

**Department of Electrical Engineering
Presents a Faculty Candidate Seminar on**

Meta-Lens for Imaging and Sensing

by

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Abstract

Meta-lens is a new type of optical device that has risen in recent years. Meta-lenses compose of artificial nanostructures can manipulate the electromagnetic phase and amplitude. Meta-devices show excellent performance and novel applications to meet the optical demands. The meta-devices will come into our real-life soon because of advantages of novel properties, customizable, small size, lightweight, high efficiency, better performance, broadband operation, lower energy consumption, and Semiconductor process compatibility for mass production. Dr Chen will share the applications of meta-devices for imaging and sensing in this seminar. It is believed that this is an important milestone of the research on optical meta-devices. It opens up an avenue for future applications of optical devices in micro-robotic vision, unmanned-vehicle sensing, virtual and augmented reality, drones, and miniature personal security systems.

Biography



Dr Mu Ku Chen received his Ph.D from the Department of Physics at the National Taiwan University in 2019. He was a Research Assistant Professor in the Department of Electronic and Information Engineering at The Hong Kong Polytechnic University. At present, he is a Research Assistant Professor of the Department of Electrical Engineering at City University of Hong Kong.

Dr Chen's research mainly focuses in photonic information, nanophotonics, micro & nano-electronics fabrication, and artificial nano-antenna array based meta-devices for the photonic applications. In these fields, he has published over 20 peer-reviewed papers, and filed 7 patents.

Date : 13 July 2022 (Wednesday)
Time : 9:00am – 10:00am
Venue : G4302, Yeung Kin Man Academic Building,
City University of Hong Kong
Language : English

**** ALL ARE WELCOME ****

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