

סמינריון

הנדך מוזמנ/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ה' 3.12.15 (כא' בכסלו, תשע"ו), בבניין דן-קאהן, קומה 0, באודיטוריום 1 בשעה 14:30.

ירצה : רונן ציון

מנחה : פרופ' יהושע דיין
מנחה שותף : פרופ' לאוניד מירקין

על הנושא:

Developing two-chamber reactor for biomass gasification

להלן תקציר ההרצאה:

A two chambers gasifier (2CG) is being developed at the Technion for the past several years. The reactor converts biomass and other types of solid organic waste into synthesis gas (Syngas), which may be used as fuel for energy production, chemical feedstock or substitute for natural gas. Although gasification of coal has been developed long time ago, the old process is expensive and inefficient. Recent environmental demands and the need to find new sources of sustainable energy, led to the developing of a new concept. This concept, which is based on recirculating fluidized bed, where solid particles are used to transfer heat, has been adopted by many researchers around the world. The Technion's two-chamber gasifier, also belongs to this trend, but has several surplus features that look more promising than the competitors developed elsewhere. These special features will be presented and discussed along with the determination of the parameters needed for the proper functioning of the reactor. A possible design and dynamic simulation of the controlled system, reflecting the performance of the reactor through its heating process from cold start-up to steady state, will be presented as well.

בברכה,

פרופ' אורי איתן

מרכז הסמינרים