

EVENTS

2009 AAEOY Awards

Asian American Engineers of the Year
Chinese Institute of Engineers
National Engineers Week

By Roger S. Dong

The 2009 Asian American Engineers of the Year (AAEOY) banquet honoring over a dozen of the most distinguished Asian American engineers in the United States was held at the Double Tree Hotel in Silicon Valley on February 21, 2009. The evening was auspicious and the engineers who were honored have made truly exceptional contributions to academia, public service and corporate entities. This annual event culminated the celebration of National Engineers Week and was managed by the San Francisco Bay Area Chapter of the Chinese Institute of Engineers (CIE-USA).

San Francisco Bay Area Chapter President Dr. An-yu Kuo and CIE-USA National Chairman Bernard Shung hosted the evening event and produced an extraordinary tribute to all the engineers for the audience of around 500 guests. The Master of Ceremony for the banquet was Dr. David Fong, and host for the reception for VIPs was Dr. Kelley Liu.

The event was sponsored by major corporations including IBM, Boeing, Lockheed Martin Corporation, Northrop Grumman, Fluor, Genentech, Freescale, Wells Fargo Bank, and Federal government sponsors were the US Navy and National Sandia Laboratory.

The evening was initiated with a US Navy honor guard accompanied by a US Navy Reserve band, which was a prelude that helped focus on many of the honorees who have also made distinguished contributions to our nation's security. The patriotic tapestry was very unusual for an event sponsored by an Asian American organization and is a model for other Asian American organizations to emulate when appropriate.

Letters of Congratulation were received from President Barack H. Obama, Secretary of Energy Steven Chu (who was honored as an AAEOY awardee in 2004), Senator Dianne Feinstein, Governor Arnold Schwarzenegger, Congressman Michael M. Honda,



San Francisco Mayor Gavin Newsom, and San Jose Mayor Chuck Reed.

Keynote speaker was two stars Vice Admiral Harry B. Harris Jr., Deputy Chief of Naval Operations for Communications Networks an Asian American officer born in Yokosuka, Japan with a exceptional military career with 4,400 hours including combat hours, flying maritime reconnaissance aircraft patrolling for enemy submarines.

Honorees included Asian American engineers with Chinese, Japanese, Vietnamese, Indian, and Filipino heritage. Two extraordinary ladies, Nora Lim and Dr. Jacqueline H. Chen were among the honorees. In the early years of the AAEOY banquets, the contributions of many of the awardees were quite sketchy, especially those who worked for the Federal government and defense contractors. Now that the AAEOY has established its credibility and is nationally recognized, details of some of the truly extraordinary contributions made by the honorees are now disclosed. It is stunning to read about the tremendous achievements made by many of our distinguished Asian American engineers. It is very unfortunate that their accomplishments are not generally known to the general public.

Chinese American Forum will spread the word via our CAF Magazine. Additionally, our strategic partner, Chinese American Heroes will help get the word out on our Chinese American engineers by publishing their biographies on their national website, www.chineseamericanheroes.org. Chinese American Heroes and the Chinese American Forum are collegial partners pursuing similar missions.

The following is a very brief synopsis of the careers and accomplishments of the engineers honored at this awards banquet. The careers and accomplishments noted are a fragment of the total contributions made by the individuals.

Nora Lim, Manager, Supportability Engineering, Electronic Systems Sector, Northrop Grumman Corporation who has been a very successful Independent site-coordinator and consultant/manager of major military software development programs. She is a 25 year veteran in supporting the defense industry and was recently elected President of the Society of Women Engineers.

Mr. Ray Harishankar, IBM Fellow & CTO, Global Business Services, IBM Corporation, is a 27 year veteran and senior business strategist with IBM who has had a very broad impact on IBM's business strategies across the globe. His technical skills resulted in the successful design, delivery and support of complex IT solutions that integrated many leading technology processes. In May 2006 Mr. Harishankar was appointed an IBM Fellow, the highest honor bestowed by IBM for technical innovation and leadership.

Dr. Jae H. Kim, Senior Technical Fellow, the Boeing Corporation who is a Principal Investigator in Network Systems Technology working with DARPA, Army CeCom, AFRL, ONR and NASA. His expertise incorporates wireless communications, mobile communications, satellite communications, and overall communications network management. Dr. Kim holds 4 US patents and has author/co-author more than 80 publications. He has received 10 NASA awards for technical innovation and over 25 Boeing awards for technical performance achievements.

Dr. Chung C. Hsu, Distinguished Engineer, Genentech, Inc who was introduced as one person who has had a significant contribution on every product developed at Genentech. Dr. Hsu has led an elite team of scientists who have developed processes for making Genentech's protein and anti-body products into final drug dosage forms and resolving the physical, biochemical, and mechanical issues in manufacturing drug products.

Dr. Kyung Kyu Kim, Technical Fellow, Lockheed Martin Corporation, is a photonics expert and has successfully converted theory into application for over 24 years. He designed advanced radio frequency algorithms for navigation systems for the US Air Force and US Navy aircraft systems. For his very significant contributions he was inducted as a Lockheed Martin Fellow in 2006.

