Keynote Speaker. Lois Chi served as the Convention Chair that year.

In 1991, **Dr. Catherine Kwan** became the first woman president. Six years later, **Elizabeth Kay Im** became the first chairwoman of the board of directors. In the new century, the energetic **Shirley Ho** became the first woman president and the first chairwoman of the board of directors. Then, in 2009, **Dr. Wensheng Zhou** became the president too. Indeed, women "HOLD UP HALF THE SKY" of CESASC!



CESASC Founders: Henry and Lois Chi (戚文祥/王爾樂)



# Tribute to Women in CESASC

By Dr. Liping Yan (顏利平)

In CESASC's half a century of history, women have played important roles and some times even critical roles. From our very first First Lady, Lois Chi (王爾樂), to our newest female Board Member, Nancy Lin (林予華), women have contributed to the development and growth of CESASC in one way or other. My hat is off to all of the women in CESASC! During this happy time in celebration of CESASC golden 50<sup>th</sup> anniversary, let us salute to them!

Photo: Luncheon in Honor of Women in CESASC on February 18, 2012. Front Row (L-R): Shirley Yang (萬肖蘋), Maureen Sie (鮑士平), Lois Chi (王爾樂), Lily Wang (李慧英), Teresa Sun (王積青) Back Row: L1 - Shirley Ho (張翠姝), R2 - Lihua Qiu (邱利華)





#### **CESASC Honor and Award Programs**

By Prof. Kung Yao (姚琨), CESASC President (1995); Honors and Awards Committee Chair (2008-2010)

Since 1969, CESASC has had the tradition of honoring Chinese-Americans who have achieved international status and achievements in science, engineering, technology, technical management, education, and U.S. government.

In the past, CESASC has honored Nobel Prize winners including Professors C.N. Yang (楊振寧博士), T.D. Lee (李振道博士), Samuel C.C. Ding (丁肇中博士), Y.T. Lee (李遠哲博士) and Charles Kuen Kao (高錕博士). Members of National Academy of Science, National Academy of Engineers and Academia Sinica, Numerous U.S department secretary, U.S. Army general, U.S. Navy admiral, U.S. ambassador, high U.S. government officials, university presidents and professors, scientists, engineers, and high technical managers have all been recognized during our annual conventions.

In the conventions of 2008 – 2011, this committee has also recognized over a dozen such high achievers. A prominent recipient was Prof. Terrence Tao (陶哲軒博士) of UCLA, the 2006 winner of the Fields Medal Prize (considered to be the most prestigious prize in mathematics). Recipients in education included: Prof. Robert P. Lin (林伯中博士) and Prof. Xiang Zhang (張翔博士) UC Berkeley, Prof. Frank M.C. Chang (張懋中博士) and Prof. William Y.G. Yeh (葉文工博士), both from UCLA, and Prof. Frank Hsia-San Shu (徐暇生), UC San Diego. Recipients in technology included Dr. Vincent Gau (高振智博士), of GeneFluidics; in technical management included: Mr. Wing T. Chao, of Disney (趙永濤), and Mr. William Wang (王蔚), of Vizio. Other recipients included Dr. Leroy Chiao (焦立中博士), U.S. astronaut and Dr. Peter Chen (陳政博士), St. Jude Medical Inc.



#### **CESASC Technical Programs – Past Efforts and Internationalization**

By Dr. Wei H. Kao (高為雄), CESASC President (1989-1990)

The main goal of CESASC is to serve as a platform for scientists to exchange technical expertise and establish networking. During the period of 1962 to early 1980s, the convention keynote speeches and periodically held technical seminars were the main mechanisms that CESASC used to facilitate the sharing of technical information for enhancing our member's career advancement. Our events were attended by world renowned scientists such as Drs. Chien-Shiung Wu, Chang L. Tien, and Nobel Laureates Drs. Chen Dau Lee, Yuan T. Lee, Chen-Ning Yang, Charles Kuen Kao, and Dr. Edward Teller. Through these events, our highly educated members and their achievements, together with CESASC's potential influence in the technical community were recognized by major companies such as Aerospace Corp., TRW, Rockwell, JPL, Xerox, Hughes, Lockheed, etc. These companies and many others have then provided long and persistent support to CESASC in various forms, and lasted until today. In 1985, the 1<sup>st</sup> Young Engineers and Scientists Science Competition Contest was also held.

In mid 1980s, as we realized the fast growth of aerospace and other industries in Southern California, coupled with the relaxing political sensitivities among Pacific-Rim countries, it was deemed that the time had come for holding a large scope international conference, with periodic technical seminars continuing. In the 1987 administration of Dr. Shui-lin Chao, Dr. Wei H. Kao chaired the Technical Conference and Industrial Exhibition. The successfully held March Conference marked a dramatic change of the scope and depth of CESASC's technical programs in many aspects. In addition to US speakers, the technical sessions invited speakers from Taiwan, China and Hong Kong, all were in active high ranking Science & Technology positions. This marked a breakthrough at the time when political adversary feeling was still persisting. The event had over 800 attendees with over 30 companies sponsored exhibition booths. The event was believed to be the largest one ever held in the US and by Chinese-American associations at the time, and consequently established the leading role of CESASC. We are also delighted and proud to note that some of those who participated in our programs felt the needs and then formed organizations for their own specific technical areas, such as: computer, aerospace, environmental, transportation, etc.

As the political atmosphere has been further relaxed among US and Pacific Rim countries, since mid-1980s and till today, CESASC has continued its successful technical conferences. Starting about mid- 90s, the increasing number of students and professionals from China made a positive impact to the resources needed by CESASC. Annual programs have been held with content concurrently reflecting advanced technologies, such as Satellites, MEMS, Nano-, cloud computing, bioengineering, medical technology, wireless, electronics, environments, clean energy, business ventures, and Chinese culture. Our program speakers included Drs. Henry Lee, Paul Chin-Wu Chu, etc. We have further worked together with other organizations, and main stream US professional organizations such as IEEE, AIAA. In September of 2010, CESASC also co-sponsored with UCLA and National Cheng-Kung Univ. to host a week-long International Symposium on Materials for Enabling Nanodevices (ISMEN), participated by researchers from US, China, Taiwan and Japan universities. The success of this conference enabled CESASC to reach out to academic institutions in the world and established a new model for future collaboration.

As we are celebrating the 50<sup>th</sup> year of CESASC, it is noted that over 1,200 experts have presented their accomplishments formally at our technical forum, and over 10,000 professionals have attended our technical events, and many of our members made career advancement overseas via our platform. With the internationalization of our technical conference contents, and the increasing number of younger member constituents, I believe the core value of CESASC, namely, providing a technical platform, will continue to exert value-added benefits to our members.



#### Scholarships and CESASC Scholarship Foundation

By Dr. Munson Kwok (郭民生), CESASC President (1998)

Annually, the CESASC Scholarship Foundation funds the CESASC scholarship program to encourage students to pursue engineering, science and technology, including topics of medicine and economics. Presentations are made at the annual Convention. The Foundation mission now has extended to the support of educational conferences and the pursuit of studies important to the technology professions.

CESASC scholarships commence on an informal basis in the early 1970's, motivated by members who were academicians interested in encouraging their students and also by examples of like groups across the Nation. CESASC members realized that the "pipeline" into the technical professions must be nurtured. At the time, CESASC set the record by deciding that a scholarship shall be no less than \$500, a large sum for an award of merit. Funding came from generous members with occasionally one or two annually from the CESASC general fund. Criteria defined excellence in scholarship, related community service, residence of family or college in Southern California. Word of this program, in pre-Internet days, was proliferated by announcements through the member academicians at their schools, or through network connections of the membership that reached even into the major engineering firms in the region. The competition quickly became fierce, as GPAs usually needed to be greater than 4.0!

After over a decade of operation, several enlightened Scholarship Committee Chairs in succession called for better organization of the process, to manage many more scholarships and more funds. By that time, the number of scholarships given sometimes reached as many as ten or more annually, and donations from firms and banks were not uncommon. CESASC Members added their view. *Dr. Cecilia Yu* remembered how important a token scholastic award of \$100 inspired her career, and she urged CESASC to formalize its program. With the driving energy of *Dr. Frank Wang* during his term as CESASC President, *Dr. S.A. Fung, Henry Chi*, founding president, and *Lois Chi, Michael S.Y. Chen*, and *Robert Sung*, the CESASC Scholarship Foundation was created in 1986 with the legal assistance of Wellington Kwan (of a pioneering Chinatown firm) as a federal 501c3, an educational charitable nonprofit corporation. The Foundation would



ational charitable nonprofit corporation. The Foundation would loosely affiliate with CESASC (a professional non-profit) through bylaws. This means that large-sum scholarship and educational donations to the CESASC Scholarship Foundation are now tax-deductible as legally allowed.

