

סמינר - SEMINAR

הנדך מוזמנת/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ב' 28.12.2020 (י"ג בטבת תשפ"א), בשעה 14:30 באמצעות הזום :

<https://technion.zoom.us/j/95238987561>

מרצה:

Assistant Professor Shmuel Osovski

על הנושא:

Moving beyond descriptive fractography

The seminar will be given in English

להלן תקציר ההרצאה:

When materials fail, the interaction of environmental conditions, applied loads (extrinsic) with the material's microstructure (intrinsic) results in highly irregular fracture surfaces, on which the detailed record of the fracture process is encoded. Despite numerous studies in the field, the study of fracture surfaces is, at large, restricted to qualitative analysis and typological classification.

I will present my lab's experimental and numerical work, aimed at establishing a new methodology for failure analysis, allowing for quantitative analysis of fracture surfaces. Specifically, I will show how an interdisciplinary approach, borrowing tools and methodologies from the fields of surface topology, graph theory and data science can be integrated with solid mechanics and materials engineering, resulting in a *statistical* quantification technique to extract the intrinsic and extrinsic parameters leading to failure directly from the fracture surface.

בברכה,

פרופ' מ' אתי סאס

מרכז הסמינרים