Mr. Jayant D Patel, Technical Fellow, the Boeing Corporation is a nationally recognized state of the art expert in the field of composites, plastics and elasto-

meric technologies. Mr. Patel holds 31 patents that have impacted commercial and military aircraft systems. His breakthrough materials have saved millions of dollars and thousands of pounds of weight reductions.

Dr. Satish Reddy, Executive Director, Process/Specialty Engineering, Fluor Corporation, who has substantial expertise in post combustion de-carbonization process related to carbon reduction and carbon capture which is of very significant to protecting our environment and impacting Global Warming. He holds three patents in carbon capture and purification and another three patents in syngas processing. Five other patents are pending.

Dr. Chen He, Principal Software Engineer, Freescale Semiconductor, is an exceptionally talented lead software engineer involved research and development of embedded non-volatile memory (eNVM) related to the automotive industry. He has authored 21 research publications and filed two patents improving eNVM performance and testing capabilities. Dr. Chen is involved in almost every major eNVM project at Freescale.

Mr. David P. Boyarski, Director, Enterprise Excellence, the Lockheed Martin Corporation who has served in many corporate projects promoting excellence and efficiency in operations and maintenance support and he was the Principal Systems Engineer for the NASA LANDSAT earth resources remote sensing satellite system. Boyarski is a retired USAF Lt Colonel who piloted the C-141 transporter, and worked in Cheyenne Mountain as a Space-Surveillance Officer.

Dr. Thomas T. Bui, Senior Technical Fellow, the Boeing Company, is an expert in systems information architecture and net-centric operations and cyber security within Boeing and among its Department of



Keynote speaker was Vice Admiral Harry B. Harris Jr., Deputy Chief of Naval Operations for Communications Networks.

Defense customers. He has leveraged his IT skills to advance communications capabilities for first responders to disasters with the development of Common Alerting Protocol (CAP).

Dr. Francis Chan, Head, Electromagnetics Systems Department, Naval Undersea Warfare Center, United States Navy, has been a US Navy Officer and USN civilian scientist for 28 years specializing in submarine warfare technology. He has served on USS Tinos (SSN-606) and is a Captain in the US Navy Reserves. Dr. Chen specializes in advance sonar systems development.

Dr. C. Henry Chen, Technical Fellow and IPT Manager, Northrop Grumman Space Systems, who 25 years ago developed then state of the art phased array antenna used for the 20/30 GHz NASA satellite. Today Dr. Chen continues his expert research in high frequency phased arrays for military satellite communications. He has received numerous awards for his work including the TRW Technical Fellow Award in 2000, and the Northrop Grumman Corporate Chairman's Award for Excellence in 2006.

Dr. Jacquelin H. Chen, Distinguished Member of the Technical Staff, Sandia National Laboratories, who is a pioneer in petascale direct numerical simulations of turbulent combustion processes. These mathematical simulations are essential in the design of clean and fuel efficient combustion engines using 21st Century alternative fuels for transportation. She has received special Dept of Energy awards for her achievements in 2005, 2006 and 2007.

The recipient of the Distinguished Life Time Achievement Award was Dr. Jeong Kim, President, Alcatel-Lucent Bell Laboratories. Dr. Kim's many extraordinary achievements have impacted government and commercial sectors. He began his career in the US Navy as a computer and data communications systems designer and then served as a nuclear submarine officer for seven years. As a risk taking entrepreneur he started up Yurie Systems and developed data communications that supported voice, data and video badly needed by the military. His reputation as a risk taking and successful high tech entrepreneur landed him the top position at Bell Labs. Dr. Kim has been inducted into the National Academy of Engineering and has been recognized and awarded for his innovations skills and success by any institutions including the University of Maryland, Johns Hopkins University, Ernst Young Entrepreneur of the Year award, and the KPMG High Technology Council Entrepre-



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neur of the Year Award.

The top Distinguished Science and Technology Award was received by Dr. Roger Y. Tsien, Professor, Departments of Pharmacology & Chemistry and Biochemistry, University of California, San Diego who was awarded the 2008 Nobel Laureate in Chemistry. Dr. Tsien's scientific excellence has been recognized for his major research contributions in the fields of biomolecular engineering and signal transduction. He is also recognized as a leader in protein engineering.

Dr. Roger Tsien is the foremost inventor of both small and large molecules that have been rationally designed or systematically evolved to solve real problems in the intense environment of the inside of living cells. His Nobel Prize was awarded to recognize his discovery of the Green Fluorescent Protein (GFP) which is a widely used and increasingly valuable tool that allows scientists to peer inside living cells or whole animals, watch molecules interact in real-time and ask questions once thought impossible.

The evening was concluded by Dr. Larry Wang, incoming 2009 CIE/USA SF Bay Area President, who announced that next year's CIE/USA AAEOY banquet will be hosted in New Brunswick, NJ. Dr. Wong invited all attendees to make plans to attend the big event in 2010.

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Roger S. Dong is Chairman and Executive Director (Acting) of The Great Wall of Chinese American Heroes and Heroines.