To initiate funding for the Scholarship Foundation, six very generous and enthusiastic members led by Henry and Lois Chi "endowed" the Foundation with large sum donations for special funds, several in honor of parents or past eminent relatives. Subsequent donations have raised the total to ten, to date. A generous donation by John Tu in 1991 helped to expand the program. It was decided as a goal that the management aim of the Foundation would be to preserve capital and use only the earnings to generate annual \$500 awards. (It might be noted that the earliest funds were based on bank certificate earning rates at 8% and later had to increase!) By the 1990's, there was greater recognition of financial need, and a two-tiered program, with

the excellent needy student receiving \$1,000. In the last decade, scholarships are no less than \$1,000 each.

CESASC Scholarship Foundation proudly joins with CESASC on this 50<sup>th</sup> Anniversary to report that over 250 scholarships totally valued exceeding \$200,000 have been given. We thank all our donors of past years for their generous support.

CESASC Scholarship Foundation is a federal 501(c)(3) non-profit corporation. We welcome all donations and special funds, which are tax deductible to the extent allowed by law. Please make checks payable to "CESASC Scholarship Foundation" and send to **M. Kwok**, 5474 West 76<sup>th</sup> Street, Los Angeles, CA 90045-3208. Further information may be obtained from Shan Lee, Board chair, Edward Liu, president, or Munson Kwok, treasurer of CESASC Scholarship Foundation. Please inquire about the special fund program before donating.

*"Consider a Scholarship or Special Fund donation honoring CESASC's 50<sup>th</sup>."* 



# Mentoring the New Generation

By Yiu Man So (蘇耀民), CESASC President (2009-2010) and Scholarship Chair (2007-2009)

#### I am a person who is always hungry for mentorship for me and the following shows my process.

#### Scholarship and Generation Exchange

Three terms as scholarship chair of CESASC have allowed me to review the achievements from the brightest university students from the US and overseas. One highlight as at my first term of service, I hosted a special exchange/networking session between the *Achievement* awardees, Mr. Wing T. Chao (趙永濤), Dr. Robert P. Lin (林 伯中), and Dr. Terence Tao (陶哲軒) with our twelve scholarship winners. The session filled with warmth and



unprecedented atmosphere as the three *Achievement* awardees mentored the scholarship winners. CESASC provides not only encouragement and financial reward, but also an opportunity for young achievers to network and learn from the best in the field. CESASC will conduct these invaluable sessions in the upcoming scholarship programs.

Beside scholarship services, I had two critical roles in supporting Science Technology Engineering and Math (STEM) through mentoring high school students in robotics programs and serving as a judge in major science fairs.

#### **Robotic Mentorship**

One of my CESASC's outreach activities was to serve as a mentor for a Louisville high school in the design and constructing of robots for national competitions. After three years, I have to report that the tight schedule and goal intensified competition along with a team of excellent mentorship have powered the transformation of a reserved Asian American into a team worker and visible leader in a diverse culture environment. Such valuable engagements prove a valuable channel to enhance young Chinese American's visions in STEM and increase their future job placement and advancement. I highly encourage all CESASC members to participate in this priceless and highly rewarding mentorship opportunity.



#### Science Fair

Serving as a judge at the California State Science Fair (CSSF) for many years allowed me to support the scientific community as well as enabling me to observe the scientific progress of the student participants as well as their educators. In addition, I have also had the privilege to serve as a grand judge for the Intel<sup>®</sup> International Science and Engineering Fair<sup>®</sup> (Intel ISEF), which allowed me to understand how our local youth advancement in science compare the rest of the world.

#### Leadership Development Workshop



Beyond supporting high school and university students, I realize the career support need for the local Chinese American professionals. I provided a *Leadership Development Workshop*, and our team successfully launches the first one titled "The Four Pillars of Life" by the renowned Dr. JJ Lee (李錦珍教授) from USC. The workshop was overwhelmingly successful and demonstrated that the Asian American Community is hungry for such resources at all stages of their careers as well as for their personal lives.

#### "Dancing with Dragon - Leaders Wanted"

In summary of my community service I prepared and delivered an opening speech titled "Dancing with Dragon, Leaders wanted" for another Asian networking organization (NAAAP OC). In which I emphasize the urgent need for local Chinese Americans to rise up in mentoring our young generation to cope with the rising Dragon (China). CESASC composes of members in diverse disciplines in science, engineering and the financial spectra. I encourage all members to feel the joy and reward in the mentoring the young generation and to provide leadership training/exchange to strengthen the Chinese American in all stages of their career.



# Youth

寫科工未來

育中華新智

Writing Our Future

By Shirley Ho (張翠姝), CESASC President (2004)

Since CESASC's founding, the enrichment of our youth program has been an important goal during the past years. In order to meet our needs, various youth programs have been developed through the leadership, dedication and hard work of our former board members, and assistance from CESASC supporters.

**Dr. Paul Yeh**, the 1971 President, indicated that CESASC often arranged **Industrial Tours** for our youth members. "CESASC youth were also interested in visiting aerospace companies," Yeh further emphasized. According to **Dr. Teresa Sun**, the 1975 Youth Programs Chair, who has worked closely with younger members since 1973, volunteering and participation in our functions and annual conventions were all efficient ways of involvement during the early years.

In order to promote the youth's interest in research and cultivate their ability of independent study, CESASC conducted a *Youth Engineering and Science Project Contest* for grade 7-12 intermediate and high school students in 1986. The Contest winners were: Viola Chee Ng, Corinna Kao, Michael Sung, Joseph Chen, Wayne Chen, Arnold Chao, Gerald Chao and Michael Yeh. Through well-organized team efforts led by **Dr**. *Wei Kao*, the 1989 President, **the Contest** was very well received by students and community.



CESASC first Youth Engineering and Science Project Contest Award Presentation (1986)

In 2005, *Dr. Dean Ho* and *Dr. Benjamin Chu*, Ph.D. candidates from the UCLA Bioengineering Department, organized our first *Student/Postdoctoral Poster Session* in that year's technical symposium, which highlighted major advances in a wide scope of fields such as Biological Sciences, Chemistry/Physics, Engineering and Applied Sciences, Nanotech, Biotech, and Wireless Tech, etc. The poster presentations enabled the young researchers from a variety of disciplines to better understand the potential from integrative research that will inevitably shape the future course of innovation.

In an effort to strengthen leadership skills for future generations, CESASC further developed a series of *Leadership Development and Mentor programs* over the years. Panel Discussions, Topical Seminars, and Communication Workshops conducted by well-known entrepreneurs have tremendously benefitted our youth.

Furthermore, some of our board members have been quite active in the youth programs established through community. *David K. Lee*, the 2008 President and *Yiu Man So*, the 2010 President, have set good examples for all of us.

In conclusion, CESASC would like to express our sincere thanks to two 2009 Scholarship recipients. *Emily Yu* contributed her art work and efforts towards our fundraising programs. *Michelle Chen* served as a Master of Ceremonies during our 2010 Convention. What great interactions between CESASC and its youth members! We wish CESASC continued success in our youth program and greatly welcome any suggestions from you.



# 會史管理需慎重 Historian - Writer of CESASC History 承先啟後就靠它

By Shirley Ho (張翠姝), CESASC President (2004)

During the years while I served as a historian and worked with several historians in Palos Verdes PTSAs (半島學區家長教師協會), I've gained so much from these mainstream associations, and I would like to share my experiences with you through the CESASC 50<sup>th</sup> Journal.

#### **My Experience**

A historian is one who writes or compiles a chronological record of events. In the non-profit organizations I served, the historian is always an officer of the Board. Historians supervise the transition between outgoing Board and incoming Board, and make sure every board position turns over his or her **JOB DESCRIPTION** and **YEAR-END REPORT** during the group's In & Out meeting. While I served as a historian at the Palos Verdes Peninsula High School (PVPHS) Parent & Teacher Association, I often carried my camera to various events organized by VPs or Event Chairs. These photos, either kept in an album or displayed on a poster, have played a very important role for the PTA's Installation Luncheon which was always held in May. During the Installation Luncheon, the historian also needs to give a very **CREATIVE** report. Parents always wrote poems to describe what they have done during their terms. In lieu of a verbal report, I performed a song with newly revised lyrics to outline the accomplishment of our Board.

#### **CESASC's History**

Since June of 2011, I have dedicated myself to researching the CESASC history. The main resources were based upon Former Presidents' Messages from forty three Journals. However, several milestone Conventions and Technical Symposiums did not retain/preserve **ANY** photos or enough records. To connect the pieces of information of these years together has become a quite time-consuming task for me during the past months. Through interviews with some former presidents, it was found that they only knew their **OWN** accomplishments and very few were really clear about what happened before or after their terms. As one of the two Historians during the past 50 years, I strongly encourage CESASC to elect a historian every year in order to streamline the transition process. In conclusion, I'd like to thank *Lois Chi, Sherman Yu and Sikun Lan* for their record keeping efforts. Special thanks also go to the **1981 and 1982 Boards** for very well organized photo collections.

