



סמינר - SEMINAR

הנדך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ד' 9.12.15
כז' בכסלו, תשע"ו, בבניין דן-קאהן, קומה 0, אודיטוריום 1, 10:30.

ירצה:

David Elata

Associate Professor
Faculty of Mechanical Engineering
Technion

על הנושא:

Insightful analysis of the static and dynamic responses of micro-scale electrostatic actuators

להלן תקציר ההרצאה:

Electrostatic actuators are prevalent in micro systems because they successfully combine deformation and inertia of elastic structures, with the flexibility of electric circuits that may be used for driving and sensing. The static and dynamic responses of electrostatic micro-actuators are governed by simple well-known physical laws. However, at the micro-scale different effects become dominant, and therefore the response of micro actuators is different from that of macro-scale devices. The simple construction of micro-scale electrostatic actuators enables innovative development of devices with improved functionality, which emanates from insightful analysis of their response. In this talk two examples will be presented: the first is a proof-of-concept demonstrator of a new type of electromechanical rechargeable battery, which requires no chemicals and no rotating parts. The second example is a micro-device implementation of a 250 year-old self-excited dynamic system, known as the Franklin oscillator.

בברכה,

פרופ' אורי איתן
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