



이름: 최창순

직위: 조교수

소속: 동국대학교 융합에너지신소재공학과

기타소속:

## 강연제목: Wearable Energy System and Artificial Muscles

### Abstract

Among possible structures, coil structures of yarns or fibers are interesting and advantageous for wearable applications as they can provide mechanical stretchability in tensile direction (up to 1000%) and high specific length or area packing density. Therefore, the presentation will introduce various energy applications (energy storage and harvesting) and the working principle for coil-based energy devices. In addition, a brief introduction of coil structure-based artificial muscles that can provide large strokes and high work capacity will be provided for future research.

### Brief Biosketch

Changsoon Choi is currently an Assistant Professor in the Department of Energy and Materials Engineering at Dongguk University, Seoul, Korea. He received his Ph.D. from Hanyang University, Seoul, Korea in 2017. He carried out his research career as a senior researcher in the Division of Energy Technology at DGIST from 2017 to 2020. His research interests focus on electrochemical energy generation and storage for wearable applications.