多數的美國主流團體均有一套行之有年的制度,理事成員中定有一位會史管理長(HISTORIAN),其 重要性與秘書及財務不相上下。會史管理長為所有理事提供新舊交接程序,新理事甫上任時,需確 定每位理事均自前任者收到一份工作檔案夾,內有會議紀錄、議程、財務報告以及該職務年度詳細 工作記錄等。理事卸任前,則需依會史管理長的指示,將更新的職責說明(JOB DESCRIPTION)及年 終報告等項在新舊理事交接會議中交到繼任者手中,如果哪位理事想要省略這一步驟是不可能的, 會史管理長會緊緊地跟著那位理事,直到他/她完成所有的交接程序。我所服務過的華人團體大都 沒有這個職位,碰上有能力的會長,則問題不大,如是新手會長,有可能近兩三年的文件也需數週 才找得到。這也難怪,某些會長或理事甫一上任就有挫折感,因為對整個系統制度不甚了解,常得 靠自己的創意運作會務,因為活動辦得辛苦,常是以一場熱鬧的慶功宴代替慎重的移交,長此以 往,如何維持完整的會史及制度呢?過去十個月來,我頃全力將斷斷續續的中華科工學會的歷史連 接在一起,實為一大挑戰。寄語未來的會長及理事們,南加州中華科工學會如欲走得更長遠,還需 各位同心協力,繼續在會史管理的園地上耕耘。



#### New Page

By Mingsong Yin (殷明松), CESASC Webmaster

While CESASC is celebrating its 50<sup>th</sup> anniversary, CESASC website has been upgraded and turned into a new page. The new website utilizes cutting edge web technology as platform for CESCSC to fulfill its mission.

#### **Provide Richer Communication and Networking**

The new website not only posts news in technology to members and visitors, but also creates mechanism for members to participate in providing content to the website such as announcing events of other organizations, employment opportunities, educational news, sharing photos, videos, online member registration, etc.

For years, the annual convention and periodical technical seminars were the main mechanisms for CESASC to share technical information for enhancing our members' career advancement. The futuristic CESASC will utilize blog and discussion board on web site as additional platform for members to exchange technical expertise, establish networking, and advance career without constraints of time and space.

#### **Expand Territory**

In the past CESASC focused on serving scientists and engineers in Southern California. CESASC will extend its mission to all Chinese scientists and engineers who are able to access the Internet. CESASC welcomes people outside Southern California to join CESASC. Recently one scientist in Silicon Valley joined CESASC and searched for expertise from CESASC.

#### **Facilitate Team Collaboration**

CESASC team will use the website to share documents and calendars, work collaboratively on documents or projects, online discussions, and surveys, etc.

With rich history CESASC is starting a new page. The new page will be richer, brighter and more colorful!

# **新的一页** <sub>殷明松</sub>

随着南加州中华科工学会 (CESASC) 即将跨入第二个五十年之际,CESASC 的网页旧貌换新颜,翻开了新的一页。新的网页运用新的网络技术为 CESASC 履行其使命提供一个更有力的工具与平台。

#### 提供丰富多彩的交流

新网页在继续向会员和网友提供科技信息的同时,将为会员和网友参与网页内容的更新提供管道,使得会员间的交流与专业互动更为容易,诸如发布其他社团活动信息,就业机会,教育资讯,分享活动图片,视频,网上申请加入学会等等。

多年来 CESASC 举办一年一度的大型科技研讨会,为科技界提供最新动态,让与会者受益良多。展望未来 CESASC 可在网页上开设部落格(Blog)与专栏讨论,为会员们提供一随时随地介绍和探讨新科技的平台。

#### 扩大 CESASC 的活动空间

过去 CESASC 致力于促进南加华人科技人员间的科技交流与发展,CESASC 将运用网页为任何有国际网络地区的华人科技人士服务,同时吸引南加以外的科技工人员及有志加入科技行业的人士加入 CESASC。最近有一位 硅谷的科技专家通过新网页加入为会员,并开始在 CESASC 寻求他们所需要的科技人才。

#### 提供更有效的团队工作环境

CESASC 工作团队可在新网上共享文件信息与学会活动时间表,协同进行文档管理或学会活动规划方面的工作和在线讨论民意收集等。

愿历史悠久的南加州中华科工学会将继往开来,在新的一页上绘出更绚丽多彩的图画!



# **CESASC-Industry Outreach**

By Shan Lee (李珊), CESASC President (2005)

Historically, CESASC's membership has a substantial concentration of people from the aerospace industry. It is understandable since aerospace industry has been a major economic driving force in Southern California for many years.

During the 1980s, many top executives from companies such as *Rockwell, McDonnell Douglas, TRW, Aerospace Corp., Bechtel, 3M*, etc., served as the keynote speakers during CESASC's annual conventions.

During the 1990s and on, many top scientists and administrators from academic institutions such as *Caltech, UCLA, USC, UC Irvine, UCSD and UC Santa Barbara*, including a few Nobel Laureates, as well as high-ranking government officials from DOD, DOT and Armed Forces, would come and serve as the keynote speakers. Top executives from *Hughes, Boeing and JPL* continued to be involved with CESASC's activities. Large engineering firms such as *Bechtel, Tetra Tech's* support also reflected the significant growth of environmental sciences in Southern California

Many of the achievement award recipients over the years are Nobel Laureates, members of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, Taiwan's Academia Sinica and China's Chinese Academy of Sciences and Chinese Academy of Engineering.

Since the cold war ended in 1989, aerospace industry in Southern California has started a steady decline due to the defense budget cut. But many other industries have sprung up in Southern California, many start-ups and mature companies in biotech, software, computer, communication, 3D animation and internet industries play an important role in driving the advances of the science and technology.

Into the 21<sup>st</sup> century, CESASC started the effort reaching out to other industries. Companies in the entertainment industries such as *Walt Disney, DreamWorks and Fox,* etc. and biotech industries such as Amgen became involved in our activities and sponsors. A few aerospace companies such as *Northrop Grumman Corp., Raytheon and Pratt & Whitney/Rocketdyne* continue to be major sponsors of CESASC.

Since our membership is also an important consumer group, we reached out to financial industry for support. A lot of banks give us support over the years. *Citigroup, HSBC, Cathay Bank, Chinatrust Bank*, as well as security firms, *UBS, Morgan Stanley*, etc. are all among our important sponsors.

Looking into the future, CESASC will continue to work with the emerging industries such as the life science industries in medical devices and drug discoveries, alternative energy industries in solar, wind, geothermal, fuel cell, utility industries that will upgrade our infrastructure such as smart grid and the environmental and construction industries on the improvements of efficiency of energy consumption and reduction of carbon emission and contamination. These areas will provide future career opportunities for the local economy and where our new members will come from.

# The Aerospace Corporation and CESASC

By Dr. Charles C. Wang (王啟明), CESASC President (2002-2003)

The Aerospace Corporation in El Segundo, California, has been a long time friend of CESASC. It not only consistently sponsored but also sent its representatives to



Eberhard Rechtin

celebrate the CESASC annual conventions for years. The *Vice President, Bruce Billings*, of Aerospace's Washington Office and the *President, Dr. Eberhard Rechtin*, of The Aerospace Corporation were invited to address the keynote speeches at CESASC convention banquets in 1975 and 1985, respectively. Their presences and inspiring speeches symbolized the close connection between Aerospace and CESASC. Keynote Speaker



BRUCE H. BILLINGS VICE PRESIDENT - WASHINGTON OFFICE THE AEROSPACE CORPORATION

The relationship between Aerospace and CESASC can be also clearly recognized by the fact that there were eight CESASC presidents from Aerospace in CESASC's 50-year history. They were Norman Au (1963), Charles P. Wang (1979), Frank Wang (1984), Wei Kao (1989), George Chao (1992), Munson Kwok (1998), Sheng-Rong Lin (2000), and Charles C. Wang (2002). These eight individuals made significant contributions to CESASC and held their personal professional achievements at the same time.



L-R: Norman Au, Mrs. Au, Lois Chi, and Henry Chi

• Norman Au worked at Aerospace from 1961 to 1992. He was the recipient of Aerospace Asian-Pacific American of the Year Award in 1979. When he retired in 1992, he was the General Manager of Vehicle and Control Systems Division. Norman was also the recipient of the CESASC Achievement Award in 1985.

• *Charles P. Wang* was a Senior Scientist in the Aerophysics Laboratory at Aerospace working on laser devices and related technology, such as HF Chemical laser and Excimer laser, unstable resonator, pointing and tracking, etc. He was the recipient of many Aerospace Inventors Awards, U.S. Patents, and Program Chair of the LASER 1985 Conference on SDI. Currently, he is the President of Optodyne, Inc. in Rancho Dominguez, California.

• *Frank Wang* joined Aerospace in 1960. He was the Principal Director of Space Test Directorate when he retired from Aerospace. He was also the recipient of Aerospace Asian-Pacific American of the Year Award in 1985.

• *Wei Kao* joined Aerospace in 1981. He was the recipient of Aerospace Asian-Pacific American of the Year Award in 1989. Before he retired from Aerospace in 2007, he was the Director of Materials Science Department. He is currently the Associate Director of the Institute for Technology Advancement in UCLA.



• *George Chao* retired from Aerospace in 2002 as a senior engineering specialist after 24 years of accomplished technical service. He has won numerous awards including a U.S. patent in GPS application of controlling spacecraft in formation and is widely regarded as one of the leading experts in the nation in geostationary orbit control and collocation. He was the recipient of Aerospace Asian-Pacific American of the Year Award in 1993.

