

From MemS to Nems: Discovery in the bottom

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Professor

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Time: 3:00 pm

Venue: LT-4, 4/F,

Yeung Kin Man Academic Building



Abstract

As a start of microsystem discovery from Richard Feynman's lecture "There is plenty room in the bottom" at 1959, MEMS devices already are blooming in consumer electronics and sensor network in the past decades, reached every corner of our daily life. In this talk, Prof. Haixia (Alice) Zhang will tell us her adventure from MEMS to NEMS and her discovery in self-powered smart system, the talk will cover three parts,

First, make soft functional materials to meet the requirements of MEMS and NEMS;

Second, high performance multi-functional active sensors and actuators in micro-nano scale;

Third, demonstrations of skin-on-chip, smart watch, health monitor patch, etc.

Finally, discuss the perspective of MEMS and NEMS.

Biography

Dr. Haixia Zhang, Professor, School of Integrated Circuit, Peking University. Dr. Zhang is a pioneer and world leader for her outstanding research achievements and creativity in micro/nanotechnology. She authored and co-authored 300+ peer reviewed scientific articles on the prestigious journals. Dr. Zhang is the founder iCAN and iCANX Talks.

Dr. Zhang won numbers of Awards/Honors, including won National Invention Award of Science & Technology at 2006, Education Award at 2013 and 2017 in Beijing City, Geneva Invention Gold Medal at 2014. She was honored as the Excellence Teachers in Beijing City at 2017, Top10 supervisors in Peking University at 2017. She won the Medal of May Day in 2018. She won the 2nd prize of National Education Award 2018 and elected as the member of Innovation Education Committee in Chinese Ministry of Education at 2018. She was listed in Forbes Top 50 Female Scientists at China in 2020, Nano Energy Award 2021. 2022 Elsevier Most Cited Chinese Researchers, and 2023-2025 IEEE Distinguish Lecturer.