Technion-Israel Institute of Technology Faculty of Mechanical Engineering





הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום הי 11.07.2019 (חי בתמוז, תשעייט), בניין דן קאהן, אודיטוריום 1, 13:45.

אור דוד <u>מרצה</u>:

מנחה : פרופ*י* משה שהם

<u>על הנושא:</u>

Minimally Invasive, Motion Preserving Artificial Spinal Intervertebral Disc

The seminar will be given in Hebrew

תקציר ההרצאה:

Traditionally, spinal fusion was used as a surgical treatment of several medical conditions, such as disc degeneration, scoliosis, spondylolisthesis etc.

Due to the loss of vertebral motion caused by the fusion some artificial disc replacements were developed. Although those devices allowed motion in the treated segments, they suffered from mechanical issues and didn't preserve the natural motion correctly.

This seminar will describe the initial development of a novel, compliant artificial disc, that is optimized to preserve both the stiffness and the kinematic characteristics of the natural disc, described by the screw motion of the vertebral level.

The device is designed for a minimally invasive insertion and transplantation, in order to reduce surgery - related complications.

בברכה,

מרכז הסמינרים מאני