

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Faculty of Engineering

Website: <https://www.eng.nus.edu.sg/ece/>

Area: Microelectronic Technologies & Devices

Host: Dr. Liu Qiyao

TOPIC	:	Introduction on THz Generation Technology and PCA-Based THz Emitter
SPEAKER	:	Ms. Cui Mingfang Graduate Student, ECE Dept, NUS
DATE	:	Friday, 23 April 2021
TIME	:	3.00PM to 4.00PM
WEBINAR	:	Join Zoom Meeting https://nus-sg.zoom.us/j/88467242519?pwd=MkNieWJ5VDVBYkZTTVE1cUZgc3lRdz09 Meeting ID: 884 6724 2519 Passcode: 598555

ABSTRACT

Terahertz (THz) radiation with frequency ranging from 0.1 THz to 10 THz falls in between infrared and microwave radiation in the electromagnetic spectrum. It has many special characteristics such as rich molecular fingerprints, ionization-free, high temporal resolution, and high penetration in non-metallic materials etc. These characteristics give rise to its great potential in a wide range of applications such as safety surveillance, quality control and THz communication. However, there is little technological development in THz wave applications yet. This is primarily due to the lack of efficient generation and detection of THz waves. In this seminar, a summary on main THz generation techniques is introduced and the fabrication and testing of a mesa-structured InGaAs/InAlAs photoconductive antenna (PCA) is also discussed here.

BIOGRAPHY

Ms. Cui Mingfang is currently pursuing M.Eng in Department of Electrical & Computer Engineering, National University of Singapore (NUS). Her research interests cover THz emission device fabrication and THz spectroscopy. She received her Bachelor's degree in Electrical and Computer Engineering from NUS.

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