

Chenming Hu Honored with AAEOY Distinguished Lifetime Achievement

Chih-Tang Sah's Introduction

“Dr. Chenming Hu is the TSMC Distinguished Chair Professor of Microelectronics at the University of California, in Berkeley. TSMC stand for Taiwan Semiconductor Manufacturing Company

In just one year, over one billion transistors were produced for every woman, child, and man on this planet earth. Today, we can hardly live without electronics, for food, medicine, entertainment, computer, cell phone, internet, government, and to teach and learn, and even to spread democracy.

Countless engineers and scientists have contributed to this microelectronics revolution and success. Two years ago (2009), the world's largest engineering association, the Institute of Electrical and Electronics Engineering or IEEE, recognized Professor Hu's personal contributions and his leadership with a citation that reads “Microelectronics Visionary. Achievements have been critical to producing smaller, more reliable and higher performance microchips.”

Dr. Hu has also been recognized many other times for developing and inventing solutions to some of the most difficult and important problems in microelectronic engineering. For example, his transistor model, BSIM, is the world standard for computer simulation of integrated-circuits. Microchips worth hundreds of billions of dollars have been designed using his BSIM model, which he and his graduate students and staff have tirelessly developed and he has provided the BSIM model FREE to the industry.

Looking ahead, a new transistor structure called the FinFET or fish Fin shaped Field-Effect

Transistor, is going to lead our 40-year-old microchip technology into the next height. He invented the FinFET to further miniaturize the already tiny micrometer size transistor.

Professor Hu is a phenomenal teacher and communicator. He has received his University's highest teaching honor, the Berkeley Distinguished Teaching Award. He also received the US Semiconductor Industry Association's Aristotle Award for “long history of producing not only outstanding research but also students whose accomplishments are testament to his talent as a teacher.”

In addition to academic research, Dr. Hu has founded a computer aided design companies. And he had also served as the Chief Technology Officer of TSMC, which is the world's largest company for mass-producing customer designed micro-circuits. He has authored 4 books, 800 research papers and 100 US patents.

Ladies and Gentlemen, I now present to you Professor Chenming Hu.”

###

Prof. Chih-Tang Sah is the Pittman Eminent Scholar and a Graduate Research Professor at the University of Florida, USA from 1988. He was a Professor of Physics and Professor of Electrical and Computer Engineering, emeritus, at the University of Illinois at Urbana-Champaign where he taught for 26 years. In 2010, he accepted a professorship at Xiamen University, China. Professor Sah attended the event with his honored guest Professor Bin B. Jie from at Xiamen University, China.

Chenming Hu's Acceptance Speech

“I thank the Executive Committee of Asian American Engineer of the Year for this wonderful Distinguished Lifetime Achievement

Award. I congratulate Dr. Negishi and the other awardees for your accomplishments and awards.



Dr. Chenming Calvin Hu

You saw a photo of my family on the big screen a minute ago. I thank them for their support and love. My wife Margaret is here. Margaret, please stand up to be recognized. In the other two slides you saw what I do for fun—diving, driving, trekking, and painting. Painting is a pastime that I share with my sons, Raymond and Jason. They would say that they are the better painters in the family. OK. But they don't have this (trophy).

While we are celebrating the National Engineers Week, let's also acknowledge that the very existence of the Engineers Week is a reminder that engineering as a profession still needs promotion, is still undervalued in the US for all its contributions to the economy and the modern way of life. That is bad news for engineers and bad news for the competitiveness of America.

There is an additional piece of bad news for Asian American engineers. It is the glass ceiling. Probably not for you in this room and not for me. But, Asian Americans as a group, have only about half the chance of attaining management positions compared to the national average. Half the chance, according to Labor Dept. statistics.

The whole day today, I was in my hotel room, on the telephone, calling into the board meeting of an Asian American organization called 80-20. 80-20 understands that Asian Americans value self-improvement, self-sufficiency, and self-criticism. But that cannot be

the total solution. We need to learn from the success of other minorities. Black Americans and Hispanic Americans have achieved parity or near parity with the national average on the glass ceiling front. They have done so, rightfully, with the help of Government's enforcement of equal opportunity laws for them.

80-20 is using the internet technology to organize Asian American voters to pressure both political parties to enforce the same laws for our children. If we did not do that and let the disparity correct itself, at the present rate of change, it will take 75 years, or several generations, for the disparity to disappear. Please search for 80-20initiative.net and support it. 80-20 especially needs internet professionals, working or retired, as volunteers to make the internet strategy work.

Let there be no mistake, I am enormously grateful for my life as an Asian American engineer. I would not trade it for any other. Well, maybe I will trade it with James Bond. But, not tonight. Not tonight.

Thank you."