

## סמינר - SEMINAR

הנדך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ב' 9.12.2019  
(י"א בכסלו תש"פ), בניין דן קאהן, אודיטוריום 1, 14:30.

**מרצה:**

**Assist. Prof. Matthew Suss**

Faculty of Mechanical Engineering  
Grand Technion Energy Program  
Technion - Israel Institute of Technology

**על הנושא:**

### **Advances in electrochemical systems which combine energy storage and conversion with water desalination**

The seminar will be given in English

**להלן תקציר ההרצאה:**

Electrochemical systems are explored towards applications in energy storage, energy conversion and water desalination, with rapidly expanding capabilities and material sets. Here I will discuss three measurements which highlight novel functionalities developed by my group at Technion, each one taken from one of our 2019 publications. These include: 1) demonstration of tuneable ion-size based selective water desalination with capacitive nanoporous carbon electrodes, 2) a grid-decoupled electrochemical system which produces both electricity and desalted water simultaneously, 3) a novel flowable electrode which leverages large-scale particle motion to enhance its electric conductivity.

בברכה,

ד"ר מתי סאס

מרכז הסמינרים