



# 南加州中華科工學會

Chinese-American Engineers and Scientists Association of Southern California

Since 1962

*In Collaboration With*

**UCLA** Grand Challenges

Sustainable LA

*Annual Convention,  
Scholarship Fundraiser,  
Technical Symposium  
& Awards Gala*



2016: Better Environment, Better Life

**54<sup>th</sup>** CESASC  
Anniversary Journal



Since 1962

# 南加州中華科工學會

Chinese-American Engineers  
and Scientists Association of  
Southern California

CESASC

[www.cesasc.org](http://www.cesasc.org)

## WELCOME MESSAGE

From CESASC Chairman of the Board and the President 2015-2016

April 23, 2016

Dear CESASC Members and Friends:

Happy Post Earth Day!

Welcome to the 54<sup>th</sup> CESASC Annual Convention 2016! The Convention will have Achievement and Lifetime Achievement Awards, Scholarship Awards and Technical Symposium in a daylong extravaganza at UCLA campus on April 23, 2016. Held on a day after the Earth Day, our Annual Convention theme is "Better Environment, Better Life." This is the first time our Annual Convention is collaborating with UCLA Sustainable Los Angeles Grand Challenge, in which the UCLA academic community is striving to find answers for sustainable cities in great Los Angeles area. We are proud to be part of this effort and contributing to the Los Angeles community.

Founded in 1962, CESASC is one of the largest and oldest established Chinese-American professional organizations in Southern California, and is dedicated to promoting the interests, aspirations, and professional excellence of the engineers and scientists in the United States. Over the last half a century, CESASC has been providing support to the community in professional advancement via the Association's annual technical symposium, scholarships, and technical and social programs. In addition, CESASC has established a strong Science, Technology, Engineering and Mathematics (STEM) program to encourage students in middle school, high school and college, to develop interest in STEM as a career. In the past year, we added a series of seminars for career development in professional field.

Congratulations on all 2016 achievement awardees: Lifetime Achievement Awards to Dr. Steven Chu, Professor of Stanford University, Nobel Laureate, and former Secretary of Energy, and to Chancellor Henry Yang, University of California, Santa Barbara; and Achievement Awards to Dr. Yang Yang, Professor of UCLA, Mr. Bill Chiu of Southern California Edison, and Dr. C. Y. Chang of Raytheon. All of them are top notched engineers or scientists in their respective engineering and scientific field nationally and globally. CESASC is proud to recognize them.

It has been a great honor and privilege to serve you. Please enjoy the technical seminars and award ceremony. See you all next year!

Sincerely,

Dankai Liu, Ph.D.  
Chairman of the Board  
CESASC 54<sup>th</sup> Convention Co-Chair

Yue Rong, Ph.D.  
President of CESASC  
CESASC 54<sup>th</sup> Convention Co-Chair

THE WHITE HOUSE  
WASHINGTON



March 28, 2016

I send my regards as you celebrate your organization's 54th anniversary.

Throughout the American story, each generation has continued the unending work of building a better future and making our Nation more just and more equal. By joining in a spirit of common purpose and contributing to shared progress, you are helping drive America forward. As you reflect on your achievements, I hope you take pride in the difference you have made in the lives of others.

Congratulations on all you have accomplished. I wish you the very best in the years ahead as you continue working to forge an ever brighter tomorrow.

A handwritten signature in black ink, appearing to read "Barack Obama". The signature is fluid and cursive, with a large oval loop on the left and a long horizontal stroke on the right.

THE WHITE HOUSE  
WASHINGTON



March 28, 2016

I send my regards as you celebrate your organization's 54th anniversary.

Throughout the American story, each generation has continued the unending work of building a better future and making our Nation more just and more equal. By joining in a spirit of common purpose and contributing to shared progress, you are helping drive America forward. As you reflect on your achievements, I hope you take pride in the difference you have made in the lives of others.

Congratulations on all you have accomplished. I wish you the very best in the years ahead as you continue working to forge an ever brighter tomorrow.

A handwritten signature in black ink, appearing to read "Barack Obama". The signature is fluid and cursive, with a large, stylized 'B' at the beginning.

**JUDY CHU, Ph.D.**  
27TH DISTRICT, CALIFORNIA

**COMMITTEE ON  
THE JUDICIARY**

SUBCOMMITTEE ON  
CRIME, TERRORISM, HOMELAND SECURITY  
AND INVESTIGATIONS

SUBCOMMITTEE ON  
COURTS, INTELLECTUAL PROPERTY  
AND THE INTERNET

**COMMITTEE ON  
SMALL BUSINESS**

RANKING MEMBER, SUBCOMMITTEE ON  
ECONOMIC GROWTH, TAX AND CAPITAL ACCESS  
SUBCOMMITTEE ON  
CONTRACTING AND WORKFORCE



**Congress of the United States  
House of Representatives  
Washington, DC 20515**

**WASHINGTON OFFICE:**

2423 Rayburn House Office Building  
Washington, DC 20515  
(202) 225-5464  
(202) 225-5467 (Fax)

**PASADENA DISTRICT OFFICE:**

527 South Lake Avenue, Suite 106  
Pasadena, CA 91101  
(626) 304-0110

April 23, 2016

Chinese-American Engineers and Scientists Association, Southern California  
420 W. Mission Road  
San Gabriel, CA 91776

Dear Friends,



It is with great happiness that I extend a warm welcome to all those who have gathered here to participate in the Chinese-American Engineers and Scientists Association of Southern California's 54<sup>th</sup> Annual Convention.

Since its founding in 1962, the Chinese-American Engineers and Scientists Association of Southern California (CESASC) has been working on its mission to broaden career perspectives and protect interests and rights of its members through organizational efforts. CESASC presents the Achievement Awards to honor individuals who had made significant contributions to the fields of engineering and science. In addition to the great work CESASC had been doing, another part of the Association's mission is to enrich the potential of our youth. The CESASC Scholarship Foundation has been raising funds for scholarships and educational programs that will further provide opportunities for the youths of our communities.

On behalf of the United States House of Representatives and the people of the 27<sup>th</sup> Congressional District, I offer my congratulations and best wishes for the continued success of the Chinese-American Engineers and Scientists Association of Southern California.

Sincerely,

A handwritten signature in black ink that reads "Judy Chu".

**JUDY CHU, Ph.D.**  
Member of Congress, 27<sup>th</sup> District



**JOHN CHIANG**  
**TREASURER**  
STATE OF CALIFORNIA



April 23, 2016

Mr. Yue Rong  
President  
Chinese-American Engineers and Scientists Association  
of Southern California

Dear Friends:

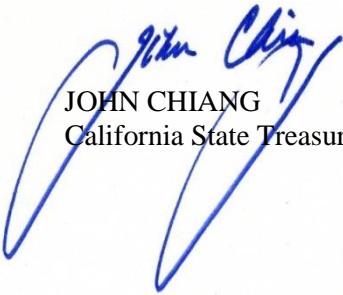
I am honored to extend greetings to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) in celebration of its 54th Annual Convention, "Better Environment, Better Life" co-hosted by UCLA's Sustainable LA Grand Challenge.

This convention brings together CESASC members and friends with academics and experts to discuss climate change, energy and water and explore innovative initiatives to shape Los Angeles County's and California's ecosystem and sustainable future. Leadership programs and exchanges such as this, promote the advancement of CESASC and future generations of scientists and engineers, contributing to a robust pipeline of leaders.

Congratulations to CESASC's Lifetime Achievement Awardees: the Honorable Dr. Steven Chu and Dr. Henry Tzu-Yow Yang and Achievement Awardees: Dr. Yang Yang, Mr. Bill Chiu and Dr. C.Y. Chang. Your individual and collective achievements have made a profound impact in our society.

It is with deep appreciation that I wish all involved in today's convening a productive convention and many more years of success.

Very truly yours,

  
JOHN CHIANG  
California State Treasurer



OFFICE OF THE CHANCELLOR  
2147 MURPHY HALL, BOX 951405  
LOS ANGELES, CALIFORNIA 90095-1405

April 12, 2016

Yue Rong, Ph.D.  
President, CESASC  
1277 Hillside Street  
Monterey Park, CA 91754

Dear Dr. Rong:

The Office of the Chancellor would like to extend our congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) for your excellence in promoting professional leadership in the world of Science and Technology. We are honored to welcome you to UCLA for CESASC's 54<sup>th</sup> Annual Convention on April 23, 2016. I commend your partnership with our Sustainable LA Grand Challenge and we are proud to host your event here at UCLA.

As we move ahead to meet the three key goals of our Sustainable LA Grand Challenge: 100% renewable energy, 100% locally sourced water, and enhanced ecosystem health for Los Angeles County by 2050, we recognize CESASC as partners in climate leadership, helping to foster a "Better Environment, Better Life" for our shared communities.

We applaud the recipients of the 2016 Achievement Awards for their profound contributions and we look forward to future opportunities for sharing news, insights, and innovations that drive our environmental initiatives ahead for a better future, both on our UCLA campus, and throughout the City of Los Angeles.

Sincerely,

A handwritten signature in black ink that appears to read "Gene".

Gene D. Block  
Chancellor

# **UCLA** Grand Challenges

---

## Sustainable LA

---

April 23, 2016

CESASC President – Yue Rong

Dear Dr. Rong:

On behalf of UCLA's Sustainable LA Grand Challenge, congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) for your extraordinary efforts over the last five decades. We are honored to host your 54<sup>th</sup> Annual Convention on April 23, 2016 at UCLA.

CESASC is a volunteer-based, non-profit professional organization, with more than 800 members, serving the Southern California community. And many of your members are leaders in the scientific, engineering and environmental fields. We commend CESASC for providing the latest scientific information and research results to their members as well as students from around the region. CESASC has done an excellent job of fostering student scholarship and civic responsibility. Thanks to the leadership of your members, our region's air and water quality has improved tremendously, as has the quality of life of the 10 million people that live and work in Los Angeles County.

We look forward to continuing and expanding our relationship for the good of the environment and our quality of life for years to come.

Sincerely,



Mark Gold, D. Env.  
UCLA Associate Vice Chancellor of  
Environment and Sustainability

# **2016 Technical Symposium**

## **Luncheon Session Keynote Speech**



Dr. Alex Hall

Professor, UCLA Department of Atmospheric and Oceanic Sciences

Director, UCLA Center for Climate Change Solutions

Dr. Hall's research is focused on reducing climate change uncertainty at both regional and global scales. At the global scale, his goal is to reduce uncertainty surrounding processes determining the climate system's response to increases in greenhouse gases. At the regional scale, he has been active in the development of downscaling techniques to reduce uncertainty about processes that are crucial to regional climate change, but are unrepresented in global climate models. Dr. Hall was a Contributing Author to the 2007 IPCC 4th scientific assessment of climate change Working Group I report, where his work on climate sensitivity is featured. He was also a Lead Author of Chapter 14 of the Working Group I component of the IPCC 5th Assessment Report, entitled "Climate Phenomena and their Relevance for Future Regional Climate Change," and a Contributing Author of Chapter 9, "Evaluation of Climate Models." At UCLA, Dr. Hall teaches climate-related courses at the undergraduate and graduate levels. He is a recipient of the NSF Graduate Fellowship (1993–1996), the NASA Earth System Science Fellowship (1996–1998), the Lamont Fellowship (1999–2001), and the NSF CAREER award (2002–2007).

