

סמינר - SEMINAR

הנך מוזמנת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ה' 6.04.2017 (י' בניסן, תשע"ז), בבניין דן קאהן, אודיטוריום 1, 13:30.

ירצה:

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על הנושא:

Multiscale modeling and characterization of the biomechanical properties of the bone-implant interface

The seminar will be given in English

להלן תקציר ההרצאה:

Implants are often employed in orthopaedic and dental surgeries. However, risks of failure, which are difficult to anticipate, are still experienced and may have dramatic consequences. Failures are due to degraded bone remodeling at the bone-implant interface, a multiscale phenomenon of an interdisciplinary nature which remains poorly understood. The objective of this seminar is to provide a better understanding of the multiscale and multitime mechanisms at work at the bone-implant interface.

To do so, the evolution of the biomechanical properties of bone tissue around an implant will be studied during the remodeling process. A methodology involving combined in vivo, in vitro and in silico approaches is proposed. Different aspects related to the biomechanical behaviour of the bone-implant interface in the static (contact and/or fracture problems) and in the dynamic (acoustics) regimes will be tackled.

Eventually, two medical devices aiming at assessing the stability of dental and orthopaedic implants will be described.

המארח: פרופ' דניאל ריטל

בברכה,

פרופ' אילן שמואל אולובסקי
מרכז הסמינרים