• *Munson Kwok* joined Aerospace in 1968 and was the Department Head of Mechanics Research in the Aerophysics Laboratory before he retired after 44 years of continuous service as a Senior Project Engineer. He worked as a chemical physicist on HF lasers and on directed energy weapons, and as a optical engineer on sensor payloads of Space Surveillance and Tracking System projects. He was the recipient of Aerospace Asian-Pacific American of the Year Award in 1982.

• Sheng-Rong Lin joined Aerospace in 1973. He served as Director of the Structural Technology Department and the Structures Department for over 20 years, introducing and advancing the state-of-the-art structural analysis techniques for composite structures since early 1970's. Currently, he is the



Alexander C. Liang

Senior Project Leader in the Vehicle Systems Division. He was named the Aerospace Asian-Pacific American of the Year in 1994 and received the Aerospace Distinguished President's Award in 1991 because of his engineering achievements. He was invited to serve as a panel member overseeing NASA's solid motor improvement program and evaluating Space Shuttle and International Space Station recurring anomalies.

• *Charles C. Wang* joined Aerospace in 1996. During the past 16 years, he has been dedicating himself in the area of digital communication systems design. He has won more than ten US patents in his career at Aerospace. He is currently the Director of Communication Systems Engineering Department.

It is more than worthwhile mentioning the contributions of another Aerospace employee Alexander Liang to CESASC. Before Alex passed away in 2009, he had carried the touch from Norman Au as the mentor to many Asian-American employees, especially members of CESASC, at Aerospace. Alex joined Aerospace in 1970 and was the General Manager of Vehicle Systems Division when he died. To recognize his outstanding accomplishments in both professional career and community service, Aerospace has renamed the Aerospace Asian-Pacific American of the Year Award to Dr. Alexander C. Liang Asian-Pacific American Achievement Award in 2010. Alex was also the recipient of the CESASC Achievement Award in 2000.

In the mid-1970's, Aerospace led the industry in complying with federal executive orders for equal employment opportunity. Munson Kwok helped to create the company's executive Aerospace Affirmative Action Committee (AAAC). Munson Kwok, Alex Liang, and others formed the Aerospace Asian American Association (AAAA) first chaired by Dick Luke and mentored by the high manager Norman Au. Starting with President Shui-lin Chao, consciousness and comprehension of issues in hiring, upward mobility (glass ceiling), access to high-security(i.e. more lucrative) jobs, and salary parity were then brought to the understanding of CESASC membership by formation of similar committees in CESASC for presenting panel forums, promoting vigilance of industry practices and overcoming stereotypes. CESASC partnered with *Leadership Education for Asian Pacifics* (LEAP) to refine skills of members seeking to move up. The vigilance aspect was dramatically exercised when Dr. Charles Sie, assisted by Munson Kwok, helped to initiate the national movement to free Dr. Wen Ho Lee and obtain justice for him in 1999.



# **CESASC's Relationship with Raytheon**

By Manwai Szeto (司徒文偉), CESASC Treasurer

CESASC's relationship with Raytheon first date back to year 2004 when **Dr. Peter Pao**, Raytheon Corporate Vice-President of Engineering & Technology, was given the Achievement Award. Employees from Raytheon were notified of this award and have attended the annual convention & awards program and supported CESASC ever since. Another notable Achievement Award recipient from Raytheon was **Ms. Heidi Shyu** in year 2007. Ms. Heidi Shyu served as Corporate Vice-President

of Technology & Research and presented the luncheon keynote speech "Leadership for the 21<sup>st</sup> Century" at the 45<sup>th</sup> Annual Convention & Awards, sponsored by Raytheon with Manwai Szeto and Fonda Wu as session co-chairs. We are very proud to report that Ms. Heidi Shyu has since been appointed by President Barack Obama in June 2011 to the position of Assistant Secretary of the Army for Acquisition, Logistics and Technology. CESASC can't wait for the third achievement award recipient from Raytheon in the coming years.

This relationship proved to be very beneficial for both CESASC and Raytheon. CESASC gained a national corporate sponsor and in return CESASC can offer Raytheon exposure to



L-R: Manwai Szeto, Kung Yao, Sikun Lan, Shan Lee, David Lee and Fonda Wu joined Heidi Shyu, L4, after her Keynote Presentation.

countless of highly qualified engineers and scientists. Raytheon has supported CESASC by advertising in the annual journals, sponsoring tables at the conventions and setting up booths at the technical symposiums.

Another benefit for CESASC is that several employees from Raytheon have turned out to be invaluable contributors to CESASC, serving as board members over the past seven years. Past CESASC board members from Raytheon include **Yiuman So** (past-President 2010-2011), **Manwai Szeto** (current Treasurer), **Fonda Wu** and **Ying Zhang**. Many other employees have contributed in other ways including volunteering at the registration tables for the annual convention, hosting technical sessions at the technical symposium and coordinating music and live performances at the awards dinner.

On September 14, 2011, CESASC, along with local community organizations and companies, organized a networking event at the Raytheon Employee Park in El Segundo. The purpose of this event is to showcase some of the local industry companies and community organizations and also to build on relationships among its members. Employee Resource Groups (ERGs) from Raytheon, Aerospace Corporation, Boeing and Northrop Grumman presented the 100+ audience with a brief description of their organization. Local community organizations such as Asian Business League, Asian Pacific Alumni of UCLA and National Association of Asian-American Professionals (NAAAP) also presented similar briefings. Yiuman So, CESASC past-President (2010-2011), gave the briefings on behalf of CESASC and then gave a brief history of the Harvest Moon Festival and the importance of us all forming alliances to strengthen our common cause. Special thanks go out to Shirley Ho, David Lee, Yiuman So, Manwai Szeto and Jason Wen for coordinating this successful event on behalf of CESASC. It is with these types of events that we continue to build the CESASC brand and name around our community and industry.

# CESASC and North American Aviation/Rockwell International/Boeing/ Pratt & Whitney Rocketdyne

By Dr. Youping Gao (高幼平), CESASC Secretary and Board Director (2009-Present) Dr. T.T. Yang (楊添才), CESASC President (1997), Dr. Konrad Zhu (朱昇華), CESASC Secretary and Board Director (2005-2008)

The Chinese-American Engineers and Scientist Association of Southern California (CESASC) was founded in 1962 to promote professional excellence of Chinese-Americans in the engineering and scientific fields. The early 60s was also the time when the word of Southern California had an inherent connotation of the aerospace industry, as Dwayne Day, an American space historian, described in the Blue Sky Metropolis: The Aerospace Century in Southern California exhibits. The founding of CESASC was met with enthusiastic support of Southern California's aerospace companies where significant numbers Chinese American worked in the high tech industry. Engineers and scientists from aerospace giants such as North American Aviation, TRW formed the essential bases of the CESASC membership. Recognizing Chinese American engineer's contribution to the aerospace industry, corporate executives embraced CESASC for its leading role in the Chinese American professional community. As the group formally launched its annual convention, executives from North American Rockwell were among the first to deliver keynote speeches. Wallace W. Booth (L1), Vice President of North American Rockwell was the Keynote Speaker in 1969 followed by William B. Bergen (L2), Group Vice President, in 1971 and Richard F. Walker, President of North American Rockwell in 1972. North American Rockwell's Dr. Yu Hsiu Ku (L4, 顧毓 琇) was the first one to receive CESASC Professional Achievement Award in 1969. A group of engineers from Rockwell International's Space Shuttle program was the first CESASC Group Achievement Award recipient in 1983.



Wallace W. Booth William B. Bergen





Richard F. Walker Dr. Yu Hsiu Ku

As time goes by, corporation evolves, **North American Aviation** merged with Rockwell-Standard become **Rockwell International**. Subsequently, Rockwell's space and defense business, including Rocketdyne were acquired by **The Boeing Company**, followed with absorption of McDonnell Douglas and Hughes' satellite business and the divesture of Rocketdyne Propulsion and Power to **Pratt & Whitney** a member company of the United Technologies Corporation. In the ever changing business world, one thing has stayed firm that is recognize the benefit of diverse work force, the support of CESASC was never on the wane. Recognizing the enduring support by corporation and its employee, in 2010, CESASC recognized Pratt & Whitney Rocketdyne with its first sustaining corporate support award that expressed CESASC's profound appreciation of Pratt & Whitney Rocketdyne's uninterrupted financial contribution and its employee volunteerism and generous giving.