**UCLA Sustainable LA Grand Challenge goal:  
100% renewable energy, 100% locally sourced water, and  
enhanced ecosystem health in Los Angeles County by 2050**



# 2016 CESASC Technical Symposium

## 南加州中華科工學會第 54 屆年會科技研討會

11:00 am – 5:00 pm, April 23, 2016; UCLA Carnesale Commons

### Theme: Better Environment, Better Life

(主題 : 美麗環境, 美好生活)

Symposium Co-Chairs: Dr. Liping Yan (顏利平) / LADWP; Dr. Jian Peng (彭艦) / OCPW

<b>TIME</b>	<b>ACTIVITIES</b>
11:00 am	Check-in and Social
11:30 am - 12:50 pm	Luncheon Session (Palisades Room)
11:50 am - 11:54 am	<i>Opening Remarks by Dr. Liping Yan (顏利平) / LADWP</i>
11:54 am - 11:58 am	<i>Introduction by Dr. Mark Gold / UCLA</i>
11:58 am - 12:38 pm	<i>Keynote Speech “What Climate Change Means for LA” Prof. Alex Hall / UCLA Center for Climate Change Solutions</i>
12:38 pm - 12:46 pm	<i>Q &amp; A</i>
12:46 pm - 12:50 pm	<i>Recognition</i>
1:00 pm - 4:00 pm	Student Business Innovation Competition (Malibu Room): Moderator – Dr. Hui Su <i>Panel of Judges: Drs. Feng An, Wen Hua, Wensheng Zhou</i>
	LEAP (Venice Room): Moderator – Dr. Yutao He (何宇滔) / JPL <i>Panelists: Mr. Bill Chiu (邱維倫) / SCE, Dr. Dankai Liu (劉登凱) / JPL, Mrs. Shirley Wang (王范文華) / Plastpro Inc., Prof. Yang Yang (楊陽) / UCLA</i>
	STEM Essay Contest Winner Presentations / Workshop (Hermosa Room): <i>Mr. Yiu Man So, Ms. Dongmei Huang, Dr. Xiwu Cao, Dr. Shouhua Huang "Everyone Is an Inventor" by Mr. Bin Feng / Microduino, Inc.</i>
	Technical Presentation and Panel Discussion Sessions (Palisades Room)
1:00 pm - 2:20 pm	Session on Water Issues: Moderator – Dr. Jian Peng (彭艦) / OCPW
1:00 am - 1:50 pm	<i>Presentation W1: “Toward Characterization of Greater Los Angeles Water Budget” Prof. Steve Margulis / UCLA</i>
	<i>Presentation W2: “Water Delivery for Sustainability” Mr. Walter Wang (王文祥) / JM Eagle Inc.</i>
	<i>Presentation W3: “Low Impact Development for Energy-Efficient Stormwater Management”, Mr. Daniel Apt / Michael Baker International</i>
1:50 am - 2:20 pm	<i>Panel Discussion on Water Issues</i>
2:20 pm - 2:40 pm	<i>Break</i>
2:40 pm - 4:00 pm	Session on Energy Issues: Moderator – Dr. Mark Gold / UCLA
2:40 pm - 3:30 pm	<i>Presentation E1: “Transforming Wastewater Treatment Plants into Energy &amp; Water Producing Profit Centers”, Prof. Eric Hoek / UCLA and Water Planet Inc.</i>
	<i>Presentation E2: “Next Generation Thin Film Photovoltaics Research at UCLA” Prof. Yang Yang (楊陽) / UCLA</i>
	<i>Presentation E3: “A Technology Portfolio for a Sustainable Energy Future” Prof. Laurent Pilon / UCLA</i>
3:30 pm - 4:00 pm	<i>Panel Discussion on Energy Issues</i>
4:00 pm - 5:00 pm	<i>Press Conference (Venice Room)</i>
	<i>Networking and Silent Auction</i>

## CESASC Technical Symposium Speakers

	<p>Daniel Apt is a Vice President with Michael Baker International and their Surface Water Management Department in Irvine, California. He has more than 21 years of experience in stormwater management and water quality and specializes in Low Impact Development (LID), MS4 permit assistance and program development, BMP planning and design for new and redevelopments, BMP retrofits, and stormwater training. Mr. Apt is the Co-Developer of the California Low Impact Development Web-portal, and is the Project Manager for the Southern California Monitoring Coalition LID Effectiveness Project and the California Stormwater Quality Association LID Municipal Code Update Project. Mr. Apt also serves on the CASQA Board of Directors. His topic at the CESASC 2016 Technical Symposium is “Low Impact Development for Sustainable Stormwater Management – Enhanced Watershed Management Plans in the Los Angeles Region.”</p>
	<p>For over two decades, Eric Hoek has dedicated his life's work to education, research, engineering, innovation, entrepreneurial and philanthropic activities related to his passion – clean water.</p> <p>I currently serve as the CEO of Water Planet, Inc. where we are commercializing next-generation membrane filtration technology. Previously, I was an engineering professor at UCLA and UC Riverside from 2002 to 2014; I've been on leave from UCLA since January 2014 to run Water Planet. At UCLA, I am a faculty member <i>Civil &amp; Environmental Engineering</i>, the <i>UCLA Institute of the Environment &amp; Sustainability</i> and the <i>California NanoSystems Institute</i>. I also helped create the <i>UCLA Water Technology Research Center</i>, the <i>UC Center for Environmental Implications of Nanotechnology</i> and the <i>KAUST-Cornell Center for Energy &amp; Sustainability</i>. Since the late 1990's my research has focused on understanding and improving membrane materials, modules, processes and systems applied to desalination, water reuse and environmental remediation. Since 2002, I have generated over \$4.5M in externally funded research projects, including &gt;\$870k in active grants, and I was part of 3 teams that raised over \$50M in funding for 3 research centers. In <i>ISI Web of Science</i>, I have 106 journal articles, 7 review articles, 16 patent filings, 52 conference proceedings papers all of which have been cited over 7,600 times given an H-Index of 40; Google Scholar indicates 188 publications with 10,087 citations and an H-Index of 46.</p> <p>Currently, I am the Editor-in-Chief of the Nature Partner Group <i>Clean Water Journal</i> and I am under contract by J. Wiley &amp; Sons to author a textbook on <i>Membrane Science &amp; Technology</i>. Previously, I was associate editor of the international journal <i>Desalination</i> and I co-edited the <i>Encyclopedia of Membrane Science &amp; Technology</i>. I have received numerous awards including the 2012 ASCE Walter L. Huber Award, 2007 <i>Public Works Magazine</i> Trendsetter Award, the 2007/2013/2016 Global Water Awards, and the Global Cleantech List of 100 ones to watch.</p>
	<p>Steve Margulis is currently a Professor and the Vice Chair of Graduate Affairs in the Civil and Environmental Engineering Department at UCLA. He graduated with a Ph.D. from MIT in 2002 after which he joined the faculty at UCLA. His area of expertise is in hydrology and water resources engineering with an emphasis on characterizing and modeling water resources at regional domains including regional snowpack and how it is changing. In the context of the Sustainable LA Grand Challenge Project, his group has recently begun examining the Los Angeles water budget and implications for how it may change going forward in the context of less availability and/or reliance on regional water resource supplies.</p>

## CESASC Technical Symposium Speakers

	<p>Laurent Pilon is Professor in the Mechanical and Aerospace Engineering Department at UCLA. His research group engages in a wide range of interdisciplinary research projects for sustainable energy conversion, storage, and efficiency technologies at the intersection between interfacial and transport phenomena, material science, and biology. He is the recipient of the 2005 U.S. National Science Foundation CAREER Award, the 2008 Bergles-Rohsenow Young Investigator Award in Heat Transfer from the American Society of Mechanical Engineers (ASME), and the 2009 Young Scientist Award in Radiative Transfer from the Journal of Quantitative Spectroscopy and Radiative Transfer. He was elected Senior Member of SPIE in 2011 and Fellow of ASME in 2015. He is also the recipient of multiple teaching awards from UCLA.</p>
	<p>Walter Wang is Chairman and CEO of JM Eagle, the world's largest manufacturer of <u>plastic pipe</u>. At its 20 plants in North America, China and Mexico, the company manufactures <u>polyvinyl chloride</u> and <u>high-density polyethylene</u> pipe for a variety of industries including utility, plumbing, electrical, natural gas, irrigation, potable water, drainage and sewage. With capacity to produce 2.2 billion pounds of pipe a year, JM Eagle surpasses global competition in technological product innovations, modern manufacturing efficiencies, product breadth and environmentally progressive initiatives. JM Eagle PVC requires lower amounts of water and temperature in manufacturing, does not contain lead, rust or hazardous materials in its products, employs 100% recycling policy and requires less fuel to transport its products due to its lighter weight. Due to its sustainability-identified in studies to last at least 100 years-plastic pipe from JM Eagle conserves water due to reduced leakage and waste and it protects the environment against biological contamination.</p> <p>Mr. Wang rose through the ranks at Formosa Plastics in Taiwan and its subsidiary J-M Manufacturing. He acquired J-M in 2005 and PW Eagle in 2007 to form JM Eagle, which now employs more than 1,200 people in 20 plants. He sits on the Board of Directors of the Formosa Petrochemical and Formosa Chemical and Fiber Corporations. Mr. Wang and his wife, Shirley, are benefactors to numerous causes in the United States and abroad, and he has received numerous awards for his civic and charitable efforts, including the Ellis Island Medal of Honor, Asia American Advancing Justice Public Service Award, China Institute Blue Cloud Award and Committee of 100 Philanthropy Award. Most significantly, Mr. Wang has donated 400 miles of plastic pipe to bring clean water to nearly 200,000 people in eight African countries.</p>
	<p>Professor Yang YANG (楊陽) holds a BS in Physics from the National Cheng-Kung University in Taiwan in 1982, and M.S. and Ph.D. in Physics and Applied Physics from the University of Massachusetts, Lowell in 1988 and 1992, respectively. Professor Yang is the Carol and Lawrence E. Tannas Jr. Chair Professor of Materials Science and Engineering at UCLA. He is a materials physicist with expertise in the fields of organic electronics, organic/inorganic interface engineering, and the development and fabrication of related devices, such as photovoltaic cells, LEDs, and memory devices. His notable contributions to the field of organic photovoltaics (OPV) are enhanced understanding of polymer morphology and its influence on device performance; the invention of the inverted organic solar cell; the inverted tandem solar cell; and transparent OPV devices. Professor Yang has published more than 290 peer-reviewed papers (including book chapters); ~60 patents (filed or issued), and given 150 invited talks. His H-Index is 115 as of January 2016. Some of his recent honors and awards are: "World's most influential scientific minds" by Thomson Reuters, 2016. (Only 19 scientists worldwide selected.); Second highest cited papers in Chemistry between 2005 - 2015, selected by the American Chemical Society (ACS); Highly Cited Researcher in Materials Science and Chemistry Categories (2016, 2015, 2014) published by Thomson Reuters; Fellows of American Physical Society (2015); Materials Research Society (2015); Royal Society of Chemistry (2015); SPIE &amp; (2014).</p>

# CESASC 54<sup>th</sup> Annual Convention Banquet Gala Program

## (南加州中華科工學會第54屆年會晚宴)

Saturday, April 23, 2016

UCLA Carnesale Commons, 251 Charles Young Drive West, Los Angeles, CA 90095

5:00 pm	Check-in, Social, and Silent Auction	
6:15 pm	Banquet Gala	MCs: Ms. Sue Ann Pien and Mr. James Lin
6:25 pm	Opening Remarks by CESASC President	Dr. Yue Rong
6:30 pm	Remarks by UCLA Chancellor (Introduced by Dr. Mark Gold)	Dr. Gene Block
6:35 pm	Congratulations of State Treasurer (Introduced by Dr. Dankai Liu)	Mr. John Chiang
6:40 pm	Keynote Speech (Introduced by Dr. Yue Rong): <i>“Climate Change, Clean Energy and a Low Cost Path Forward”</i>	Dr. Steven Chu
	2016 CESASC Lifetime Achievement Award Presentation: <i>Dr. Steven Chu (朱棣文) / Stanford University</i>	Dr. Yue Rong
7:10 pm	Dinner and Student Award Presentations	
	2016 CESASC Student STEM Essay Contest Award Presentations: Group1 (Grade 6-8): Keene Cheung, Fuyi Yang, Jianbo Sun, Major Yang, Stanley Liu, Xin Zhu Group 2 (Grade 9-12): Benjamin Liu, Valerie H. Narumi, Andrew Huang	Mr. Yiuman So
	2016 CESASC Scholarship Award Presentations: Yingjie Hu, Cheng Li, Janelle Liu, Yang Shen, Jinghui Yang, Siyin Yang, Zheng Yang, Hsien-Wei Yeh, Jiachen Zhang, Qiong Zhang	Dr. Hui Su
	2016 Student Business Innovation Competition Award Presentations: Michael Licherman, Nicole Tsai, Joshua D. Wiensch	Dr. Wensheng Zhou
7:50 pm	2016 CESASC Achievement Award Presentations (Introduced by Mrs. Lan Saadatnejadi): <i>Dr. Yang Yang (楊陽) / UCLA</i>	Dr. Yue Rong
	<i>Mr. Bill Chiu (邱維倫) / SCE</i>	Dr. Dankai Liu
	<i>Dr. Chi-Yung Chang (張琦永) / Raytheon Company</i>	Mrs. Lan Saadatnejadi
8:05 pm	2016 CESASC Lifetime Achievement Award Presentation (Introduced by Dr. Chih-Ming Ho): <i>Dr. Henry Tzu-Yow Yang (楊祖佑) / UC, Santa Barbara</i>	Dr. Dankai Liu
8:20 pm	2016-2017 CESASC Board Installation by State Assemblymember Mr. Ed Chau (Introduced by Dr. Liping Yan)	
8:30 pm	Entertainment Performance – Flute (Introduced by Mr. Yiuman So)	Ms. Fiona Liu
8:40 pm	2016 CESASC Silent Auction Announcement	MCs
8:50 pm	2016-2017 CESASC President Speech	Mrs. Lan Saadatnejadi
8:55 pm	Closing Remarks	Dr. Yue Rong



# 54<sup>th</sup> Annual Convention Highlights

## KEYNOTE SPEAKER

**STEVEN CHU**, Professor of Physics and Molecular & Cellular Physiology

Professor Chu has published ~260 papers in atomic physics, laser spectroscopy, polymer physics, biophysics, biology, and batteries, and holds 11 patents and 5 more pending. He was U.S. Secretary of Energy from January 2009 - April 2013. As the first scientist to hold a Cabinet position, he recruited outstanding scientists into the DOE, initiated ARPA-E (Advanced Research Projects Agency-Energy), the Energy Innovation Hubs, and was tasked by President Obama to assist BP in stopping the Deepwater Horizon oil leak. As director of the Lawrence Berkeley National Laboratory, Chu encouraged research in the conversion of solar energy into electricity and transportation biofuels. At Stanford, he was twice Chair of Physics, and helped launch Bio-X at Stanford University, a multi-disciplinary institute combining the physical and biological sciences with medicine and engineering, and the Kavli Institute for Particle Astrophysics and Cosmology. Previous to those positions, he was head of the Quantum Electronics Research Department at AT&T Bell Laboratories.



