大阪府立大学
OSAKA PREFECTURE UNIVERSITY

学術講演会のお知らせ

Xu Laboratory
Nanofluidics

２０１７年１２月１１日（月）
１５：００～１６：３０

大阪府立大学　中百舌鳥キャンパス
B5棟１B-34教室

お申込不要

北京大学　張海霞 教授

MEMSとナノエネルギーデバイス研究の著名な研究者である北京大学の
張海霞先生をお招きし、最新の研究成果についてご紹介いただきます。

Self-Powered Smart Sensing Systems

自己電源式スマート・センシング・システム

In this talk, Prof. Zhang will report her latest research work in TENGs with hybrid mechanism. Frist, a r-shape hybrid piezoelectric and triboelectric NG was designed and integrated into a PC keyboard to harvest energy in the typing process. Additionally, this device was utilized in piano for self-recorder of composing. Second, another hybrid magnetic and triboelectric nanogenerators which can be used as self-powered visualized omnidirectional tilt sensing system will be introduced. Third, an ultrathin flexible piezoelectric and triboelectric harvester for implantable applications will be discussed. The hybrid mechanism of the triboelectrical generators provides high performance and stability, which are important for powering implantable devices, touch panels, cell phone, artificial skins, and sensor network.

Haixia(Alice) Zhang, received her Ph.D. degree from the Huazhong University of Science and Technology in 1998. Then, she spend 2 years in Tsinghua University for her Post-Doc training, and joined the faculty of the Institute of Microelectronics in 2001. Her research fields include MEMS design and fabrication, energy harvesting and applications. She is senior editors of IEEE TNANO, IEEE-JMEMS, Microsystems &. Nanoengineering, IET MNL, etc. She co-authored 250+ peer-reviewed publications, and co-invented 32 patents (including 5 US patents). She was the founder of IEEE NEMS in 2006 and served as general chair in 2013 in Suzhou, hosted Transducers2011 in Beijing, and initiated the MINE conferences in 2017. She is chairing of Chinese International NEMS Society and IEEE NTC Beijing Chapter. She won National Invention Award of Science & Technology in 2006, Teaching Award in 2013, Geneva Invention Gold Medal in 2014. More than academy, she founded the world well-known innovation event--iCAN contest in 2007.

主　　催： 大学院工学研究科　物質・化学系専攻　化学工学分野　ナノ化学システム工学グループ
問い合わせ：（世話人）ナノ化学システム工学グループ　准教授　許　岩（シュウ　イェン）
072-254-7813（内線3579）　xu<at>chemeng.osakafu-u.ac.jp