Engineers and scientist from Rockwell/Boeing organized and chaired many technical seminars and conferences. In summer, 1985, Dr. T. S. Fu and others from space division of the Rockwell organized a wonderful technical seminar on "Wings into Space-Space Shuttle." This seminar highlighted an unprecedented challenge of the First Reusable Space Plane. The talks were well attended and received. In late 1990, a very special seminar was organized by Dr. Y. P. Tang and Dr. S. S. Chen of Rocketdyne on "The Construction of Three Gorges Dam." Two speakers from Chinese Academy of Engineering discussed the feasibility of this project and the social, human, environmental, and cultural impacts of this project. Because of its diversified nature of these talks, this seminars attracted audiences in the fields of engineering, science, history, economics, humanity, political sciences. In spring, 1997 Boeing-Laser Electro-Optical Systems co-sponsored an Industrial Technology Conference of CESASC to explore "How Technology Gets Down to Business." This conference addressed applications of advanced opto-electronics systems, avionics, and communications, in commercial airplanes and entertainments. This conference was also cochaired by Dr. T. T. Yang of Boeing's laser organization. Rockwell heritage engineers and scientists organized and participated many CESASC's technical exhibitions. The purpose of the exhibition is to inspire students' interest in science and technology. As the prime contractor of several high profile programs, such as B-1 bomber, APOLLO, Space Shuttle, and builders of many legendary commercial airplanes, Rockwell/Boeing always provided popular items ranged from microelectronics to space shuttle models for exhibitions. Dr. C. W. Lin was key responsible for Rocketdyne's exhibition for many years. These technical seminars, symposiums, annual convention, convention journal, and technical exhibitions not only provide very effective channels for Rockwell/Boeing to recruit qualified people for the company. More importantly, the presences of Rockwell/Boeing in these events have enhanced public's support in company's programs and business.

Group Achievement Award FOR CONTRIBUTIONS TO THE DEVELOPMENT OF THE SPACE SHUTTLE AWARDED TO THE CHINESE ENGINEERS AND SCIENTISTS OF ROCKWELL INTERNATIONAL SPACE SYSTEM GROUP

Dr. T.T. Yang (楊添才) was the president of CESASC for 1997, and actively involved in technical symposiums and different committees. Dr. Shen Li (李申) served as Secretary and Treasurer from 2000 to 2005. Her diligent work has left deep impression to many members of CESASC and the officers. Dr. Konrad Zhu (朱昇華) served as Secretary and director of the board from 2005 to 2008, and chaired Technical Symposiums. He worked to set up the exhibit booth, presenting Rocketdyne products ranging from SSME to NASP to Space station; and various rocket engines for the famous Delta and Atlas rockets. Dr. Youping Gao (高幼平) has served as Secretary and Board Director since 2009. Many Rocketdyne previous colleagues like Dr. Larry Tang; K. W. Lang; S. C. Chen; Tim Chen etc. They all volunteered their time and energy to various CESASC activities, especially the annual conventions for many years. Mr. Steve Tanaka, Rocketdyne's exhibit specialist has always been enthusiastically in supporting CESASC conventions.



# A Tale of Two Organizations

By Dr. Yutao He (何宇滔), CESASC Vice President and Board Director (2010-Present)

Throughout the last century, Chinese Americans have made significant contributions to America's science, engineering, and technology. The story of the 25-year relationship between the Jet Propulsion Laboratory (JPL) and the Chinese-American Engineers and Scientists Association of Southern California (CESASC) is a perfect epitome of this profound history.

#### The Origin

In one corner, JPL, a federally funded research and development center located in the San Gabriel Valley of Southern California, traces its beginning to 1936 when the first set of rocket experiments were carried out by five graduate students of Theodore von Kármán, the Caltech professor and world-famous aerodynamicist. Among them was Hsue-Shen Tsien, a talented Chinese student who co-wrote a proposal to establish a research center with the name of Jet Propulsion Laboratory. In November 1943 JPL formally became an Army facility operated under contract by Caltech. It was transferred to NASA in October 1958 and became that agency's premier planetary and space exploration center. The unique blend of research and development activities at JPL has led to employment of many talented scientists and engineers, including Chinese Americans.

In the other corner, CESASC was inaugurated in 1962 by a group of Chinese American aerospace engineers in Southern California to promote professional excellence of Chinese-Americans in the scientific and engineering fields. It grew continuously over the following years and has evolved into one of most prestigious and active professional/cultural organizations in Southern California.

#### The Past

While there had been CESASC members who worked at JPL, the first major collaboration between JPL and CESASC took place in 1988 when the then CESASC President Dr. Chih-Ming Ho invited Dr. Wennie Wu of JPL to chair the CESASC Technical Symposium. Dr. Wu subsequently recruited many JPL Chinese scientists and engineers, including Drs. Eastwood Im, Michael Lou, Gun-Shing Chen, Yuhsyen Shen, John Huang, and Mr. Eugene Chu and Ben Jai to either serve in the symposium's organizing committee, or organize the JPL exhibition booth at the symposium.

This initial collaboration turned out to be a great success, and resulted in more Chinese American JPLers participating in CESASC activities. It culminated in 1993 when Dr. Eastwood Im became the President of CESASC, followed by Ms. Elizabeth Kay-Im, who took the helm of CESASC in 1995 as the only second woman President in CESASC's history at the time. Since then, cooperation between the two organizations has been brought to a new level with more frequent and stable interactions.

The story continued to unfold as the page turned to the 21st century with JPL Asian American Council's (AAC) strategic decision on a long-term collaboration with CESASC.

In 2004, Dr. Peter Tsou, Principal Scientist of JPL, was invited to deliver the Opening Keynote Speech titled "Aerogel for Space Exploration" at the CESASC Technical Symposium. In 2006 and 2007, JPL AAC hosted "CESASC at JPL Open House Day" two years in a row, featuring invited speeches from several prominent Chinese American scientists, including Dr. Peter Tsou on "Aerogel for Space Science," Dr. Jen Yen on "Mars Robotic Exploration Missions," and Dr. Di Li on "How to Make Stars," in those occasions. In recognition of the long-lasting contributions from JPL, CESASC awarded JPL the Corporate Award in 2007. The award was accepted by Dr. Fuk Li, the Director of the Mars Exploration Directorate and the highest ranking officer of Chinese descent at JPL.

The Chinese American JPLers have continued to lend constant supports to CESASC in recent activities and functions. In April 2009, Dr. Yutao He served as the Co-Chair of the Hi-Tech and Space Exploration Session at the Annual CESASC Technical Symposium. Dr. Dankai Liu delivered a talk titled "The Excitement and



Challenges of Mars Exploration," and Dr. Savio Chau made a presentation on "The NASA Constellation Mission of Lunar Exploration."

In April 2010, Dr. Yutao He served as the Chair of the CESASC Technical Symposium. Dr. Xiaoyan Zhou chaired the Aerospace and Space Exploration Session. Dr. Yi Chao presented a talk on "Climate Change: The Role of Satellite Remote Sensing and Computer Modeling." Dr. Xiaoqing Pi delivered a presentation titled "GPS Applications in Space Science and Technology." In addition, several JPL AAC members provided help on the symposium exhibits and registration. They included Winnie Wang, Gloria Yu, Danny Fong, Nelson Huang, Iris Cheung, Dr. Chengxing Zhai, Wanqing Huang, Dr. Zhen Liu, Dr. Jonathan Jiang, Dr. Charles Wang, and many others.

In April 2011, Dr. Xiaoyan Zhou chaired again the Aerospace and Space Exploration Session at the CESASC Technical Symposium. She also delivered a talk on Space Weather. Dr. Di Li presented a talk on "Tracing the Key Step of the Interstellar Medium Life Cycle," and Victor Luo presented a talk on "Controlling the Future."

In August 2011, in collaboration with CESASC, JPL AAC organized the LA18 Harvest Moon Festival in Santa Anita Park in Arcadia. It attracted a large crowd and received great interests from the general public on science, engineering, and technology. JPLers, Yutao He, Winnie Wang, Shouhua Huang, Yi Chao, Wanqing Huang, Jenifer Huang, Chester Lim, Kevin Ortega, and Hongjin Tan (Caltech student and 2011 CESASC Scholarship recipient), helped out at the event.

#### The Future

As CESASC celebrates its 50<sup>th</sup> anniversary, JPL AAC is committed to renew its full support in CESASC missions. The successful tale of two organizations will continue well into the future.



JPL Chinese American engineers organized the JPL Exhibit at the 1988 CESASC Technical Symposium (from left to right: Not identified, Eugene Chu, Yuhsyen Shen, Ben Jai).



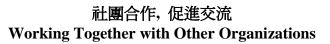
CESASC, CAST-LA, and JPL AAC members and families at the 2007 JPL Open House.



Dr. Peter Tsou (Middle) received the Keynote Speaker Appreciation Certificate from the 2004 CESASC Symposium Chairs Dr. Nhan Do and Dr. Liping Yan.



LA18 Harvest Moon Festival in Santa Anita Park in Arcadia in April 2011, organized jointly by JPL AAC and CESASC.



By 溫俊山 (Dr. Jason J. Wen), CESASC 2011- 2012 年會長

作為一個華裔科技社團,南加州中華科工學會一直把科技交流和專業互動作為主要的會務.幾十年來,堅持舉辦各種規模的專業講座和科技研討會.為華裔科技學人和專業人士提供了一個重要的交流平臺. 鑒于早期在南加州工作的華裔工程師和科學家多數都就職于和國防及航太有關的公司和行業,科工學會當時的科技研討會比較側重國防和航太相關的專題.因此,中華科工學會的資深會員有很多都是這方面的專家學者. 作為早期在南加州唯一的華裔科技社團,中華科工學會的科技研討會的規模和影響都是較大的.