Dr. Chu has numerous awards including the 1997 Nobel Prize in Physics for his contributions to laser cooling and atom trapping. Other research highlights include the introduction of atomic fountain atomic clocks, atom interferometry based on optical pulses, the manipulation of biomolecules with optical tweezers, and the first single molecule FRET (fluorescence resonance energy transfer) experiments with biomolecules tethered to surfaces. He has 27 honorary degrees, and is a member of the National Academy of Sciences, the American Philosophical Society, the American Academy of Arts and Sciences, National Inventors Academy, the Academia Sinica, and a foreign member of the Royal Society, the Royal Academy of Engineering, the Chinese Academy of Sciences, and the Korean Academy of Science and Technology.

After completing his government service, Chu has returned to Stanford, where he is developing new optical imaging technologies with nanoparticle probes for applications in biology and biomedicine. He is also exploring new approaches to acoustic imaging, lithium ion batteries, PM<sub>2.5</sub> air filtration and other applications of nanotechnology.



# 54<sup>th</sup> Annual Convention Highlights

## AWARDEES

**Dr. Henry Tzu-Yow Yang (楊祖佑)** is an engineer and educator currently serving as the fifth chancellor of the University of California, Santa Barbara, a post he has held since 1994. Regarded as an expert in aerospace structures, structural dynamics, transonic aeroelasticity, wind and earthquake structural engineering, intelligent manufacturing systems, and finite elements. Dr. Yang was on the staff of Purdue University for 25 years before his assignment at UC Santa Barbara. He is an eight-time winner of the Elmer F. Bruhn Award, which honors outstanding teachers at the Purdue University School of Aeronautics and Astronautics. He was named as the university's Neil A. Armstrong Distinguished Professor of Aeronautics and Astronautics, a title bestowed on him from 1988 through 1994. He has authored or co-authored 170 articles for scientific journals, as well as a widely used textbook on finite element structural analysis. He has guided 54 Ph.D. and 20 M.S. recipients. Dr. Yang has served on scientific advisory boards for the Department of Defense, U.S. Air Force, U.S. Navy, NASA, and the National Academy of Engineering. He is a past chair of the Association of Pacific Rim Universities (2010–2014) and the Association of American Universities (2009–2010). Yang currently serves on the President's Committee for the National Medal of Science, being appointed originally by George W. Bush in 2009 and again by Barack Obama in 2011. He was named as chairman of the board for the Thirty Meter Telescope project in 2007 and still holds the position. He also currently serves on the board of directors of The Kavli Foundation. Yang holds honorary doctorates from Purdue University, Hong Kong University of Science and Technology, National Taiwan University, City University of Hong Kong, Chinese University of Hong Kong, West Virginia University, and Hong Kong Polytechnic University. He is the 1998 recipient of the Benjamin Garver Lamme Award from the American Society for Engineering Education and the 2008 recipient of the Structures, Structural Dynamics, & Materials Award from the American Institute of Aeronautics and Astronautics.

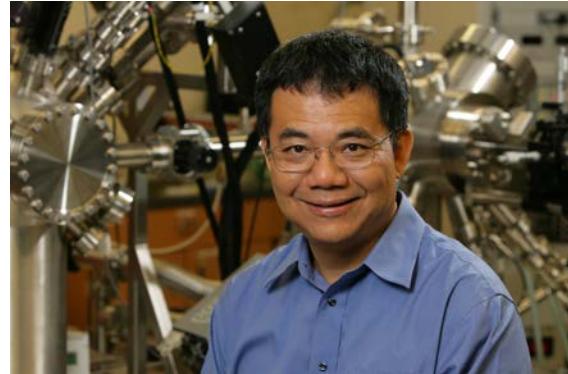




## 54<sup>th</sup> Annual Convention Highlights

**Professor Yang YANG (楊陽)** Professor Yang Yang holds a BS in Physics from the National Cheng-Kung University in Taiwan in 1982, and he received his M.S. and Ph.D. in Physics and Applied Physics from the University of Massachusetts, Lowell in 1988 and 1992, respectively. Before he joined UCLA in 1997, he was the research staff of UNIAX Corporation (now DuPont Display) in Santa Barbara from 1992 to 1996.

Professor Yang is the Carol and Lawrence E. Tannas Jr. Chair Professor of Materials Science and Engineering at UCLA. He is a materials physicist with expertise in the fields of organic electronics, organic/inorganic interface engineering, and the development and fabrication of related devices, such as photovoltaic cells, LEDs, and memory devices. His notable contributions to the field of organic photovoltaics (OPV) are enhanced understanding of polymer morphology and its influence on device performance; the invention of the inverted organic solar cell; the inverted tandem solar cell; and transparent OPV devices. Since 2007, he has taken the lead in the creation of several world record cells in OPV, with a recent efficiency of 10.6% - 11.6% PCE via tandem structure.



In addition to organic solar cells, his group is also heavily involved in the development of liquid-processable CIGS/CZTS photovoltaics. His group has achieved approximately 11.2% PCE using a CISS absorber layer deposited from a solution- phase precursor system. Recently, his group has entered the field of perovskite solar cell, and he demonstrated 19.3% power conversion efficiency by interface engineering and improved crystal growth process. Professor Yang has published more than 290 peer-reviewed papers (including book chapters); ~60 patents (filed or issued), and given 150 invited talks. His H-Index is 115 as of January 2016.

Some of his recent honors and awards are:

- 'World's most influential scientific minds' by Thomson Reuters, 2016. (Only 19 scientists worldwide selected.)
- Second highest cited papers in Chemistry between 2005 - 2015, selected by the American Chemical Society (ACS).
- Highly Cited Researcher in Materials Science and Chemistry Categories (2016, 2015, 2014) published by Thomson Reuters.
- Fellows of American Physical Society (2015); Materials Research Society (2015); Royal Society of Chemistry (2015); SPIE (2014) and the E-M Academy (2014).
- The Carol and Lawrence E. Tannas Jr. Endowed Chair in Engineering, 2011.



## 54<sup>th</sup> Annual Convention Highlights

### **Bill Chiu, Director of Engineering Southern California Edison - Transmission & Distribution**

Bill Chiu is the Director of Engineering at Southern California Edison (SCE), with responsibility for all engineering disciplines involved in electric grid infrastructure and technical requirements for SCE's power delivery transmission, substations, and distribution system, including the interconnections of renewable resources.

Through his leadership, together with his dynamic team, their accomplishments have broken new ground, establishing new industry standards that have lead the way for others to follow, including: partnering in a federal demonstration project for the largest battery storage system in North America, designing and engineering a 500-kilovolt underground transmission line in Chino Hills—the first project of its kind in the Western Hemisphere, and developing SCE's grid modernization to pave the way for a two-way flow of power to and from customers.



Bill is an active member of the Institute of Electrical and Electronics Engineers (IEEE) and recently served as the Chairman of the IEEE/PES Transformers Committee from 2012 to 2013. In that capacity, he was responsible for leading one of the largest IEEE standards development organization that sponsored more than 90 industry standards that are used world-wide in the power industry. In 2014, Bill received the IEEE USA Regional Leadership Award for his personal contributions to the power industry.

Prior to joining SCE in 1998, Bill served various management and engineering roles at Austin Energy, Los Angeles Department of Water & Power, and Bechtel Power Corporation. With over 26 years of experience in the utility industry, Bill has had responsibilities across various functional areas that included business strategy, regulatory policy, customer service, distribution construction and maintenance, engineering, and bulk power infrastructure projects.

Bill is a registered professional engineer in the state of California and Texas. He currently serves on the Industry Advisory Board for the USC Viterbi School of Engineering and the California State University at Los Angeles School of Engineering, Computer Science, and Technology. Bill has a Bachelor of Science degree in Electrical Engineering from Cal Poly Pomona, a Master of Science in Electrical Engineering from USC Viterbi School of Engineering, and an MBA degree from the USC Marshall School of Business.



## 54<sup>th</sup> Annual Convention Highlights

**Dr. C.Y. Chang** is a Principal Engineering Fellow at Raytheon Space and Airborne Systems (SAS) located in El Segundo, California. He received his B.S. degree in Electrical Engineering from National Taiwan University in 1982 and M.S. degree and Ph.D. degree in Electrical Engineering from University of California at Los Angeles in 1983 and 1986, respectively. He has 30 years of experience in developing spaceborne and airborne radar systems for earth science, surveillance and reconnaissance applications, specializing in advanced radar system design and signal processing.

From 1986 to 1997, Dr. C.Y. Chang worked at the NASA Jet Propulsion Laboratory (JPL) in Pasadena, California on spaceborne imaging radar programs: Shuttle Imaging Radar-C (SIR-C) and Shuttle Radar Topography Mapper (SRTM). SIR-C was the third in a series of remote sensing imaging radar systems flown on Space Shuttle for earth science applications. SIR-C represented the first multi-frequency band (L-band and C-band) multi-polarization (HH, VV, and cross-polarization) imaging radar system ever flown in space. It was flown together with the X-SAR imaging radar developed by Germany and Italy on-board Space Shuttle Endeavour twice in 1994. Dr. Chang led the Ground Data Processing System (GDPS) which digitally processed all the radar data into image products. SIR-C radar image products have been used to support a variety of earth science research studies from geology, oceanography to interferometry. He received a NASA Exceptional Service Award for his contribution to SIR-C. It was an extremely exciting experience and gratifying accomplishment for a young engineer. The SIR-C follow-on system, known as Shuttle Radar Topography Mapper (SRTM), became the first spaceborne single-pass interferometric radar system with dual antenna arrays, which produces the worldwide Digital Terrain Elevation Data (DTED) available today.

Dr. C.Y. Chang joined Raytheon Space and Airborne Systems (SAS) in 1997. Raytheon Company is a leading aerospace company specializing in defense, civil government and cybersecurity solutions throughout the world. The Space and Airborne Systems (SAS) business unit builds radars and other sensors for aircraft and spacecraft. The SAS business unit also provides communications, electronic warfare and high-energy laser solutions. The El Segundo site is best famed for developing high performance airborne radars. Since Dr. Chang joined the Raytheon SAS, he has worked on a variety of advanced long range airborne surveillance and reconnaissance radar programs with increasing responsibilities. Aircraft includes piloted aircraft and remotely piloted aircraft. He is responsible for technology and product roadmap development. He has presented Raytheon's technologies and product offerings to numerous customers. He is recognized for advancing radar technologies, capturing new programs, and turning around challenging programs.

Teaching is another experience Dr. C.Y. Chang enjoys very much outside his day job. He previously taught a technical short course on imaging radar. Currently, he teaches three radar courses at Raytheon as part of company's advanced technical education program. Dr. Chang resides in Redondo Beach, he enjoys hiking, running, and traveling to canyon country and tropical islands.



## CESASC Banquet Gala Program MCs



Sue Ann Pien is a Chinese-American public figure and UCLA alumni featured in worldwide media including Time and People magazines, ELLE, The Huffington Post, the Chinese "World Journal", "Apple News" and she has over a decade of experience in front of the camera as an actress working for MTV, Sony, The CW Network and continues to book roles on TV and film today. Her passion for preserving the environment comes from her 14+ years of rock climbing around the globe.

It is more for her Mars One candidacy. Mars One is a Dutch non-profit that aims to put the first human colonists on Mars. Their mission plan is based on using existing technologies and sending teams of four to Mars one-way every two years starting from 2026. All teams will be international and include two men and two women.

