

CURRICULUM VITAE

Personal Details

Name: Elad Priel

Date and place of Birth: December 12, 1977, Haifa, Israel

Citizenship: Israeli

Marital status: Married+3

Affiliation: Department of Materials – NRCN

Department of Mechanical Engineering – SCE

Army service: 1996-2000 (Medic)

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Education

- 2011** **Ph.D., Mechanical Engineering, BGU.**
Dissertation title: Investigating the passive and active response of arterial walls by p-Finite element methods.
Advisor: Prof. Yosibash, Zohar
- 2007** **M.Sc., Mechanical Engineering, BGU.**
Thesis title: Mechanical failure criteria for brittle elastic materials containing V-notches under mixed mode loading.
Advisor: Prof. Yosibash, Zohar
- 2005** **B.Sc., Mechanical Engineering, BGU.**

Employment (NRCN)

- 2016-Today** Head – Computational Metallurgy group- NRCN
2014-2015 Head – Metal forming group – NRCN
2015-Today Senior Researcher - R&D division –NRCN
2011-2014 Researcher – R&D division –NRCN

Academic Employment (SCE)

- 2018-Today** Senior Lecturer, Department of mechanical engineering-SCE

2017-Today	Director – Center for Thermo-mechanics and Failure of Materials – SCE.
2016-Today	Organizer of department seminars, Department of mechanical engineering - SCE
2016-2018	Head, Engineering design program – Mechanical Engineering Department – SCE.
2015-Today	Committee member, Graduate program committee-SCE.
2013-2018	Lecturer, Department of mechanical engineering-SCE

Awards and Recognitions

2021	Excellence in teaching award, Department of Mechanical Engineering -SCE
2021	Research excellence award for the year 2020 Given by the head of the Materials Science Department, NRCN
2020	Certificate of recognition for outstanding research conducted in the year 2019, Given by the NRCN.
2018	Best poster award, IAEC Engineering conference, given by the Chief Scientist of the Israel Atomic Energy Commission (IAEC)
2017	Excellence award for outstanding research conducted in the year 2016, Given by the NRCN.
2016	Best poster award, IAEC Materials conference, given by the Chief Scientist of the Israel Atomic Energy Commission (IAEC)
2015	Excellence in teaching award, Department of Mechanical Engineering -SCE
2012	Kazir Scholarship, Given by the I.M.D.
2011	Best lecture award for the year 2011, given by the Israeli Association of Computational Methods in Mechanics.
2010	Excellence in teaching award, Given by the Dean of the Engineering Faculty – BGU.
2009	Excellence in teaching award, Given by the Head of the Mechanical Engineering Department – BGU.
2007	Negev Scholarship (Paran-Class A) for outstanding Ph.D. Candidates-BGU.
2006	The Ben-Amitai award, for excellence in research in the field of aerospace engineering.
2005	B.Sc. Graduated with excellence
2005	Award for outstanding achievements for the fourth year of undergraduate studies.

Main fields of interest

Finite element methods, Plasticity, Ductile fracture, Thermo-mechanics, Metal forming, Fracture mechanics, Bio-mechanics.

Supervision of Students

M.Sc. Students with Thesis

- Aharon Farkash (in progress) "The elastic response of AMCs with weak particle-matrix interface bonding: A computational study", Co-advisor Prof. S. Hayun, Department of Materials Engineering, BGU.
- Nitzan Rom (in progress) "Modeling ductile failure in metallic materials", Co-advisor Prof. K. Bortman, Department of Mechanical Engineering, BGU.
- Olga Sinitzky (in progress) "The mechanical response and failure of Epoxy Sisal composites", Co-advisor Dr. N. Trabelsi, Department of Mechanical Engineering, SCE.
- Moti Kayat (in progress) "Modeling the bonding of metallic materials by plastic forming at different strain rates", Co-advisor Prof. K. Bortman, Department of Mechanical Engineering, BGU.

Undergraduates Students (B.Sc. Projects)

2013-Today Supervision of 30+ final project groups in the department of mechanical Engineering (SCE) department of mechanical Engineering (BGU) and the Faculty of medicine (BGU).

Two of the final projects under my supervision won best project award in the years 2016 (SCE) and 2017 (BGU)

International exchange student programs:

As part of a research internship program between SCE and difference Universities in the U.S and Canada.

- Ms. Sarah Abella, "Image Analysis of skin tissue for deformation measurements", Biomedical Engineering department, John's Hopkins University, Summer of 2017
- Ms. Anna Weitzman, "Image Analysis of tensile tests for deformation measurements", Mechanical Engineering

department, McGill University, Summer of 2018

- Ms. Marlin H. Jacobson, "Image Analysis of tensile tests for deformation measurements", Aerospace Engineering department, University of Boulder Colorado, Summer of 2019

M.Sc and Ph.D. Thesis Examiner:

- Mr. Cho Xu, "Elastic-Plastic contact of cladded surface", Ph.D. Dissertation exam-Mechanical Engineering Department-Technion, Israel, July 2019.
- Mr. Matan Tubul, "Mechanical properties characterization for a cylindrical fuel clad using the segmented expanding cone-mandrel (SEM) method", M.Sc Thesis, Nuclear Engineering department, BGU, Israel, April 2016.
- Mr. Ziv Ungarish, "A study of the interface between Mg Alloys and Al Clad for Understanding the Cladding Process by Extrusion", M.Sc Thesis Materials Engineering department, BGU, Israel, February 2016.

Reviews for scientific Journals:

Invited to conduct 4-5 manuscript reviews, each year, for the following journals:

- International Journal of Solids and Structures
- Engineering Fracture Mechanics
- Advances in materials science and engineering
- International Journal of Fracture Mechanics
- Journal of Materials for Structural Engineering
- Materials
- Metals
- Applied Sciences

Membership in professional associations:

- Israeli Association for Computational Methods in Mechanics (IACMM)

- European Community of Computational Methods in Applied Sciences (ECCOMAS)

Formal roles in professional associations:

- From 2018-Today, Member of the executive committee of the IACMM.
- From 2016-Today, Editor of the IACMM bulletin.

Formal roles in scientific conferences:

- Chairman (Morning Session) 47th Israeli Symposium of Computational Mechanics, October 2019, BGU, Israel.
- Chairman (Morning Session) Mini-symposium on numerical modeling of composite materials, World Congress of Computational Methods, September 2018, New-York, U.S.A.
- Conference Organizer, 41th Israeli Symposium of Computational Mechanics, October 2016, SCE, Israel.
- Chairman (Morning Session), 40th Israeli Symposium of Computational Mechanics, April 2016, Technion, Israel.

Research Grants:

2021-Today	Investigating the mechanical response of the human Zona Pellucida, 130,000\$, Israeli Science Foundation, Grant Number:1477/21
2020-2021	Investigating the mechanical behavior and failure of metals and composite materials, 57,000 \$, IAEC, Grant Number 5100044897.
2017-2020	Investigating the mechanical behavior and failure of metals and composite materials, 288,000 \$, IAEC, Grant Number 4300011151.
2016-2018	Investigating deformation of Molybdenum by Equal Channel Angular Extrusion (ECAE), 8,000\$, REFAL-Advanced defense Systems, Grant Number 384656.
2016-2018	Investigating the mechanical response of Human Skin Tissue, 17,000\$, Internal Grant, SCE Research Authority.
2013-2016	Investigating the mechanical response of the human Zona Pellucida, 25,000\$, Young Investigator Grant, SCE Research Authority.