隨著冷戰的結束,國際局勢的變化和中國的改革開放,在南加州的華裔科技人士的人數也迅速增加, 所從事的專業也不斷增多.近二十多年來,各不同專業的新的科技社團也應勢蓬勃而生.各個專業的學術 和技術交流也更加頻繁.因此,中華科工學會近十幾年來的專業研討會也不局限于國防和航太,形式也從 獨家舉辦變成與其他兄弟社團聯合舉辦. 作為南加州的"老大哥"科技團體,中華科工學會一直與多個社 團聯合舉辦每年的科技研討會,不僅達到本行業深入交流的目的,而且為不同學科和行業的交叉交流及南 加州科技社團之間的互動起到了積極和獨到的作用. 與南加州中華科工學會聯合舉辦科技研討會的兄弟 科技社團包括:

Asian American Professional Association (AAPA) 亞美專業協會

Chinese American Biomedical Technology Association (CABTA) 生物醫學技術學會

Chinese-American Computer Association (CCA) 中華電腦學會

Chinese American Professional Society (CAPS) 美西華人協會

Chinese Association for Science and Technology – Los Angeles Chapter (CAST-LA) 中國旅美科技協會加州洛杉磯分會

Chinese Scholars Association (CSA) 華裔教授學者協會

International Chinese Transportation Professionals Association – Southern California Chapter (ICTPA-SCC) 國際華人交通運輸協會南加州分會

Organization of Chinese-American Entrepreneurs' Advisory Network (OCEAN) 四海創業諮詢會

Photonics Society of Chinese-Americans (PSC) 中華光電學會

Society of Chinese-American Aerospace Engineers (SCAAE) 美華航太工程師協會

Southern California Chinese-American Environmental Protection Association (SCCAEPA) 南加州華人環 保協會

Vietnamese Association for Computing, Engineering Technology and Science 越裔旅美科技協會

Peking University Alumni Association of Southern California (PUAASC) 北京大學南加州校友會

Tsinghua University Alumni Association of Southern California (THUAA-SC) 清華大學南加州校友會

Jiaotong/Chiao Tung University Alumni Association of Southern California (CTUAA-SC) 交通大學南加 州校友會

University of Science and Technology of China Alumni Association of Southern California (USTCAA-SC) 中國科學技術大學南加州校友會

南加州中華科工學會對各兄弟社團的支持和協助表示衷心的感謝,并將進一步加強社團之間的合作 以更好地為社區服務.



# What's Special about CESASC?

By Dr. Sikun Lan (藍思堃), CESASC President (2006 and 2007)

I was interviewed by EDI City Newsweek's reporter Mr. Lu in 2007 shortly before the 45<sup>th</sup> CESASC annual convention. I shared my thoughts of one year into my tenure of being CESASC President. The interview was published in EDI City Newsweek's 396<sup>th</sup> edition. The following is an excerpt in which I commented on the distinguished CESASC characteristics that ensured CESASC's longevity:

- 1. **Inclusiveness:** CESASC members include Chinese and Chinese-Americans who were born in Taiwan, Mainland China, the United States and elsewhere who came to Southern California for career development. We all use English as the working language and the language of choice for formal occasions. This traditional practice plays down differences of origins and allows us to focus the cutting-edge scientific and engineering technologies that we share common interest.
- 2. Leadership Training: It takes a long journey to become a CESASC President. One normally joins CESASC's various activities for five or more years followed by services in a number of Committees for a year or two. Subsequently he or she is elected to the Board of Directors and takes key executive positions like Vice President, Secretary, or Treasurer before being nominated and elected to presidency. After the presidency, the Bylaw requires the ex-President to serve in the Board of Directors for another two years for training and helping successors. In the CESASC's 45-year history, there have been 43 presidents. Many people grew and rose to the challenges as they took leadership role.
- 3. Valuable Tradition: CESASC has established historical precedents how to do things and has dedicated personnel and position to collect historical materials. You can find all 40+ annual journals. After I became an officer, one of the traditions that I feel very admirable is that all officers, Board members, Committee members, and volunteers pay for their own tickets for attending the annual convention, without exception, after months of hard work.
- 4. **Support from Large Corporations**: CESASC organization and the way they operate are gradually recognized by the large U.S. businesses. Every year, ten to twenty large companies support the organization by advertising on the CESASC annual journal. Thus CESASC has the resource to organize many activities throughout the year following the high quality, high class, and low-fee tradition.
- 5. **Member Support:** CESASC has many successful people. Many of the former presidents served when they were in their thirties and forties. Their careers continuously grew thereafter. They always pay back to CESASC and sponsor many regular activities. Most endowments of the CESASC Scholarship Foundation were donated by them. The interest generated becomes the funding for the CESASC Scholarships for many college undergraduate and graduate students.
- 6. **Support from Chinese Elites**: The CESASC Annual Achievement Award is awarded to world class Chinese/Chinese-American scientists and engineers. Many famous Chinese including several Nobel Laureates and those who have potential to receive such level awards accepted the CESASC Achievement Awards. In fact, they do not necessarily have the personal need to come all the way to Los Angeles to accept the award, but they are in support of the CESASC ideals and mission and come with sincere desire to give guidance to the younger colleagues and professionals. With their support, CESASC can be as prosperous as it is for all these years.
- 7. **Stay above Politics**: CESASC respects individual member's political affiliations. However, in the practical work, we always avoid unnecessary conflicts due to political alignment. The Chairman of the Board and I were born from Taiwan and Mainland China, respectively and we each belong to different US political parties and be active in their political campaigns. But we have worked very pleasantly and smoothly over several years and such harmony is reflected in a dozen or so CESASC events each year.



# **Volunteers Service for CESASC**

By Weiwei Wang (王炜玮), Former Working Committee Member

When I first came to the US in early 2006 (accompanied by my husband Wei Huang), Mr. Sikun Lan, my husband's best friend, came to LAX to pick us up. I can still vividly remember that it was in his car on the way to our home in Hawthorne where I first heard about the word "CESASC" when Sikun asked Wei to do some volunteer work for CESASC. Wei agreed pleasantly, and I learned the meaning of "CESASC" at that moment.

Shortly afterwards, being a housewife and a newcomer to the US, I joined my husband in the volunteer team of CESASC in order to know more friends, especially more Chinese friends. As time went by, I became happier and happier since I indeed got the chance to know a lot of excellent people in this organization, whose names will occupy more than a page if I try to list them all here. My involvement in CESASC allows me to see, in close distance for the first time, how an organization run by volunteers actually operates.

Since then, Wei and I volunteers for CESASC for 5 years until 2010 when we moved away from Southern California to Cincinnati, Ohio. As we witnessed in those years, CESASC has been a strong advocate for Chinese-American engineers and scientists and has promoted their professional interests in numerous related industries in Southern California for early 50 years now. During those years when we volunteered for CESASC we got to know many remarkable and outstanding engineers and scientists, some of whom became friends of mine or Wei. As one California state official pointed in her congratulation letter to a CESASC annual convention, CESASC "has created a greater cultural understanding in our state and has added greatly to the cultural fabric of Southern California."

Because CESASC was the first organization I encountered in the US, my volunteering for CESASC gained me tremendous knowledge and expertise on how to hold a convention, learned from many CESASC "officials," committee chairs and committee members as well as all the other co-volunteers. That is why I could become a good volunteer for the *Greater Cincinnati Chinese Chamber of Commerce* short after Wei and I settled in Cincinnati. I advised my co-volunteers there on quite a few things such as registration and silent auction, based on what I've learned at CESASC.

Speaking of silent auction, my gratitude went *to Shirley Ho* and *Suellen Kwok*. Silent auction is very popular during many events in the US, but I never heard about it back in China. So when I attended the 2006 CESASC convention held at a Hilton Hotel, I couldn't help wondering what those things were for when I saw a lot of beautiful baskets and wrapped boxes put on some of the tables inside or outside the convention room. But the next year in 2007 I would know the tricks inside out as Shirley invited me to join her silent auction team. Shirley was very kind and patient to show me how silent auction works step by step, and I got my hands dirty while working with Shirley and Suellen. As I can happily recall, we collected \$2000-3000 every year for CESASC during its annual convention. Of course, I am very thankful to all the generous donors I've met, and that experience will be part of my happiest memory forever.

My husband Wei, on the other hand, got a nice memory of editing the annual convention journal of CESASC for several years which enhanced his editing skills (on or off the computer) as well as his command of the English language itself. He once told me that he was "never" so careful and picky about each sentence in each paragraph in an article, and really got to know the correct usage of some punctuation marks in English for the first time. Good for him!



# Reflections

#### By Amy Kung Emmendorfer (龔璇), CESASC 1984 Scholarship Recipient

My recollections of CESASC date from many years past. When I was a teenager, our family often attended CESASC functions. My father (先嚴龔棣燦), an engineer with a passion for computer science, opened one of the first computer stores in the South Bay. Both my brother and I became "experts" at operating Atari 800s and Paper Tigers. We learned PASCAL before our peers did and at UCLA, I went on to take Assembly Language and easily got a job working at the UCLA Computer Lab. My brother, though now a psychiatrist at the Mayo Clinic, really became our engineer --- getting a degree in Computer Engineering at UCLA and then his Master's at USC.

