SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING
Website: https://cde.nus.edu.sg/ece

Area: Metamaterials

Host: Associate Professor Qiu Cheng-Wei

TOPIC	:	**3D Printing and Metamaterials in Optics, Robotics, and Mechanics**
SPEAKER	:	**Professor Muamer Kadic** **Université de Bourgogne Franche-Comté**
DATE	:	**Wednesday, May 31, 2023**
TIME	:	**10:00AM to 11:00AM**
VENUE	:	**Block E3, E3-06-08** **College of Design and Engineering, National University of Singapore**

ABSTRACT

In this presentation, I will review our work on 3D printed objects at the microscale which have been designed as functional devices. Particularly, we will see gray tone lithography as a technologically practical route to effectively multi-material metamaterials. I will emphasize the potential via 3D printing and how one can achieve various effective properties that can go way beyond the naturally available continua.

Science 358 (6366), 1072-1074 (2017)
Nature Reviews Physics 1 (3), 198-210 (2019)
Optica 7 (6), 640-646 (2020)
Advanced Materials 34 (14), 2110115 (2022)
Communications Materials 2 (1), 93 (2021)

BIOGRAPHY

Muamer Kadic (FEMTO-ST, UFC) is a university associate professor. He has published over 110 research papers in international peer reviewed journals and 4 book chapters, with the unifying theme being the conception of functional metamaterials for mechanics, acoustics, thermal, magneto-transport, diffusion and electromagnetic waves. His research on 3D printed metamaterials in optics and mechanics has been featured in a number of magazines (New Scientist, Physics Today, Physics World...). He has delivered over forty keynotes, invited and contributed talks in international conferences.

https://cde.nus.edu.sg/ece/highlights/events/