

An Entrepreneurial Journey of Flexible Nanophotonic Metamaterials: Technological Innovation and Industrialization

Dr. Tian Feng, CEO of Phomera Metamaterials Inc.

Data: 23 May 2018, Wednesday

Time: 15:00 -16:00 p.m

Venue: ST 602 (4D Theatre), POLYU



Abstract:

Vibrant colors are found everywhere in nature, from a stone dog out of Australian mines, to a chameleon living in the Brazilian rainforests. Similarly, artificial flexible nanophotonic metamaterials has allowed us to tune color by stretching and pressing, or to adjust temperature and humidity. How have Dr. Tian Feng and Phomera Metamaterials been able to industrialize their flexible nanophotonic metamaterial in China? How can these amazing coloration phenomena be commercialized on an industrial scale? Dr. Tian Feng will tell you more about his entrepreneurial journey of “coloration without color”.

Biography:

Dr. Tian Feng, founder and CEO of Phomera Metamaterials Inc., started his work in the flexible metamaterial in 2015 in Guangdong Zhuhai, in which his team is changing the way people using toxic coloration by enabling healthy and robust structural metamaterial through the combination of nanofabrication and nanoengineering. Phomera's proprietary FlexibleChameleon™ shows customized color transformation at different angles and applied forces on account of internal elasticity and periodicity of materials. These smart metamaterials also respond to environmental change upon contact with water or being heated, exhibiting diversified color variation. Phomera is a world leading start-up company, focusing on fashion and beauty industries, decoration for industrial products and buildings, as well as optical recognition and protection.

Prior to his entrepreneurship in China, he worked as a Michlin Research Fellow at Harvard SEAS. He got his Ph.D. in Chemistry from the University of Cambridge as the Duke of Cambridge Scholar in St Edmund's College and his M.Sc from Fudan University. He also serves as a visiting professor at DPU, post-graduates' supervisors at DUT, Xiamen University and NPU. He has published 14 articles in Journals including Nature Communications.

ALL ARE WELCOME!