I took a different path. Armed with my CPA from a "Big 8," I returned to UCLA to work on my MBA. After graduation, as a TRW Management Associate, I had the opportunity to see and work with top management regularly. I attended special programs set-up just for the handful of Management Associates that TRW hired for its management future. My mentors were Vice-Presidents and Division Heads who helped navigate me through six-month rotations in TRW's major business sectors. However, being close to leaders was not new. I remember CESASC functions where keynote speakers were leaders in their fields of science, technical management, and public management. CESASC members we knew were also much recognized professionals.

With TRW, I left Southern California and traveled much of the United States. Many years later when I left TRW in Michigan, I told friends that I was taking the position of "CFO" of the Emmendorfer household, but, as I soon discovered, that was far from being an accurate job description. Rather, I entered the world of "hands-on" parenting and volunteering. Hands-on parenting meant actually spending time with our two sons --- no more nannies, no more "latch key." Still, our sons took piano lessons, played travel baseball, and attended weekly Chinese language classes. They participated in robotics, flag football, and the school band. Volunteering meant serving on formal school committees and being actively involved with the parent-teacher group at their schools. Volunteering also meant actively organizing a Relay for Life event for the American Cancer Society. I became even more appreciative of all the time that CESASC members made available (and still do!) to promote fellowship and to provide community service to help balance and round-out life's many facets.

My older son is now a sophomore in high school. He attends BASIS Tucson, ranked #2 nationally by U.S. News & World Report in its 2011 edition of Best High Schools for Math and Science. As such, it should have been no surprise to hear his words, "Probably, I'd like to get into engineering," stumble out when he was interviewed recently by a local television channel in its report on charter schools. How ironic life can be --- little does my son know that one of CESASC's objectives is to "encourage the pursuit of education in science, engineering, and technical management." Little does he know that CESASC gave me a scholarship to pursue such opportunities. And little did I know that when I received a CESASC scholarship, that I would be actively encouraging the pursuit of education in science and engineering with this next generation!

My brother and I remember our days with CESASC fondly. We knew it gave us opportunities, but only realize now that it was not just to encourage young students to pursue their dreams in science and engineering. The fellowship it fosters and the community service it provides are just as invaluable. So here's to many, many more years to come, CESASC!



# Thank You, CESASC

By Dr. H. E. Frank Wang (王鴻恩), CESASC President (1984)

Thanks to CESASC President Edward Liu's effort in making the arrangement, a dozen or so CESASC members and friends toured Southeast Asia in December 1990. We visited Taiwan, Singapore, Thailand and Hong Kong, focusing on high tech industrial concerns. Interspersed between visiting manufacturing plants and holding technical discussions was some memorable sightseeing too. The group as a whole thoroughly enjoyed the trip, but for me, it also opened up a door to a life-enriching experience.

While in Taiwan, we were briefed by the *National Science Council* (NSC 國科會) and learned about its missions. The most prominent mission at that time was Taiwan's 15-year space program. The program had the following objectives: establish ground control station for earth resource and communication satellites; develop subsystem design and integration capabilities; employ other nation(s) for launch of two low-earth orbiting satellites; and promote space technology research and education. Having worked for 10 years for the U.S. Air Force Space Test Program, I was very much impressed by such an ambitious program. We were also given a tour of the Hsinchu Science Park. We could not help but admire the garden-like setting even though the buildings were marked with high tech corporate names. Following the Science Park tour, we were taken to visit the *Industrial Technology Research Institute* (ITRI 工研院). We learned that the Institute's mission was to conduct industrial research (as opposed to scientific research) and to transfer its matured technology directly to the local industrial firms.

In 1991, representatives of NSC and ITRI came to California several times, vigorously recruiting Chinese scientists and engineers to go back to Taiwan and participate in their aerospace activities. I was one of those attracted to the calling just when I was considering retiring from the Aerospace Corporation. There could never have been a better motivator than the prospect of offering my expertise to assist Taiwan's budding space program. Thus, I retired on February 28, 1992 and flew to Taiwan with my wife a month later to join ITRI's Center for *Aeronautic and Space Technology* (CAST 航太中心) as its deputy director, working as a major partner with NSC on Taiwan's newly commissioned space program.

I worked for ITRI on the *National Space Program Office* (NSPO 太空計劃室) contract for 15 months and returned to California in July 1993 for family reasons, not because the work was done. In those 15 months, by working with the enthused local engineers as well as visiting engineers from other countries, I was able to assist NSPO in writing the RFP for the first satellite, conducting several industrial briefings and subsequent source selection, and preliminary design review at the contractor's site. ITRI engineers working on the space program also made a trip to mainland China, visiting some of their aerospace manufacturing facilities. In the months after my return, I was invited back couple times to participate in the RFP preparation process and source selection of the second satellite. Although I was not working on the program at the time of the successful launch of the first satellite, I know in my heart I made a contribution to Taiwan's space program and that gives me a sense of satisfaction, lasting a lifetime. For all of these valuable experiences, I owe a debt of gratitude to CESASC. Although belatedly, I must say "Thank you, CESASC!"



# Preventing Disaster Caused by Nature as Well as by Men

By Prof. Tung-Po Lin (林同坡), CESASC President (1973)

I arrived in Los Angeles to teach in the Department of Mathematics at CSUN (then known as San Fernando Valley State College) in 1961. At that time there were very little social or professional interactions among the Chinese-American scientists. Luckily the next year, Henry and Lois Chi, along with Kam Wong, Norman Au, and others, formed CESASC. Social activities and academic communications started bubbling and rolling increasingly ever since. I soon eagerly joined the organization and started serving at various times as an officer, VP, President and Board Chairman. My whole life has been closely intertwined with CESASC ever since, even after my retirement from CSUN in 1994.

For the past 50 years, CESASC has served as a useful platform among Chinese groups as well as other cultural and professional groups (Asian and main stream) to disseminate ideas as well as assist groups in need. With new and energetic leaders that emerge every year, I am sure it will continue to make significant contributions to technological fields.

Reviewing the gigantic scientific advancements in the USA during the last 50 years and the recent financial tsunami disaster in the last 5 years, I could not help but be reminded an article that I wrote 35 years ago, "Of Heaven, Earth and Man," (CESASC Annual Convention Brochure 1977, P.4). In the article, I quoted Xun Zi (荀子) and predicted that scientists and engineers will continue their victorious achievements such as landing on the moon and Mars and taking up the mandate of predicting and preventing the natural disasters.

Indeed, great strides have occurred in the electronic communication fields. Smart phones, GPS, pocket computers and the internet have changed the entire mode of communication among human beings. Yes, man now can watch happenings thousands of miles away (千里眼), can listen to voices from far distances (顺风耳), can maneuver surgical and scientific instruments remotely (遥控机械人)!

Yet the US and the whole world have suffered an economic tsunami caused by less than 1% of population of greedy financial innovators. With scientific analysis, we know these tsunamis did not come from nature. Rather, they are man-made,

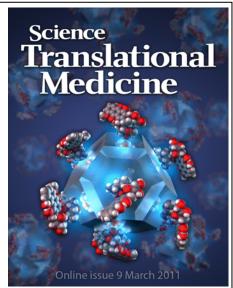
In comparison to natural disasters, the prevention of man-made disasters is so much simpler and achievable. The greediness of a few CEO's should be easy to cope with by legislating, regulating and providing oversight by our economic institutions. In addition to these superficial actions (治标), more basically (治本), we need idealistic "human-mind engineers," educators and teachers, to counsel against greed and warn of the impact of excessive materialism on our society. It affects all spheres of our lives - economical, physical, cultural, familial and spiritual. Constraining acquisitive activity to legal and fair means, reminding each other that to help those in need will ultimately help ourselves - that is our next and most important challenge facing us today.



