

## סמינר - SEMINAR

הנדך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ב' 30.10.2017  
(י' בחשוון, תשע"ח), בבניין דן קאהן, אודיטוריום 1, 14:30.

מרצה:

### Dr. Andreas Schamel

Director of Ford Global Powertrain Research and Advanced Engineering



על הנושא:

## FORD vision on future of vehicle propulsion

The seminar will be given in English

להלן תקציר ההרצאה:

The challenges of climate change and energy security require a continuous effort toward reduction of greenhouse gas (GHG) emissions, global environmental pollution and fossil oil consumption. Nowadays, road vehicles are responsible for about three quarters of total energy consumption in the transportation segment and almost entirely dependent on crude oil. There is a significant potential of reducing tank-to-wheel (TTW) GHG emissions through further optimization of gasoline/diesel fed powertrains. Ford is developing a variety of novel technologies aimed at powertrain efficiency improvement. However, further substantial reductions in GHG footprint and fossil oil substitution would be impossible without development of low carbon intensity alternative fuels. The latter, enable significant steps down in TTW GHG emissions. Fully electric propulsion technologies, like batteries and fuel cells will have in a foreseen future only limited customer acceptance, due to long re-charging time, limited infrastructure and high costs. At the same time, complete CO<sub>2</sub> neutral mobility also possible if vehicle CO<sub>2</sub> emissions are "recycled" into sustainable PtX fuels, like dimethyl ether, oxymethylene ether, etc., which have a potential of fast market penetration. Ford R&A is involved in several PtX research activities.

בברכה,

המארח: ד"ר לאוניד טרטקובסקי

פרופ' נ"מ שמואל אוסובסקי  
מרכז הסמינרים