Sue Ann Pien is in the Round 3 selection phase of 100 candidates worldwide who were chosen out of over 200,000 initial applicants. Her father was an aerospace engineer and her mother worked for Rockwell Rocketdyne - while her granduncle was a Chief Rocket Design consultant. The next round of Mars One selections will whittle down the 100 candidates to 24 candidates (12 men and 12 women) after testing how the candidates do in teams and long-term isolation. The final 24 candidates will then be trained in teams of four for the next ten years to prepare for their final departure to Mars. Sue Ann hopes to live out her final years of life on the Red Planet, having lived the first half of her life on Earth!



Mr. James Lin was born and raised in Taiwan, and moved to United States when he was fifteen years old. He studied Electrical Engineering at UCLA and received a fellowship from TRW in his junior year. A year later, Mr. Lin graduated and continued to work at TRW for four more years on the Peacekeeper project. Then in 1986 Hughes Aircraft hired him as a project manager in its advanced avionics divisions.

Mr. Lin was an avid investor with a passion for the stock market even as he was working as an engineer. In 1988 he foresaw a slowdown in the aerospace defense industry and decided to begin his career in the financial services industry after the 1987 stock market crash.

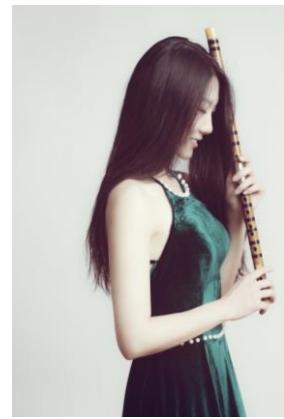
Mr. Lin started his own money management firm, JJK Capital Management in 1992 to concentrate on developing his equity trading strategies. In 1993 he earned first place honor in the "Stock Only" category in the United States Investing Championship, ranking him the top contestant who produced the highest possible return. In late 1995, JB Oxford asked Mr. Lin to start an Asian Market Group. By 2000, JB Oxford Asian Market Group had more than 10,000 investors with more than 600 million in customer assets.

Mr. Lin loves to help worthy causes and make a difference in the community. Currently, he is the Board Chair of the South Bay Chinese Culture Association and Board member of Palos Verdes Peninsula Friends of the Library. Mr. Lin is also the Agency Director at Transpacific Financial Inc., which is now the largest Asian General Agency in the United States.

## Entertainment by Qian LIU (刘倩) -- “Reminiscence”

- Youth Chinese Traditional Musician
- Performer & Assistant of Director of China Flute Orchestra
- Senior Teacher Certificated by the Ministry of Education in China
- Member of Chinese Nationalities Orchestra Society
- Member of Chinese Bamboo flute Committee

**Qian LIU** displayed her outstanding aptitude in music since studying piano at four, especially after meeting her first bamboo flute teacher LIU Feng-shan when she was ten. As the youngest performer passed the highest level test of professional bamboo flute within only ten months, she was invited to record the official demo tapes for Instruments' Grading Test, and was awarded almost all youth flute performance competitions. In the 4th International Youth Arts Festival of 2004 in Ukraine, her distinguished performance helped Chinese Troupe to win the Throne honor.



Since 2008, she started her music performance major in China Conservatory with Prof. Zhang Wei-liang, a national music expert. After obtaining her B.A degree, she won the only place in her domain to become a government-sponsored student to enhance her study of Chinese Instruments Performance Research in Graduate School of China Conservatory and got her M.A. degree in 2015. During studying, she partly organized Chinese bamboo flute arts festivals and invitational tournaments as the coordinator. In the meanwhile, her paper was published by China Youth Press with the musicology scholars'. And she was invited to attend to the CHIME (European Chinese Music Research Foundation) Annul Conference as the only independent student participator.

As a performer, she has cooperated with musicians of Philharmonia Orchestra, China National Orchestra, etc. She held several personal concerts in China and recorded demo tapes, advertising videos, and professional albums. She often appears at global festivals and academic exchanges, accompanying with state leaders of China as a culture envoy. Her performance is throughout Asia, Europe, Africa and Oceania, in many worldwide respected music halls such as Beijing NCPA, London Southbank Centre and Hong Kong City Hall.

As an educator, she assisted with Music Intervention Program of Beijing Union University, taught in many local elementary schools and participated in establishing attached bases of China Conservatory. She got the “Golden Prize” and “Outstanding Advisor” award, and achieved the Senior Teacher Level Certification verified by the Ministry of Education of China.

Her wealth experiences stimulated her to be a versatile musician with balanced foundation of theory, performing skills, practical ability and the depth of thought. Therefore, she is studying in UCLA to enhance her Ethnomusicology and Music Business knowledge, looking forward to pursuing a new chapter of her music career.



**Qian ZHANG** is a M.M graduate from New York University, Film Scoring major., She graduated as a multiple-scholarship-recipient from China Conservatory, Music Composition Department in 2013. She's been a composer in residence of China Conservatory Youth Performing Art Troupe since 2011. In 2015, as a project manager, she represented NYU to invite the art troupe to hold a Film Music Concert of Chinese instruments in NYU Skirball, which was well received and highly praised by the audience in the United States. Zhang's music encompasses film scoring, concert music and songwriting. Her poetic and romantic mélange of western classical music and traditional Chinese music establishes her unique voice.

## CESASC 54<sup>th</sup> Annual Convention and Awards



### *Entertainment by Qian Liu (刘倩)*

#### *“Reminiscence”*

- Youth Chinese Traditional Musician
- Performer & Assistant of Director of China Flute Orchestra
- Senior Teacher Certificated by the Ministry of Education in China
- Member of Chinese Nationalities Orchestra Society
- Member of Bamboo flute Committee of Chinese Nationalities Orchestra Society

**Qian Liu** has stepped on her music journey since she was four, playing piano supervised by ZHANG Jing-yuan (National first-level composer) and Lv Bao-zhi (Composer of Qian Wei Art Troupe), Especially, when she met her first bamboo flute teacher Feng-shan Liu at the age of 10, as expected, she became the youngest girl passing the highest level of professional bamboo flute test only for ten months.

In 2008, she matriculated in China Conservatory and majored in music performance. Supervised by Prof. Zhang Wei-liang, she polished music theory and performance skills with unremitting effort for her bachelor degree study. In 2012, She was admitted to the Graduate School of China Conservatory majored in Music and research on Chinese Instruments Performance. The academic cultivation and abundant practical experiences enabled her to receive a master degree and obtain opportunities to broaden horizon.

As a performer, she performed in the National Centre for Performing Arts, Beijing Music Hall, Zhongshan Music Hall, as well as Queen Elizabeth Hall of Southbank Centre in London. Additionally, she held several solo concerts and recitals in Mainland China successfully. Her footprints touched upon abundant countries throughout the world.

As a student music culture researcher, her paper was published by China Youth Press with the musicology scholars' together. Last year, she was invited to attend the CHIME (European Chinese Music Research Foundation) Annul Conference as the only independent student participator. As an educator, she was the recipient of “Golden Award” and “Outstanding Advisor” in the 2nd Chinese Bamboo Flute Invitational Tournament, and honored with the Senior Teacher Level Certification verified by the Ministry of Education of China.

Her ultimate goal is to be an Asian music and Eastern culture researcher, and she aims for a PhD from the Department of Ethnomusicology in UCLA.



**Trace Qian Zhang** is a M.M graduate in Film Scoring from New York University. As a multiple-scholarship-recipient, she graduated with honors from Music Composition Department of China Conservatory in 2013. She's been a composer-in-residence of China Conservatory Youth Performing Art Troupe since 2011. In 2015, as a project manager, she represented NYU to invite the art troupe to hold a Film Music Concert of Chinese instruments in NYU Skirball Theatre, which was well received and highly praised by the audience in the United States. Zhang's music encompasses film scoring, concert music and songwriting. Her poetic and romantic mélange of western classical music and traditional Chinese music establishes her unique voice.

**NAMED AMONG THE TOP 6% OF HOSPITALS IN CALIFORNIA**  
and one of the best regional hospitals by U.S. News & World Report. Torrance Memorial offers expert care through a comprehensive health system in numerous locations throughout the South Bay, including our new state-of-the-art Lundquist Tower. Advanced care isn't far away, it's just around the corner. [TorranceMemorial.org](http://TorranceMemorial.org)

NATIONALLY RECOGNIZED CARE • 18 PATIENT CARE LOCATIONS • PHYSICIAN NETWORK



# EXCEPTIONAL CARE.

# EXCEPTIONALLY CLOSE.



Lundquist Tower, 3330 Lomita Blvd., Torrance CA

Congratulations on CESASC's 54th Annual Convention



**Congratulations to the esteemed  
honorees of the 54th Annual  
CESASC Convention & Awards.**

[squirepattonboggs.com](http://squirepattonboggs.com)



**CESASC**  
acknowledges  
**Perceiver**  
for its support  
of the 2016 oversea  
**STEM** competition

【主辦機構】



南加州中華科工學會

Chinese-American Engineers and Scientists Association of Southern California

Since 1962 in USA

【中國賽區獨家承辦】



**Perceiver**  
普西文教

Future Technology that Can Improve Human Life  
10 tickets to UCLA express  
**REGISTER NOW!**



2 0 1 6  
**STEM**  
ESSAY CONTEST

2016国际青少年STEM科技论文大赛

April 23, 2016. UCLA



## ***Congratulations on CESASC's 54<sup>th</sup> Convention***

We thank

***Dr. Steven Chu***

for his informative keynote speech and his inspiration  
to all CESASC members.

We congratulate

***Dr. Henry T. Yang & Dr. Yang Yang***

for their dedication to excellence in higher education.

We congratulate

***Dr. CY Chang & Mr. Bill Chiu***

for their relentless pursuit in technical excellence.

CESASC Founding President

***Henry and Lois W. Chi***

## **2016 Silent Auction Donors**

Cathay Bank

Paul & Lily Chen

Henry & Lois Chi

Chinese American Museum

Chih-Ming & Shirley Ho

Bin Feng

Eastwood & Elizabeth Kay Im

Wei & Marina Kao

Munson & Suellen Kwok

J.J. Sage Lee

Shan & Sanne Lee

Dankai Liu

Edward & Tina Liu

Szechwan Chinese Restaurant

Lihua Qiu & Liping Yan

Kung & Mary Yao

Yue Rong

Peizheng Zhou/Wensheng Zhou

# **SPONSORS FOR CESASC 54<sup>th</sup> ANNUAL CONVENTION**

CESASC would like to acknowledge the following corporations, organizations, and individuals for their generous sponsorship.

## **Foundation Sponsorship**

The Anna & John J. Sie Foundation

## **Annual Convention Sponsorship**

Raytheon  
Southern California Edison

## **Advertisement Sponsorship**

Anna & John J. Sie Foundation	MBI Media
Beijing Piesat Information Technology	Squire Patton Boggs
California State University, Long Beach	Taipei Economic & Cultural Office
EZ Printing & Graphic Design	Torrance Memorial Medical Center
Henry and Lois W. Chi	UCLA Grand Challenges
Hsinchu Science Park	UCLA (Suzhou) Institute for Technology Advancement
Longo Lexus	

## **Banquet Table Sponsorship**

Chiao-Tung University Alumni Association of Southern California (CTUAA-SC)  
Chinese American Professional Society (CAPS)  
Chinese Scholars Association - Southern California (CSA-SC)  
Jet Propulsion Laboratory (JPL-Caltech)  
Overseas Chinese Civil and Structural Engineering Association (OCCSEA)  
Peking University Alumni Association of Southern California (PUAASC)  
Southern California Chinese-American Environmental Protection Association (SCCAEPA)  
Southern California Monte Jade Science and Technology Association (SCMJ)  
Tsinghua University Alumni Association of Southern California (THUAA-SC)

Munson & Suellen Kwok, Sanne & Shan Lee

# **SPONSORS FOR CESASC 54<sup>th</sup> ANNUAL CONVENTION**

CESASC would like to acknowledge the following corporations, organizations, and individuals for their generous sponsorship.

## **Foundation Sponsorship**

The Anna & John J. Sie Foundation

## **Annual Convention Sponsorship**

Raytheon  
Southern California Edison

## **Advertisement Sponsorship**

Anna & John J. Sie Foundation	MBI Media
Beijing Piesat Information Technology	Squire Patton Boggs
California State University, Long Beach	Taipei Economic & Cultural Office
Henry and Lois W. Chi	Torrance Memorial Medical Center
Hsinchu Science Park	UCLA Grand Challenges
Longo Lexus	UCLA (Suzhou) Institute for Technology Advancement

## **Banquet Table Sponsorship**

Chiao-Tung University Alumni Association of Southern California (CTUAA-SC)  
Chinese American Professional Society (CAPS)  
Chinese Scholars Association - Southern California (CSA-SC)  
Jet Propulsion Laboratory (JPL-Caltech)  
Overseas Chinese Civil and Structural Engineering Association (OCCSEA)  
Peking University Alumni Association of Southern California (PUAASC)  
Southern California Chinese-American Environmental Protection Association (SCCAEPA)  
Southern California Monte Jade Science and Technology Association (SCMJ)  
Tsinghua University Alumni Association of Southern California (THUAA-SC)  
  
Munson & Suellen Kwok, Sanne & Shan Lee

# **CESASC Scholarship Foundation**

Annually, the CESASC Scholarship Foundation funds the CESASC scholarship program to encourage students to pursue science and engineering, including medicine and economics.