#### Nanomedicine: The Application of Nanotechnology towards Improving Human Health

By Prof. Dean Ho (何鼎), CESASC Life Member Departments of Biomedical and Mechanical Engineering Robert H. Lurie Comprehensive Cancer Center Northwestern University

Continued advancements in the field of nanotechnology have resulted in the emergence of novel approaches towards treating and diagnosing the major diseases of our time (e.g. cancer, heart disease, etc.). Among the many platforms that are being developed for these applications include the use of metallic, polymeric, lipid, and carbon-based nanoparticles to enhance the efficacy and safety of drug delivery and imaging. Examples of recent studies include the use of gold nanoparticles to enhance the solubility of typically water-insoluble therapeutics, polymers and lipid nanoparticles to reduce cardiotoxicity, and other approaches to address many disease models such as arthritis, regenerative medicine, cancer, inflammation, among others. These nanoparticles possess high surface area-to-volume ratios and enable high drug loading capacities and can also improve drug retention within tumors. Nanodiamonds, which are carbon-based materials, have recently been explored as versatile agents that combine several important properties into a single platform. For example, nanodiamonds can deliver a broad range therapeutic compounds, including small molecules (hydrophobic and hydrophilic), therapeutic proteins such as insulin for potential wound healing studies, as well as DNA and siRNA-based therapies. In addition, nanodiamonds can be processed in a high throughput manner, where conventional methods such as ultrasonication and ultracentrifugation, ball milling, and acid washing can yield uniform particles that are 4-6 nanometers in diameter. Nanodiamonds have also been shown to increase chemotherapeutic circulation time 10-fold compared to a clinical standard. Importantly, nanodiamond-based drug delivery has also been shown to markedly reduce myelosuppression, which is the dose-limiting side effect of chemotherapy, compared to clinical standards. Perhaps one of the most unique characteristics of nanodiamonds pertain to the faceted electrostatic properties which enables interesting water and drug binding to the nanodiamond surface. For example, a recent study has shown that nanodiamond complexes bound to the doxorubicin cancer drug, a widely used clinical standard, were able to markedly decrease the growth of a breast and liver cancer model. In addition,



Schematic of nanodiamondbased chemotherapy delivery; Courtesy: American Association for the Advancement of Science (AAAS)/ Science Translational Medicine the nanodiamond-doxorubicin complex, termed NDX, did not cause myelosuppression which is the dose-limiting side effect of chemotherapy.

Current challenges in cancer therapy include the onset of chemoresistance, which accounts for a significant fraction of treatment failure cases. Examples of chemoresistance include situations where membrane proteins efflux, or eject therapeutics before they've had a chance to function, significantly decreasing the efficacy of therapy. Technologies such as NDX may mediate the bypass of drug resistance to potentially reduce the toxicity associated with repeat dosing, and to enhance the retention of drug compounds to improve treatment outcomes.

Multi-disciplinary research efforts, such as those promoted through many of CESASC's technical symposiums have significantly advanced efforts to introduce new technologies to enhance the quality of life for patients suffering from advanced/metastatic cancers. Continued efforts in this and other important areas of research and public health/policy will play a key role towards continued progress in next-generation medicine and biology.



# **Medicine Meets Computer Science and Engineering**

By Dr. Shiuan Chen (陳瑄), CESASC Board member (2006-2008) Professor and Director, Division of Tumor Cell Biology, City of Hope

Congratulations to CESASC for reaching its 50<sup>th</sup> anniversary! I am a proud lifetime member of this Chinese-American professional organization in Southern California. CESASC has played an important role in promoting the interaction between Chinese-American Engineers and Scientists. I became involved with this group in 1995. At that time, I was contacted by Drs. Sikun Lan and Shan Lee with the intent to enhance interaction between scientists/researchers in the biomedical field. It is so exciting to see increased activity in this area during the last few years, as seen by the inclusion of thrilling scientific presentations in biomedicine during annual conventions.

We are in a time when scientific knowledge is expanding exponentially. Many novel findings are resulting from collaborations with different disciplines. This is no exception for biomedical research. Bioinformatics is an exciting field that utilizes computer science and information technology to increase our understanding of molecular events associated with biology and medicine. Such approaches have generated new knowledge that is leading to new ways to treat diseases such as cancer and diabetes. The Cancer Genome Atlas (TCGA) is a great example of the collaboration between biomedical researchers and bioinformaticians. TCGA is a large project sponsored by the National Cancer Institute and designed to enhance our understanding of the molecular basis of cancer through the application of genome analysis technologies, including large-scale genome sequencing (<u>https://wiki.nci.nih.gov/display/TCGA</u>). The goal is to improve our ability to diagnose, treat and prevent cancer. The project began in 2006. We have started seeing some early reports with great promise that may help us fight terrible diseases such as cancer. It is expected to have great progress during the next few years.

There are clear interactions between engineers and biomedical researchers. Robotic surgery, high resolution and precision biomedical imaging, and nanomedicine are good examples. These technical developments have improved patient treatments significantly. We can now detect cancer much earlier, treat it much more effectively and with fewer side effects, and achieve a better outcome with less recurrence. CESASC has several members who are leading investigators in these fields.

The new era of biomedical advancement requires researchers with knowledge from several disciplines and with the ability to link them. For the young members of CESASC, you have the ability to make quantum leaps by exploring novel interactions among different disciplines in biomedicine and engineering. CESASC provides a great platform for such interaction and collaboration.

I want to thank all of the past and current officers of CESASC for their efforts to achieve the goal of this renowned professional society. I believe that CESASC will continue leap forward with exciting progress. Congratulations again.



# About the Couplet

By Dr. Teresa Sun (孫王積青), Scholarship Committee Chair (1978)

In July 1978, we lost Dr. Stuart Lee, a great friend and an active member of CESASC. In memory of Dr, Lee, **Dr. Stuart Lee Scholarship** has been established by CESASC. The Scholarship Committee, chaired by **Teresa Sun**, was in charge of an active scholarship fund drive.

# 好公益李氏轨牛耳作育良才垂萬世

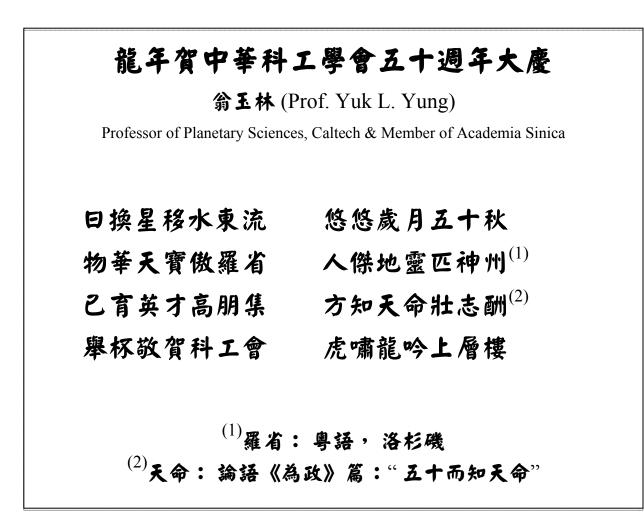
# 研理工華裔樹先聲解囊義舉助人群

中華科工之友司徒研理博士不幸於1978年7月仙逝,為追念司徒先生 生前對科工會的貢獻,獎學金委員會在主席孫王積青女士的策劃下, 除成立司徒研理獎學基金,嘉惠更多華裔學子外, 並創作對聯一付,以資紀念。









# 沁園春·歡迎參加科工大會

陳治宏 (Dr. John Chen) CESASC Vice-President (1996) & 40<sup>th</sup> Convention General Chair

2002.3 (沁園春) 詞一首 歡迎大家駕臨參加第四十屆科工大會:

美麗地球,日照雲飄,萬物逍遙; 觀中外古今,英才不少,勿辭辛勞,競奪錦標; 美訪九洲,九洲訪美,欲把全球發展好!

望明朝,邀君又洛城,共渡良宵! 南加景色美好,迎世界群英飛天到; 會洛杉磯市,爭展風騷; 好萊塢眺,西風殘照; 遍地車跑,漫天機降,鑽石燈海錢江潮; 新千紀,問乾坤環宇,誰是最驕?

# 南加州中華科工學會 創會五十週年誌慶

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# 中華科工現任理事陳中敬賀 April 22, 2012



# **CESASC 50<sup>th</sup> Convention Working Committee**

- Advisors: Shirley Ho\*, George Chao, Suellen Cheng, Elizabeth Kay-Im, Wei Kao, Munson Kwok, Shan Lee, Tung-Po Lin, Edward Liu, Jason Wen
- Convention Chair: Jason Wen
- Convention Co-Chairs: Suellen Cheng, Yutao He, Elizabeth Kay-Im, Manwai Szeto
- **Opening Reception:** CESASC Scholarship Foundation
- Masters of Ceremonies: Elizabeth Kay-Im, Munson Kwok
- Welcome: George Chao, Dean Ho, Shirley Ho, Wei Kao, Sikun Lan, David K. Lee, Shan Lee, Edward Liu, Li-Jean Wang, Jason Wen
- **Registration Committee**: Suellen Cheng\*, Marina Kao, Tina Liu, Manwai Szeto, Linda Wen, Jenny Yu

Treasurer: Manwai Szeto

Stage Management/Coordination: Youping Gao, Yutao He, Yiu Man So, Manwai Szeto

PowerPoint: Mingsong Yin

- Entertainment/DJ Coordination: Nancy Lin\*, Xu Yin
- Photographers: Douglas Endo, Susan (Yuanxuan) Li, Victor Yeh
- Exhibition: George Chao, Wei Kao, Munson Kwok, Edward Liu, Tien Tsai Yang

Data Collection: Lois Chi, Shirley Ho, Sikun Lan, Sherman Yu

Art Design: Angela Li

Logo: Kirsty Feng

Brochures and Invitations: Shirley Ho, Elizabeth Kay Im, Jason Wen

Plaques and Gifts: Shirley Ho, Jason Wen

Name Tags: Alex Hsu

Decoration: Linda Lo's Floral Arrangement Studio

DJ: Philip Entertainment Production Inc.

Audio/Visual: SWANK AV



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