

2013 CESASC Technical Symposium

南加州中華科工學會第 51 屆年會

科技研討會

March 30, 2013

10:30am – 4:30pm

科技研討會主題：人類，環境與自然資源

Theme of 2013 Technical Session: Human, Environment, and Natural Resources

Sponsor: Chinese-American Engineers and Scientists Association of Southern California (**CESASC**) 南加州中華科工學會

Co-Organizers: NASA Jet Propulsion Laboratory Asian American Council (**JPL/AAC**) 美國太空總署噴氣動力實驗室亞裔員工協會
Southern California Chinese-American Environmental Protection Association (**SCCAEPA**) 南加州華人環保協會
Chinese-American Computer Association (**CCA**) 中華電腦學會
International Chinese Transportation Professional Association – Southern California Chapter (**ICTPA-SCC**) 國際華人交通運輸學會南加分會
Alumni Association of South-China Medical University – North American (**AASMU-NA**) 南方醫科大學北美校友會
Overseas Chinese Civil and Structural Engineering Association (**OCCSEA**) 海外華人土木與結構工程協會
Chinese-American Oceanic and Atmospheric Association - Southern California Chapter (**COAA-SCC**) 美華海洋大氣學會-南加州分會

Symposium Chair: Yue Rong (容躍), Ph.D., (SCCAEPA)

10:30 am Session 1: CESASC Scholarship Recipient Poster Exhibition (college)

(Session Chair: Dr. Lisa Wang 王雲霞, OCCSEA)

11:00 am Registration

11:30 am – 1:00 pm Luncheon Session and Keynote Speech

Keynote Speech: Mars Exploration Program – Past, Present and Future

Fuk Li, Ph.D. (李復國)

NASA Jet Propulsion Laboratory

1:30 pm – 2:50 pm

Concurrent Sessions 2 - 4

Session 2: Aerospace and Exploration

(Session Chair: Dr. Jonathan Jiang 蒋红涛, JPL/AAC, COAA-SCC)

- (1) Is Saturn's Moon Titan volcanically active? —The evidence from Cassini Orbiter observations (Dr. Robert Nelson, Planetary Science Institute)
- (2) Building a space telescope: NASA's Wide-Field infrared survey explorer (WISE) mission (Dr. Fengchuan Liu 刘凤川, Jet Propulsion Laboratory)
- (3) From surface to space —A taste of science hidden in the secret of haze (Dr. Yingdi Liu 刘英迪, Jet Propulsion Laboratory)

Session 3: Information Technology

(Session Chair: Joseph Chen 陳中, CCA)

- (1) IT emerging technologies and trends (Dr. Philip Chen 陳君儀, California State University, Fullerton)
- (2) Cyber-security concepts and practices (Mr. Brandon Clark Parks, Los Angeles Police Department)
- (3) Cloud computing with Microsoft technology (Dr. Peter Zhang 章華, Zhtech)
- (4) Intellectual Property Law for the entrepreneurs (Thomas Chan, Esq. 陳德華, Fox Rothschild LLP)

Session 4: Humanity and Social Sciences

(Session Chair: Dr. Zuoyue Wang 王作躍, Chinese American Professors & Professionals Net)

- (1) Intellectual Patent Law (Elizabeth Yang, Esq 楊安立, Yang & Wang, P.C)
- (2) Toward Establishing a Successful Technology Business (Jeffrey Lu, CPA 陸恩廣, Lu & Associates)
- (3) Today is Apple vs. Samsung, what holds for tomorrow? (Charlie Wu, Esq 吳志鴻,

Charles C.H. Wu & Associates)

2:50 pm – 3:10 pm	Break
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3:10 pm – 4:30 pm	Concurrent Sessions 5 - 8
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Session 5: Environmental-transportation-geotechnical

(Session Chair: Dr. Guangyu Wang 王光宇, SCCAEP)

- (1) Los Angeles Metro Measure R, Highway program (Lan Saadatnejadi 茹蘭, Los Angeles Metropolitan Transportation Authority)
- (2) Earthquake Faults in Southern California and Potential Seismic Hazards to Your Home (Dr. Endi Zhai 翟恩地, Kleinfelder West, Inc.)
- (3) Current use pesticides-pyrethroids and fipronil in Southern California coastal water environment (Dr. Wenjian Lao 劳文剑, Southern California Coastal Water Research Project (SCCWRP))

Session 6: Bio Sciences/Medical Technology

(Session Chair: Dr. Sheng-He Huang 黄胜和, USC)

- (1) The Omics and personalized medicine (Dr. Xiaowei Fu 付晓薇, University of Southern California)
- (2) A symphony in the shoot apical meristem for shoot development (Dr. Shang Wu 吴楠, University of California, Riverside)
- (3) A high throughput screen of environmental chemicals that promote breast cancer (Dr. Shuan Chen 陳瑄, Department of Cancer Biology at City of Hope)
- (4) Pharmaceuticals: Photochemical fate and engineered water treatment systems (Dr. Ling Wang 王玲, University of California, Irvine)

Session 7: Energy and Alternatives

(Session Chair: Mengzhao Hu 胡蒙兆, ICTPA-SCC)

- (1) SCAQMD perspective on hydraulic fracturing in the South Coast Air Basin (Henry Hogo, Southern Coast Air Quality Management District (SCAQMD))
- (2) Groundwater monitoring for hydraulic fracturing processes (Emily Vavricka, Environmental Engineering & Contracting, Inc.)

- (3) Earthquake design for buildings - Code of regulations in United States and Its comparison to Chinese code (Dr. Shaw Zhang 张晓哲, KPFF Consulting Engineers)

Session 8: CESASC STEM Essay Contest Winner Presentation

(Session Co-Chairs: Dr. DanKai Liu 劉登凱, JPL/AAC, Yiu Man So 蘇耀民. CESASC)

2013 CESASC STEM Essay Contest Winners (High School)

Karina Loo (South Pasadena High School)

Sara Pak (Diamond Bar High School)

Evelyn Yau (Mark Keppel High School)

Samuel Park (Rosemont Middle School)

Vick Liu (Flintridge Preparatory School)

Michael Cornish (The Academy of Aerospace and Engineering Middle School-CREC)

4:30pm – 5:30pm Mingle with CESASC Scientists and Student Poster Exhibition

2013 CESASC Scholarship Winners (College)

Jianshi Tang (唐建石) UCLA

Jinqiang Chen (陈金强) CalTech

Rui Luo (罗睿) UCLA

Fei Yu (于非) USC

Jun Wang (王军) UCLA

Aolin Wang (王奥琳) UCLA

To see speakers abstract and bio, please go to www.cesasc.org