

Special Seminar “ScAlN MEMS for Sensing and Frequency Control”

Organizer: Micro/Nano Machining Research and Education Center (MNC)
S. Tanaka Laboratory, Tohoku University

Date/Time: 18 May 2023, 15:00-16:00

Room: MNC 3F Seminar Room

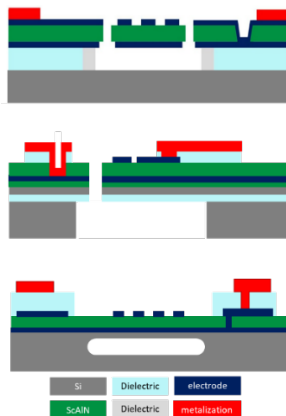
Lecturer: Dr. Zhu Yao, Head of Department, MEMS,



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Zhu Yao is the Head of MEMS department in IME, A*STAR Singapore. Her current research interests include MEMS devices for sensing, actuating and communication applications. Zhu Yao received her Ph.D. degree from Nanyang Technological University in 2015. She is actively involved in IEEE societies such as associate editor for IEEE MEMS Journal, committee member of IEEE Solid State Circuit Society Singapore Chapter & IEEE Nanotechnology Technical Council, technical sub-committee member of IEEE IEDM 2023 and IEEE MEMS 2023. She is the recipient of SEMI MEMS & Sensors Industry Group Emerging Leaders Awards 2022.

Abstract: Scandium Aluminium Nitride (ScAlN) is a promising piezoelectric material with outstanding features such as CMOS BEOL compatible, low loss at high frequency, as well as customizable coupling coefficient with varying scandium concentrations. In this talk, I will present the ScAlN thin film and MEMS platforms developed at IME. Various devices and applications will be show cased. Furthermore, I will share about the Lab-in-Fab which is a joint initiative by IME, STMicroelectronics and Ulvac aiming to offer a direct path from piezoelectric MEMS concepts to volume production.



World's first Lab-in-Fab
for Piezoelectric MEMS

ST Techno Park in Ang Mo Kio
(Singapore)