## ***Endowments***

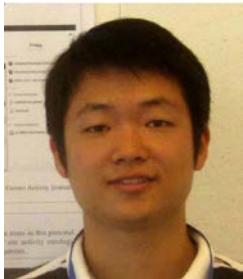
**Mrs. Hsu Hwa Chao Memorial Scholarships**  
**Lois and Henry Chi Scholarships**  
**Prof. Yung-Ho Chien Memorial Scholarships**  
**Mrs. Edna and Dr. Yu-Shan Han Memorial Scholarships**  
**General Shann Tzyy Kao Memorial Scholarships**  
**Dr. Jiin-Jen and Mrs. Sage Lee Scholarships**  
**Tsai-Sun and Cho-Seng Chien Lee Memorial Scholarships**  
**The Anna and John J. Sie Foundation Scholarships**  
**Grace Yu Memorial Scholarships**  
**Prof. June Chien Yu-Tsao Yu Memorial Scholarships**

## ***Major Contributors (2015-2016 to date)***

**Henry and Lois Chi**  
**Edison International, Inc.**  
**Shan and Sanne Lee**  
**John and Marilyn Long Family Trust**  
**Pratt & Whitney**  
**Raytheon**  
**David and Diana Sun Foundation**  
**Charles Woo**  
**Tim and CC Yu**

CESASC Scholarship Foundation is a federal 501(c)(3) non-profit corporation. We welcome all donations and endowments, 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 76th Street, Los Angeles, CA 90045-3208. Further information may be obtained from Eastwood Im, president, or Munson Kwok, treasurer of CESASC Scholarship Foundation.

# 2016 CESASC Scholarship Recipients



Yingjie Hu 胡英杰

Graduate Student, Geographic Information Science, UCSB

Published 39 peer-reviewed papers and book chapters on international journals, conferences, and books. He will pursue an academic position after completing his degree.

*Lois & Henry Chi/General Shann Tzyy Kao/Yung-Ho Chien Scholarships*



Cheng Li 李成

Graduate Student, Planetary Science, Caltech

Graduated from Peking University, school of physics in 2011. After entering Caltech as a graduate student, he developed an interest in studying planetary atmospheres, especially on the atmospheric circulation of giant planets. He received NASA Earth and Space Science Fellowship in 2015. He will go to JPL as a postdoc and work for the Juno mission.

*Grace Yu/Prof. June Chien Yu-Tsao Yu Memorial Scholarships*



Janelle Liu 劉建吾

Graduate Student, Neuroscience, UCLA

She uses neuroimaging tools to investigate the neural basis of language during early development. Her research has implications for understanding causes of developmental language disorders and informing educational policy by creating novel learning strategies for second language learners and individuals with language disabilities.

*HSBC Scholarship*



Yang Shen 沈扬

Graduate Student, Mechanical Engineering, UCLA

He holds dual bachelor degrees from The University of Hong Kong and Shanghai Jiao Tong University. Works with Prof. Jacob Rosen at UCLA Bionics Lab with a research focus on exoskeleton robotics / virtual reality and their applications in post-stroke rehabilitation. Serves as a director at HKUASC and a feature editor of ACM XRDS.

*United Healthcare/Sue Van/Dr. Jiin-Jen & Sage Lee Scholarships*



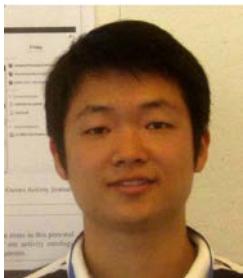
Jinghui Yang 楊靜慧

Graduate Student, Electrical/Optical Engineering, UCLA

Researching integrated optical devices and physics for next generation communication, precision timing and sensing. Contributed to 10+ peer-reviewed journals and top conference presentations. Willing to better the community through science and technology for sustainable development, and help young students and future scientists.

*Mrs. Edna & Dr. Yu-Shan Han Memorial Scholarships*

# 2016 CESASC Scholarship Recipients



Yingjie Hu 胡英杰

Graduate Student, Geographic Information Science, UCSB

Published 39 peer-reviewed papers and book chapters on international journals, conferences, and books. He will pursue an academic position after completing his degree.

*Lois & Henry Chi/General Shann Tzyy Kao/Yung-Ho Chien Scholarships*



Cheng Li 李成

Graduate Student, Planetary Science, Caltech

Graduated from Peking University, school of physics in 2011. After entering Caltech as a graduate student, he developed an interest in studying planetary atmospheres, especially on the atmospheric circulation of giant planets. He received NASA Earth and Space Science Fellowship in 2015. He will go to JPL as a postdoc and work for the Juno mission.

*Grace Yu/Prof. June Chien Yu-Tsao Yu Memorial Scholarships*



Janelle Liu 劉建吾

Graduate Student, Neuroscience, UCLA

She uses neuroimaging tools to investigate the neural basis of language during early development. Her research has implications for understanding causes of developmental language disorders and informing educational policy by creating novel learning strategies for second language learners and individuals with language disabilities.

*HSBC Scholarship*



Yang Shen 沈扬

Graduate Student, Mechanical Engineering, UCLA

He holds dual bachelor degrees from The University of Hong Kong and Shanghai Jiao Tong University. Works with Prof. Jacob Rosen at UCLA Bionics Lab with a research focus on exoskeleton robotics / virtual reality and their applications in post-stroke rehabilitation. Serves as a director at HKUASC and a feature editor of ACM XRDS.

*United Healthcare/Sue Van/Dr. Jiin-Jen & Sage Lee Scholarships*



Jinghui Yang 楊靜慧

Graduate Student, Electrical/Optical Engineering, UCLA

Researching integrated optical devices and physics for next generation communication, precision timing and sensing. Contributed to 10+ peer-reviewed journals and top conference presentations. Willing to better the community through science and technology for sustainable development, and help young students and future scientists.

*Mrs. Edna & Dr. Yu-Shan Han Memorial Scholarships*

# 2016 CESASC Scholarship Recipients

Siyin Yang 杨思垠

Graduate Student, Mathematics Education, CSULB

Graduated from Tianjin Normal University with a bachelor degree in education. She has presented her research in multiple conferences in the US. Recently, she presented applying new technology skills in math education.



*Anna & John J. Sie Foundation Scholarships*

Zheng Yang 杨正

Graduate Student, Informatics for Intelligent Built Environment, USC

His research focuses on advancing human-building interactions towards energy efficiency. He has more than twenty publications in top journals and conferences, and one U.S. patent. Zheng is also the co-founder of Builgence, Inc.



*Grace Yu/Prof. June Chien Yu-Tsao Yu Memorial Scholarships*

Hsien-Wei Yeh 葉先偉

Graduate Student, Chemistry, UCR

His interest focuses on illuminating biology through engineered bio-inspiring fluorescent and bioluminescent proteins, which act as spies for biological events trafficking. He believes the beauty of chemistry explains how the machinery of life work, just as the beauty of humanity arouses our decent society.

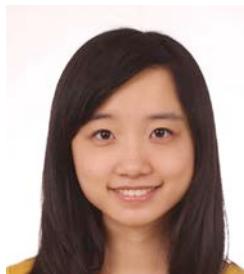


*HSBC Scholarship*

Jiachen Zhang 张佳辰

Graduate Student, Environmental Engineering, USC

Received bachelor's degree from the school of Physics at Peking University. She uses computational models to investigate the interactions between land use change, climate change, and air pollution.



*United Healthcare/Sue Van/Dr. Jin-Jen & Sage Lee Scholarships*

Qiong Zhang 张琼

Graduate Student, Environmental Science and Engineering, Caltech

His research focuses on the remote sensing of greenhouse gases in Earth atmosphere, particularly the effect of aerosol scattering. The goal is to get accurate measurements of greenhouse gas concentrations in their source regions, i.e. megacities. He is also interested in the photochemistry of upper atmosphere.



*Mrs. Edna & Dr. Yu-Shan Han Memorial Scholarships*

# 2016 Student Business Innovation Competition Finalists



Michael Lichterman

Graduate Student, Chemistry, Caltech

Accomplished technical writer and presenter with multiple papers in peer-reviewed literature and conference presentations. Designed and constructed a solar-to-hydrogen prototype device using inexpensive and robust materials.



Nicole Tsai

Undergraduate Student, Business & Liberal Studies, Irvine Valley College/UC Berkeley

Currently a sophomore at Irvine Valley College and will be transferring in Fall 2016 to UC Berkeley studying Business Administration with a minor in Computer Science. President of Business Leaders Society Delta Epsilon Chi in Irvine, Volunteer Teaching Assistant in Northwood Elementary, Social Media Manager in Nommetry and was a marketing analyst intern in summer 2015.



Joshua D. Wiensch

Graduate Student, Chemistry, Caltech

Currently developing a process for the passivation of layered transition metal dichalcogenide semiconductors for use in photoelectrochemical devices. As a consultant for Sunfolding, he performed extensive UV exposure research for polymer materials to improve reliability testing on bellows based actuators. Has multiple publications and one patent.

## 2016 Student Business Innovation Panel of Judges



Feng An, Ph.D.

Founder and Executive Director, Innovation Center for Energy and Transportation (iCET)

Dr. An is a world-renowned expert in clean transportation, energy technologies and climate policies. He founded iCET in California and Beijing to create a world-class think tank to promote policy changes for low carbon development and sustainable future. He was a leading architect of China's existing fuel economy regulations for passenger and commercial vehicles. He received his Ph.D. from the University of Michigan and MS from Tsinghua University in Beijing.



Wen Hua, Ph.D.

General Partner of Cybernaut Ventures Los Angeles

Dr. Hua is a founder of cross border accelerator Zfounder, co-founder of Hua Xiang Investment. She was a serial entrepreneur who sold her internet company before. Now she is a venture capitalist. Her investment focuses are telecommunication, media & technology (TMT), healthcare, and etc. Dr. Hua received her master and Ph.D. in US, with living experiences all over east coast, middle, and west coast. She currently lives in Los Angeles.



Wensheng Zhou, Ph.D.

Managing Director of SIP-UCLA Institute for Technology Advancement (SIP-UCLA ITA)

Dr. Zhou is the founding member and managing director of SIP-UCLA ITA, which hosts a XLAB incubator in Suzhou for start-ups since June 2014. The incubator has helped more than 150 projects to win funds from various VCs and government funding agencies. Prior to SIP-UCLA ITA, Dr. Zhou served as senior research manager of the MediaTek (USA) Inc. and a senior research staff member of HRL Laboratories, LLC. She obtained her B.S. from Peking University and Ph.D. from the University of Southern California.

