

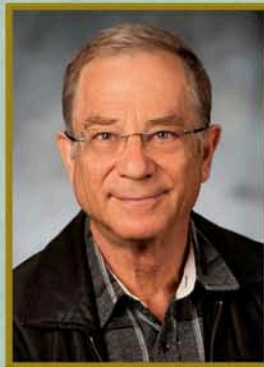


אוניברסיטת בן-גוריון בנגב
Ben-Gurion University
of the Negev

The Faculty of Engineering Sciences

בימת דיקן הפקולטה למדעי ההנדסה

פרופ' יוסף קוסט, דיקן הפקולטה למדעי ההנדסה
מתכבד להזמין להרצאת אורח בימת הדיקן



Prof. Jacob Israelachvili

Department of Chemical Engineering, Materials Department, Materials
Research Laboratory, and the Biomolecular Science and Engineering Program
University of California Santa Barbara

ירצה בנושא:

Adhesion, friction and lubrication forces in everyday life

If there were no adhesion, we would fall apart; if there were no friction we would not move forward when we walked and no sound would come from a violin. We take these forces for granted, and make use of them instinctively, without thinking – they are part of our biological makeup. The talk will attempt to give a readily understandable but scientific background to the origin, history, and present day understanding of why things stick (adhere) to each other, why they sometimes fall apart, and the role of friction and lubrication forces in all this. Examples will include how low adhesion energies can nevertheless give rise to very strong adhesion forces, how geckos use both adhesion and friction to rapidly run on walls and ceilings (currently being mimicked for robotic applications), earthquakes and landslides, and the roles of the structure, chemical nature and other properties of the materials and their surfaces.

יום רביעי, ט"ו בטבת תשע"ד, 18 בדצמבר 2013

ההרצאה תחל בשעה 12:00

מכון אילזה כץ לננוטכנולוגיה (51) אולם 015

לפני ההרצאה יוגש כיבוד קל (11:30)