סמינריון

הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ה' 4.08.16 (כט' בתמוז, תשע"ו), בבניין דן-קאהן, קומה 0, אודיטוריום 1, 14:30.

יוצא: אולג קורצ'בניק

מנחה: פרופ' יצחק עציון
מנחה שותף: ד"ר יורי קליגרמן

על הנושא:

Bi Layered Spherical Contact

The seminar will be given in Hebrew

להלן תקציר ההרצאה:

A finite element analysis was used to investigate the elastic contact of a bi layered coated spherical asperity compressed by a rigid flat, under normal loading. The bi layered coating consisted of an hard outer coating with constant geometrical and mechanical properties and a soft interlayer coating who's properties varied. The different mechanical and geometrical properties of the soft coating were considered and their effect on the size of the contact area was discussed. It was found that low moduli ratio of the soft interlayer coating compared to the substrate will increase the contact area as well as low Poisson's ratios. It was determined that in small thicknesses and high Poisson's ratios of the soft coating interlayer a decrease in the contact area can be observed, despite the fact that the coating is softer than the substrate.

An increased contact area may enhance electrical and thermal conductivity. Hence, the electrical conductivity of typical metals was considered for the soft interlayer of the asperity coating, in order to minimize the contact resistance of electrical connectors.

בברכה,

פרופ' אמיר שפיר
מרכז הסמינרים