# STEM | ESSAY CONTEST WINNERS

Future Technology that Can Improve Human Life

Student

[Group 1: Grade 6-8]



**Second Place: Keene Cheung**

Title: *Farmer-Bots*  
Grade: 6  
El Camino Creek Elementary School,  
Carlsbad, California



**Third Place: Fuyi Yang**

Title: *The Revolution of Express Packages*  
Grade: 7  
Beijing Academy  
Beijing, China



**Third Place: Jianbo Sun**

Title: *Earthquake Detection by Red Ants*  
Grade: 6  
Ynez Elementary School,  
Monterey Park, California



**Third Place: Major Yang**

Title: *Smart City Trash-Handling Robot*  
Grade: 7  
Riverside STEM Academy,  
Riverside, California



**Honorable Mention:**

**Jessie Xin Zhu**  
Title: *Emotion Chip*  
Grade: 6  
First Avenue Middle School,  
Arcadia, California



**Honorable Mention:**

**Stanley Liu**  
Title: *The Fuel Recycler*  
Grade: 6  
Dana Middle School,  
Arcadia, California

Student

[Group 2 : Grade 9-12]



**First Prize: Benjamin Liu**

Title: *A Integrated Lab-On-A-Chip Device Incorporating Novel Micropumps, Microvalves, and Acoustic Micromixer for Disease Diagnostics*  
Grade: 9  
Arcadia High School,  
Arcadia, California



**Second Place: Valerie H. Narumi**

Title: *Bed-Bit: A Non-Invasive Health Monitoring & Life Saving System*  
Grade: 11  
First Prize: Valerie H. Narumi  
Valencia High School,  
Placentia, California



**Third Place: Andrew Huang**

Title: *The Solar Rescue System*  
Grade: 10  
Maranatha High School,  
Pasadena, California

## ***PHOTO RECAPTURES (I)***

**2015 Convention & Technical Symposium, Sheraton Cerritos Hotel (May 2, 2015)**



LEAP Presentation & Program



LEAP Presentation & Program



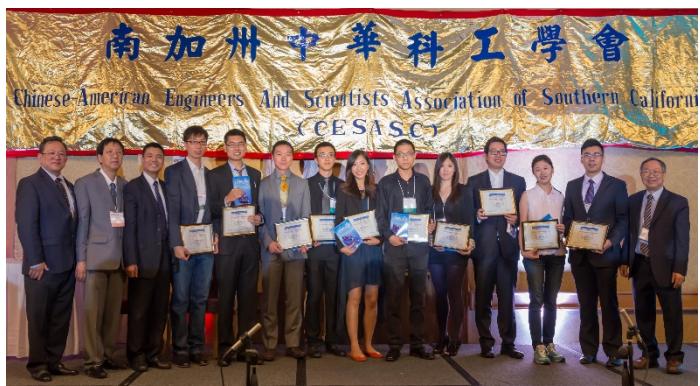
STEM Daytime Presentation



Technical Symposium Speakers & Scholarship Recipients



STEM Awards Presentation



Scholarship Awards Presentation



Scholarship & STEM Awards Recipients



Past Presidents Gathering Photo Op

## **PHOTO RECAPTURES (II)** **2015 - 2016 CESASC Activities**



Board Meeting June 2015



Past Presidents Dinner Meeting June 2015



Past Presidents Luncheon September 2015



Press Conference January 2016



Speakers & Volunteers at Radio Talk Show February 2016



Bamboo Ceiling Seminar January 2016



CAUSE Women in Power Conference February 2016



President Yue Rong with Sue Ann Pien March 2016

## CESASC Convention Keynote Speakers 1969-2016

1969	Wallace W. Booth	1994	Hon. Frederick F. Y. Pang
1970	Walter F. Burke	1995	Dr. Henry C. Lee (李昌鈺)
1971	William B. Bergen	1996	Dr. Henry T. Yang (楊祖佑)
1972	Richard F. Walker	1997	Mr. Gareth C. C. Chang (張鎮中)
1973	Dr. Yu-Hsiu Ku (顧毓琇)	1998	Dr. David Ho (何大一)
1974	Prof. T. Y. Lin (林同棪)	1999	Dr. Yu-Chong Tai (戴聿昌)
1975	Bruce H. Billings	2000	Mr. John S. Chen
1976	John Stuart Foster, Jr.	2001	Dr. Yuan Tseh Lee (李遠哲)
1977	Mr. Steven W. Leong	2002	Mr. John Chiang (江俊輝)
1978	Dr. Samuel C. C. Ting (丁肇中)	2003	Dr. Chih-Ming Ho (何志明)
1979	Dr. Joseph T. Ling	2005	Dr. Henry T. Yang (楊祖佑)
1980	Dr. Chen Ning Yang (楊振寧)	2006	Prof. Fujia Yang (楊福家)
1981	Madam Anna Chennault (陳香梅)	2007	Mr. John J. Sie (謝誠剛)
1982	Dr. Chien-Shiung Wu (吳健雄)	2008	Mr. Wing T. Chao (趙永濤)
1983	Dr. Yuan-Cheng Fung (馮元禎)	2009	Dr. Mau-Chung Frank Chang (張懋中)
1984	Dr. Hua Lin	2010	Dr. Leroy Chiao (焦立中)
1985	Dr. Eberhard Rechtin	2011	Dr. Frank Hsia-San Shu (徐遐生)
1986	Theodore J. Wong (黃華焦)	2012	Dr. Shu Chien (錢煦)
1987	Rear Admiral Ming. E. Chang	2013	Dr. Alice S. Huang (黃詩厚)
1988	Dr. Shu Chien (錢煦)		Dr. Andrew W. Lo (羅聞全)
1989	Elaine L. Chao (趙小蘭)	2014	Dr. Yuk Ling Yung (翁玉林)
1990	Mayor General William S. Chen		Dr. Richard Lee (栗亞)
1992	Hon. Julia Chang Bloch (張之香)	2015	Dr. James C. Liao (廖俊智)
1993	Dr. David S. C. Chu (朱思九)	2016	Dr. Steven Chu (朱棣文)

## CESASC Award Recipients 1962-2016

CESASC has given various awards, which include (1) Lifetime Achievement Award, (2) Achievement Award, (3) Young Achievement Award, (4) Trailblazer Award, (5) Appreciation Award, (6) Service Award, and (7) Corporate Award. For complete lists of award recipients, please visit CESASC website: <http://www.cesasc.org>.

# CESASC Former Presidents

1962 Henry Chi (戚文祥)	1980 Tennyson Wang (王滇聲)	1998 Munson Kwok (郭民生)
1963 Norman Au (區毅民)	1981 Han C. Leung (梁漢宗)	1999 William Chang (張靖生)
1964 Tung-Hua Lin (林同驥)	1982 Sui-An Fung (馮綏安)	2000 Sheng-Rong Lin (林勝榮)
1965 C. M. Wong (王頌明)	1983 Shih Y. Chen (陳仕元)	2001 Edward Liu (劉漢忠)
1966 Frederick Liu (劉繼福)	1984 Frank Wang (王鴻恩)	2002 Edward Liu (劉漢忠)
1967 Theodore Wu (吳耀祖)	1985 Chieh Sun (孫黔)	2002 Charles Wang (王啟明)
1968 Ju-Chin Chu (朱汝瑾)	1986 Shui-Lin Chao (趙瑞麟)	2003 Charles Wang (王啟明)
1969 Lewis Au (區鯉騰)	1987 Sherman Yu (于善元)	2004 Shirley Ho (張翠妹)
1970 Wellington Loh (陸孝同)	1988 Chih-Ming Ho (何志明)	2005 Shan Lee (李珊)
1971 Paul Yeh (葉雹)	1989 Wei H. Kao (高為雄)	2006 Sikun Lan (藍思堃)
1972 Paul Leung (梁佩璐)	1990 Edward Liu (劉漢忠)	2007 Sikun Lan (藍思堃)
1973 Tung Po Lin (林同坡)	1991 Catherine Kwan (寧克嘉)	2008 David K. Lee (李嘉民)
1974 Steven Tang (唐紹曾)	1992 George Chao (趙家鈞)	2009 Wensheng Zhou (周文生)
1975 K. C. Chiang (蔣光祺)	1993 T. J. Wang (王泰傑)	2010 Yiu Man So (蘇耀民)
1976 Peter Dai (戴廣勳)	1994 Eastwood Im (嚴貴方)	2011 Jason Wen (溫俊山)
1977 John Chan (陳乃豪)	1995 Kung Yao (姚琨)	2012 Yutao He (何宇滔)
1978 Shou S. Kwong (鄺紹壠)	1996 Elizabeth Kay Im (郭怡珊)	2013 Liping Yan (顏利平)
1979 Charles P. Wang (王正平)	1997 Tientsai Yang (楊添才)	2014 Dankai Liu (劉登凱)
		2015 Yue Rong (容躍)

# CESASC Life Members

Arlen, Michael	Chien, Raymond	Im, Elizabeth Kay	Loh, W. H. T.	Wang, Senlin
Bussel, Barak	Chin, Lester P.	Kao, Wei H.	Lou, Elizabeth	Wang, T. J.
Chan, Leo K. P.	Chu, Judy	Ko, Denny	Lou, Michael C.	Wen, Jason
Chan, Steven	Dai, Peter K.	Kwan, Catherine	Mak, Danton K.	Wong, Jimmy
Chan, Thomas K.	Deng, Jun	Lan, Sikun	Mar, Nelson T.	Woo, Chai Wei
Chang, David D.	Ding, Tony Y.	Lee, Alfred	Miao, David	Woo, Jer Kury
Chang, Milton	Fan, Jerry	Lee, Hugh	Qiu, James (Zhiyong)	Wu, C. H. Timothy
Chang, Ning-Wu	Gao, Youping	Lee, Hui-An	Sie, Charles	Wu, Marven Pan
Chang, William	He, Yutao	Lee, Jiin-Jen	So, Yiuman	Wu, Tim
Chao, George	Ho, Chih-Ming	Lee, Shan	Sun, Chieh	Yan, Liping
Chao, Pong	Ho, Dean	Leung, Paul	Sun, George	Yang, Tien Tsai
Chao, Shu-Kong	Ho, Shirley	Lim, Wah L.	Szeto, Manwai	Yao, Kung
Chen, Cheyang	Hsiai, Tzung	Lin, Jimmy H.	Tan, Hongjin	Yee, Henry
Chen, Jia Ming	Hsieh, Albert	Lin, Nancy	Tang, Yupai L.	Yeh, Paul P.
Chen, Joseph	Hsu, Albert	Lin, Sheng-Rong	Teng, Albert R. H.	Yen, Charles C.S.
Chen, Peter W.	Hsu, Alex	Lin, Trye-Lin	Teng, Evelyn	Yeung, Derek
Chen, Philip	Hsu, Hui Pin	Lin, Tung-Po	Teng, Ta-Liang	Yin, Mingsong
Chen, Shiuan	Huang, Alice	Liu, Dankai	Tsai, Mark F.	Yu, Pet
Chen, Wendy H. D.	Huang, George Y.	Liu, Helen	Tsai, Pin Fun	Yu, Sherman
Chen, Y. Kenneth	Huang, John	Liu, Edward	Tsiang, T. H.	Yung, Yuk Ling
Chi, Henry W.S.	Huang, Sheng-He	Liu, Paul I.	Tso, Jin (Sharon)	Zhai, Endi
Chi, Lois Wong	Hui, Angela	Liu, Robert W.	Wang, Charles C.	Zhang, Peter
Chiang, Albert C. L.	Hwang, Li-San	Liu, Wai-Min	Wang, Cun-Yu	Zhu, Konrad S.
Chiang, Martin	Im, Eastwood	Lo, Andrew	Wang, Li-Jean	

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

## 2015-2016 Board Member and Officers

President: Yue Rong (容躍)

Vice President: Lan Saadatnejadi (茹蘭)

Secretary: Dongmei Huang (黃冬梅)

Treasurer: Manwai Szeto (司徒文偉)

Chairman of the Board: Dankai Liu (劉登凱)

### Board Members:

Xiwu Cao (曹細武), Joseph Chen (陳中), Yutao He (何宇滔), Jill Long (葛捷), Hui Su (蘇慧), Liping Yan (顏利平), and Peter Zhang (章華)

### CESASC 54<sup>th</sup> Convention Steering Committee

Convention Co-Chairs: Yue Rong, Dankai Liu

Master of Ceremonies: Sue Ann Pien, James Lin

Welcome: Yue Rong, Dankai Liu, Lan Saadatnejadi, Dongmei Huang, Jason Wen, Liping Yan, Joseph Chen, Yutao He

Tickets: Peter Zhang, Dankai Liu, Dongmei Huang, Jill Long

Registration: Dongmei Huang, Jia Fan, Linda Wen, Jiarui Han, Jingnan Zhou, Meng Wang, Peter Gao, Crystal Chia-Yu Ku, Hao Zhang

Convention Journal: Manwai Szeto, Liping Yan, Yue Rong

Technical Symposium Brochure: Liping Yan, Jian Peng, Yue Rong

Evening Floor Manager/Schedule Control: Jason Wen, Tiezheng Zhao, Mengwen Stephanie Zhang

Stage Management/Coordination: Jason Wen, Xiwu Cao

Certificates and Trophies: Manwai Szeto, Hui Su

Decoration: Wanwan Yang

Photographers: Xinyi Huang, Lihua Qiu, Cynthia Vera

Silent Auction: Shirley Ho, Xiwu Cao, Jia Fan, Linda Wen, Elizabeth Kay Im, Marina Kao

CESASC Board Nomination Committee: Dankai Liu (chair), Liping Yan, Yue Rong, Lan Saadatnejadi



Award Selection Committee: Lan Saadatnejadi (chair), Dongmei Huang, Manwai Szeto, Dankai Liu

CESASC Scholarship Committee: Hui Su (chair), Zhaofeng Huang, Xiwu Cao, Yu Gu, Bin Yang

Student Business Innovation Competition Committee: Wensheng Zhou (co-chair), Hui Su (co-chair), Yue Rong, Wei Kao, Julia L. Bulanda, Feng An, Wen Hua

STEM Committee: Yiuman So (chair), Hui Su, Mason Tam, Xiwu Cao, Dongmei Huang, Shouhua Huang, Jancy Yan, Cathy Yan Jin (guest judge)

Technical Symposium Committee: Jian Peng (co-chair), Liping Yan (co-chair), Mark Gold, Yue Rong

LEAP Committee: Yutao He (chair), Yang Yang

## 2016-2017 Board Members and Officers

President: Lan Saadatnejadi (茹蘭)

Vice President: Dongmei Huang (黃冬梅)

Secretary: Hui Su (蘇慧)

Treasurer: Manwai Szeto (司徒文偉)

Chairman of the Board: to be elected by board in July 2016

Board Members:

Xiwu Cao (曹細武), Jia Fan (范佳), Yutao He (何宇滔), Jill Long (葛捷), Yue Rong (容躍), Wanwan Yang (楊婉婉), Yang Yang (楊陽), and Peter Zhang (章華)

## **CESASC Scholarship Foundation Organization**

### 2015-2016 Board of Directors

Chairman of Board: Shan Lee (李珊)

Directors: Edward Liu (劉漢忠), Yue Rong (容躍), and Hui Su (蘇慧)

### Board Officers

President: Eastwood Im (嚴貴方)

Vice President: Jiin-Jen Lee (李錦珍)

Secretary: Jiin-Jen Lee (李錦珍)

Treasurer: Munson Kwok (郭民生)

# **Chinese-American Engineers and Scientists Association of Southern California**

## **南加州中華科工學會 (CESASC)**

**[www.cesasc.org](http://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* in CAM's 15<sup>th</sup> Annual Historymaker's Awards Ceremony.

