

סמינר - SEMINAR

הנך מוזמנת/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ד' 23.05.18 (ט' בסיון, תשע"ח), בבניין דן קאהן, אודיטוריום 1, 12:30.

ירצה:

Prof. Steffen Hardt
Institute for Nano- and Microfluidics
TU Darmstadt, Germany

על הנושא:

Liquid/liquid interfaces under electric fields

להלן תקציר ההרצאה:

This talk gives an overview about our experimental work on liquid/liquid systems exposed to electric fields. First, aqueous two-phase systems composed of two incompatible polymer solutions are considered. An electric field applied normal to the liquid/liquid interface can be used to accumulate biomolecules at the interface. Upon increasing the electric field strength, a size-specific desorption from the interface takes place that can be exploited for the size-separation of DNA or proteins. Second, the effects of electric fields on oil/water interfaces in microchannels are explored. It is shown that electric field pulses can be utilized to create a stream of water droplets with size control on the level of individual droplets. In addition, electric field pulses can be employed to create monodisperse droplets on demand. Last but not least, the avoided coalescence of droplets with a water meniscus allows establishing droplet-based semi-batch reactors.

המארח: פרופ' מורן ברקוביץ

בברכה,

ד"ר איתי סאס

מרכז הסמינרים