Technion-Israel Institute of Technology Faculty of Mechanical Engineering





הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות שתתקיים ביום די 6.02.2019 (אי באדר אי, תשעייט), בניין דן קאהן, אודיטוריום 1, 30:30.

מרצה: אילן ויסברג

מנחה: פרופ"מ שמוליק אוסובסקי

צל הנושא:

Ductile fracture under complex loading scenarios

The seminar will be given in Hebrew

תקציר ההרצאה:

Ductile fracture of structural alloys is a process involving the nucleation, growth and coalescence of micron sized voids. Although several models describing this process exist in the literature, they all share a common limitation, which is their inability to describe the fracture process under low triaxialities.

In this work, finite element simulations using the GTN model with the Nahson-Hutchinson extension accounting for shear induced damage are used to examine the failure mechanism of ductile structural alloys under complex loading scenarios.

For this purpose, a new specimen allowing for tension and shear loading was designed. The dependence of strain to failure upon loading history and the effect of specimen geometry on strain to failure for different material parameters is examined in detail.

בברכה,

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