### **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 advancements in science and technology. In 2010, CESASC further co-sponsored with UCLA to host an International Symposium on Materials for Enabling Nanodevices (ISMEN). In 2016, CESASC collaborated with UCLA Sustainable LA Grand Challenge to contribute and serve the Los Angeles community.

### **Scholarship, STEM, LEAP, 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 scholarships annually to undergraduate and graduate students. The scholarship recipients have also been invited to participate in and present their research work in Technical Symposiums. In 2012, the CESASC launched a STEM program for local middle and high school students to promote science and engineering education. In 2013, CESASC started a LEAP program working together with college student organization to provide career-related guidance, education, mentorship and opportunities to help young generations for their professional development.

### **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 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專業學會之一。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年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)。

年會是科工會的年度重要活動，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/醫學學院及中科院和中央研究院院士吳健雄博士、吳耀祖博士、錢煦博士及朱經武博士、以及美國前勞工部趙小蘭部長、UC Berkeley 校長田長霖博士、UC Santa Barbara 校長楊祖佑博士、1996 TIME Magazine Man of the Year 何大一博士等。2016年，诺贝尔物理学奖获得者，美国前能源部部长朱棣文博士(Steve Chu)应邀在年会上发表主旨演讲。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活動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，近年來本會更與洛杉磯加大(UCLA)聯合主辦“奈米材料和應用元件國際研討會”，深獲好評。

鼓勵青少年的參與是本會成立至今的主要目標之一，1987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展示或發表演說。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。值得一提的是，1986年獎學金得主Brown Univ. Sophomore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 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。

科工會的活動歷年來獲得多個主流公司企業及基金會的大力贊助，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。

科工學會在 2013 年最新推出了 LEAP (Leadership, Excellence, Aspiration, and Platform) 項目，對大學生和研究生熟悉和進入職場提供幫助。2013 年二月首次在 UCLA 舉辦的職業發展研討會受到熱烈的歡迎，2013 年十一月又在 Caltech 舉辦了第二屆 (LEAP 2.0)；今年分別在兩個校區 (UC Irvine 和 UC San Diego) 舉辦了職業發展研討會，得到極大反響。2012-13 啟動的另一個項目是為中學生舉辦的 STEM (Science, Technology, Engineering, Math) 科技征文比賽，也得到了社區的積極相應；今年又舉辦了第二屆科技征文比賽。今后，科工會將進一步積極參與主流社會的活動，加強和其他社團的合作，更多的為年輕學子們提供諮詢和服務。

## **Commentary: Environmental paradox**

Yue Rong, Ph.D.

Editor-in-Chief, SCCAEPA Online Journal, CESASC President (2015-2016)

First of all, I want to offer my congratulations to the Chinese-American Engineers and Scientists Association of Southern California (CESASC) 54<sup>th</sup> anniversary. The 54<sup>th</sup> Annual Convention theme is “better environment, better life.” On the day after Earth Day and under the theme, I could not help to think about the environmental issues around us.

In last several years, people around the world start building up some momentum to curb global environmental problems such as climate change and alternative energy, and trying to work together for solutions. However, lately this movement seems to become a little quiet. This is not because people are not interested, rather it is because the environmental problem has entered a more complicated social, economic, and political chapter. Now, it may be the time to re-think and re-evaluate our perspective and approach.

Yes. We are the human being living on earth, and responsible for all of pollutions, global climate changes, etc. To cope with the problem, we may have to balance the economic development and environmental protection in order not to cause social and economic conflict and turmoil, which may cause more environmental damage (e.g., the gulf war in 1990's and nuclear power plant safety debate due to its meltdown and damage by earthquake in 21<sup>st</sup> century). Facing the global environmental crisis, people's instinctive reaction is to grab whatever available to deal with the problem first, which may lead people to “see the single tree, not the whole forest.” As they say in America, “haste makes waste.”

Like an old Chinese say, “critical illness rushes for whoever to cure” (病急乱投医). Sometimes, we think we are doing environmentally sound, but overlook the other side of the coin. For example, we encourage people not to use the disposable food utensils in order to save trees and plastics; but, do we think about how many waste water will be generated to wash the reusable utensils instead? When we charge fees for the plastic grocery bags to reduce the waste, do we think about how many “re-usable” shopping bags made of polypropylene are discarded as a waste disposal instead? When we use solar panel to convert the natural energy to electricity, do we think about increase of the waste water generated during the solar panel manufacture? Another example is that we now use ethanol in gasoline in the U.S. to improve air quality, but overlook the side effect to use a lot of corns to produce ethanol, which paints a picture of human and cars fighting for the same food. All of above seems to point to the same reason of increasing human demand in living.

At the United Nations 2009 Copenhagen Climate Change Conference, a Chinese delegate argued that China's biggest contribution to the solution of global environmental program is its population control policy. According to him, China has been implementing family planning policy (to reduce birth rate) for the last 3 decades in counting to reduce approximately a total of 400 million people, which is translated to reduce about 2 billion tons of CO<sub>2</sub>. From that perspective, the environmental pollutions and global problems may all be attributed to human growth. More people mean more food to consume and more energy to use, and more utensils, grocery bags, and solar panels, like we said above. Today, we have more people than ever in the human history. Global population had grown from 3 billion in 1960 to 6.8 billion in 2010. Energy consumption in the U.S. has more than doubled, and the municipal waste in the U.S. has tripled during that 50 years. These increases are no doubt translating into environmental burden and damages. Maybe the human growth is the primary reason for our global environmental problems? If we do not see it this way, our new efforts, technologies, energy, resources, and new ideas may quickly be outweighed and overwhelmed by the quicker growth of human population. However, if we see it this way, the population control will become a social and political conflict among believers, which may cause road blocks to slow down environmental protection and solution.

This is, I call it, an environmental paradox. Human beings may be the most intelligent living things on earth. They will and have right to reproduce. However, one day, we may run out resources and space to hold all of us on earth and then ourselves may turn into the source of evil. Reckless growth and endless consumptions are definitely unsustainable on earth. Therefore, thinking about a long term solution now should be commensurate to our current environmental efforts. To solve the global environmental problems, our solution should go beyond scientific arena and must step on the social stage. After all, the ultimate solution of environmental problems is up to the most intelligent ones on earth.

So, what do you do for the environment today?

# 遥感、导航 地理信息系统

## 中国领先的卫星应用系统服务商

北京航天宏图信息技术有限责任公司是一家专业从事卫星（遥感卫星、导航卫星）技术研究与应用的高新技术企业。航天宏图以遥感、地理信息系统以及导航技术为核心，面向大气海洋、水利环保、减灾应急、国土测绘等行业，提供空间信息应用解决方案，业务范围涉及软件研发、咨询设计、数据服务、系统集成等领域。

航天宏图总部设于中国北京，在中国多个地方成立了分公司与办事处，目前已为国家发改委、水利部、农业部、国土资源部、环境保护部、中国气象局、中国地震局、国家海洋局、国家林业局、国家统计局等 500 多个企事业单位客户提供了空间信息化服务，服务的客户遍布中国 25 个省，100 多个市，服务范围涉及亚洲、欧洲、美洲等多个地区。

**自主研发了PIE  
中国人自己的  
遥感软件！**



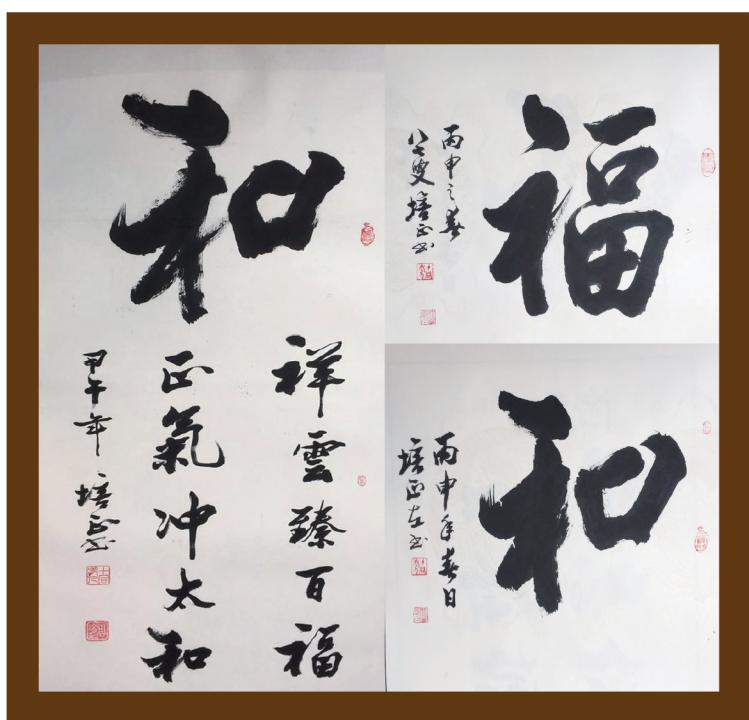
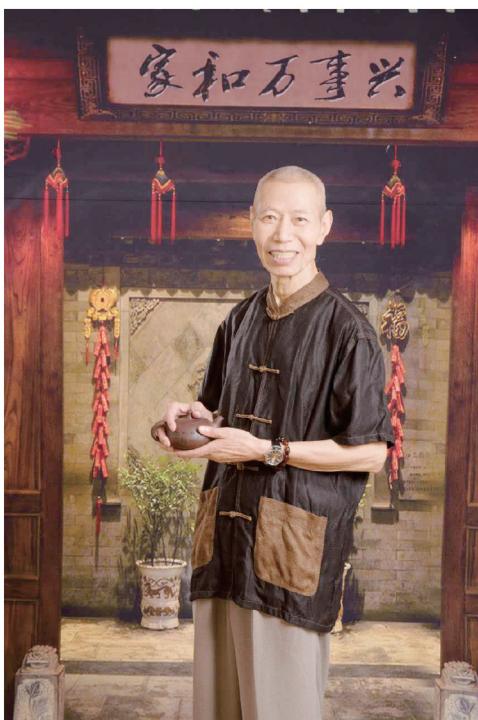
科技服务社会 遥感走进生活



北京市海淀区杏石口路益园文化创意产业基地C区5号楼3层  
电话：0086-10-82556925 传真：0086-10-82556924  
[www.piesat.cn](http://www.piesat.cn)

北京航天宏图信息技术有限责任公司  
Beijing Piesat Information Technology Co.,Ltd.

# 艺术典藏



Mr Zhou Peizheng  
周培正先生

A member of the Chinese Painting and Calligraphy Association, Honorary Dean of Yan Zhenqing Painting and Calligraphy Studio, Consultant for Wu Daozi Center for art creation, Academician of Jiuzhou Fenglin International Painting and Calligraphy Institute. Honorable mention as Chinese Artist in literature, painting and calligraphy, and Top 100 artists in Painting and Calligraphy.

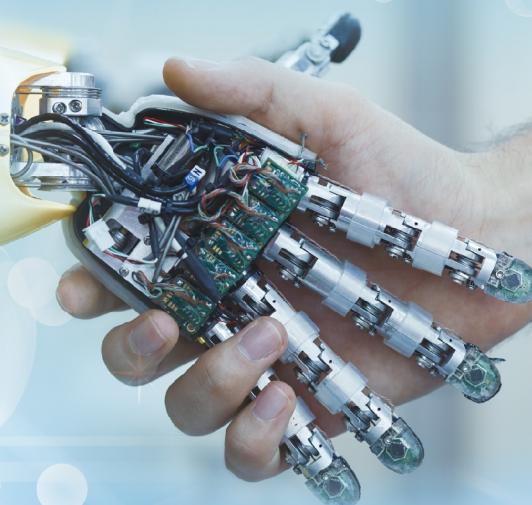
His works has been included in Contemporary Chinese Calligraphy Art, Selected works of Outstanding Artist Award, and Fine work collection of Chinese Meritorious Painters and Calligraphers in honor of 2008 Olympics. His work has been displayed at College Libraries in Europe America, Japan, and Canada, and also become private collection among friends.

中国书画家研究会会员，颜真卿书画院名誉院长、吴道子艺术创作中心顾问、九洲枫林国际书画艺术院院士。先后获“中华文人书画家”、“百家书画圣艺术家”等荣誉称号，入选《中华人物志》。

其作品入编《今日中国书法美术》、《共和国脊梁2008年海内外杰出人物》、《奥运纪念-中国功勋书画家精品大典》等作品集，还被欧、美、日、加等国大学图书馆和友人收藏。



2016  
魅力东方文化



## Hsinchu Science Park

The Innovation powerhouse that realizes  
your dream as an entrepreneur!



<http://www.sipa.gov.tw>



**Hsinchu Science Park Bureau,  
Ministry of Science and Technology**

2 Hsin Ann Road, Hsinchu, Taiwan 300  
Tel: 886-3-5773311 Fax: 886-3-5776222



廣告

# Confucius Institute is Offering Chinese Classes

Read  
Write  
Talk

## Chinese Language Certificate Program 10 Weeks Chinese 101

Taught by bilingual native  
Chinese speakers.

**Time:**

From June 6 to August 15, 2016  
Monday and Wednesday  
2 pm–4 pm  
(No class on July 4, 2016)

**Fee:**

\$180

(Use this code CLFLYER\$50 for a \$50 discount)



## Chinese Language for Teenagers

### CERTIFICATE PROGRAM

Taught by bilingual native  
Chinese speakers.

**Time:**

From June 6 to August 15, 2016  
Monday and Wednesday  
9 am–11 am  
(No class on July 4, 2016)

**Fee:**

\$50



Confucius Institute at CSULB

6300 E. State University Drive, Suite 250, Long Beach, CA 90815  
(562) 985-1062 | [ccpe.csulb.edu/ConfuciusInstitute](http://ccpe.csulb.edu/ConfuciusInstitute)

*connect with us...*



Communicate With Confidence



[twitter.com/MBI\\_Media](http://twitter.com/MBI_Media)



[facebook.com/MBImedia](http://facebook.com/MBImedia)



[youtube.com/user/MBImedia](http://youtube.com/user/MBImedia)



[plus.google.com/+MBIMedia](http://plus.google.com/+MBIMedia)

## CONGRATULATIONS!

To this Year's Award Winners  
of Chinese-American Engineers and Scientists  
Association of Southern California

### YOUR STRATEGIC COMMUNICATIONS CONSULTING COMPANY

- Effective Community Relations
- Integrated Comprehensive Outreach
- Unique Multi-Media Solutions

**WORKING TOGETHER FOR THE BETTERMENT OF OUR COMMUNITIES**

**www.mbitmedia.com**

**800.700.1999**



**ANNA & JOHN J. SIE  
FOUNDATION**

**“To our friends and colleagues at CESASC, we wish you continued success in this year and all the years to come. We are proud to support the Scholarship Awards and wish to congratulate this year’s CESASC Achievement Awards recipients Dr. CY Chang, Mr Bill Chiu, Dr. Steven Chu, Dr. Henry T Yang and Dr. Yang Yang”**



THE ANNA AND JOHN J. SIE FOUNDATION SUPPORTS THE SHARING OF KNOWLEDGE AMONGST PEOPLES AND CULTURES THROUGHOUT THE GLOBAL COMMUNITY, WITH AN EMPHASIS ON MEDIA, BUSINESS, TECHNOLOGY AND EDUCATION. THE FOUNDATION IS A SUPPORTER OF THE “SIÉ CHÉOU-KANG CENTER FOR INTERNATIONAL SECURITY AND DIPLOMACY” AT THE UNIVERSITY OF DENVER, THE STARZ FILM CENTER, CU’S “THE SIE FAMILY DOWN SYNDROME BREAK-THROUGH RESEARCH INITIATIVE”, THE LINDA CRNIC INSTITUTE FOR DOWN SYNDROME, THE DENVER SCHOOL OF SCIENCE AND TECHNOLOGY, THE DENVER ART MUSEUM, THE FESTIVAL ITALIANO, AND NUMEROUS OTHER CIVIC, SOCIAL AND EDUCATIONAL INSTITUTIONS. THE FOUNDATION ALSO SPONSORS A MANAGEMENT IMMERSION PROGRAM FOR THE MEDIA EXECUTIVES FROM CHINA AT UNIVERSITY OF DENVER.



# 駐洛杉磯台北經濟文化辦事處科技組業務簡介

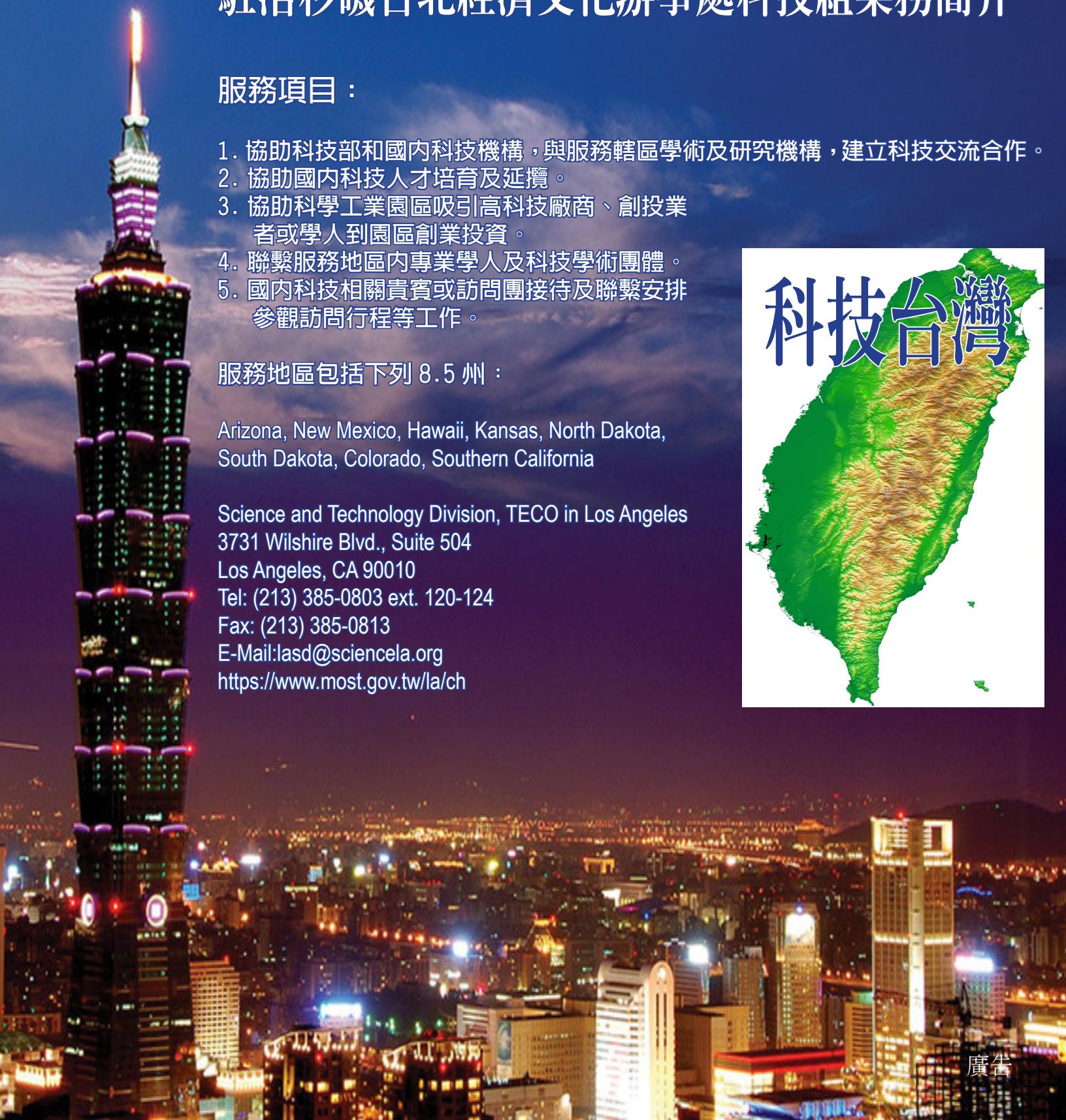
## 服務項目：

1. 協助科技部和國內科技機構，與服務轄區學術及研究機構，建立科技交流合作。
2. 協助國內科技人才培育及延攬。
3. 協助科學工業園區吸引高科技廠商、創投業者或學人到園區創業投資。
4. 聯繫服務地區內專業學人及科技學術團體。
5. 國內科技相關貴賓或訪問團接待及聯繫安排參觀訪問行程等工作。

## 服務地區包括下列 8.5 州：

Arizona, New Mexico, Hawaii, Kansas, North Dakota, South Dakota, Colorado, Southern California

Science and Technology Division, TECO in Los Angeles  
3731 Wilshire Blvd., Suite 504  
Los Angeles, CA 90010  
Tel: (213) 385-0803 ext. 120-124  
Fax: (213) 385-0813  
E-Mail: lasd@sciencela.org  
<https://www.most.gov.tw/la/ch>



Mission: : Bridges China and Overseas, Cultivates Talents, Promotes Innovation and Entrepreneurship.  
使命：融通海内外，传技输才，创新创业

## Technology Innovation Platforms

In areas of:

- Nanotechnology and New Materials
- New Energy and Environment Protection
- Biomedical Engineering and Devices
- Multimedia and Big Data

## Academic Exchanges

- International Conferences
- Workshops and Symposiums
- Research Collaborations
- Technology Transfers

## Talent Recruitment Vehicles

- National 1000 Talent Programs
- Jiangsu Double Creation Talent Programs
- Suzhou Gusu Talent Programs
- SIP Entrepreneurial Leader and Talent Programs

## Technology Incubator

Promotes:

- Imagination
- Innovation
- Implementation
- Industrialization

## Training Programs

- College Student Internships
- Advanced Skill Training
- Workshops and Seminars
- Suzhou Elite Week (Early July every year)

## Summer Camp

- one week onsite training
- Room and board covered
- BP pitch and competition
- Winner Awards etc

# Suzhou China

Venture Paradise - Suzhou, China

创业天堂 - 苏州，中国

Business Incubator - XLAB

创业保姆 - XLAB孵化器

Venture Engine - SIP-UCLA ITA

创业引擎 - 洛加大苏研院

Venture Power - "AI-Newell" Angel Funds

创业助力 - “艾智汇”天使投资



Contact Info:

Tel: +(86)0512-87663611  
Email: info@szucla.org  
Web: www.szucla.org  
wechat: ucla-ita-sz



联系信息：

电话：+86 0512-87663611  
邮箱：info@szucla.org  
网址：www.szucla.org  
微信号：ucla-ita-sz



Congratulations to the Chinese-American Engineers and Scientist Association of Southern California for your dedication to inspire young minds to excel in science and technology.

Congratulations

DR. STEVEN CHU

DR. HENRY T. YANG

DR. YANG YANG

MR. BILL CHIU

DR. C.Y. CHANG

for this recognition.

**LONGO**  
LEXUS

3530 N. Peck Rd., El Monte, CA

Great People, Great Products, Great Services, Every Day.



CAREERS AT RAYTHEON

# TURN KNOWLEDGE INTO INNOVATION

A career at Raytheon means working on the world's most advanced technologies – to build solutions that make the world a safer place. Explore opportunities with us, and expand your potential at the forefront of innovation.



[Raytheon.com/careers](http://Raytheon.com/careers)



[@Raytheon\\_Jobs](https://twitter.com/Raytheon_Jobs)



[Raytheon](https://www.linkedin.com/company/raytheon)



**Raytheon**



# Together

---

We Have the Power to Keep the Future Bright

---

Edison International is proud to sponsor  
the Chinese-American Engineers and  
Scientists Association of Southern California's  
*54<sup>th</sup> Annual Convention and Awards Gala*

We congratulate tonight's honorees  
including our very own, *Bill Chiu*

