

**Roman Goltsberg**

**Personal:**

Date of birth: 26/11/1988  
Telephone: (+972) 529 - 434 - 695  
E-Mail: goltsberg.roman@gmail.com  
Marital Status: Married + 1

**Academic Degrees:**

2015: Ph.D, *direct doctoral track*  
Faculty of Mechanical Engineering  
Technion - Israel Institute of Technology, Haifa, Israel.  
Title: "Contact mechanics of thin film coatings"

2010: B.Sc, *cum laude*, "*Brakim*" *student excellence program*  
Faculty of Mechanical Engineering  
Technion - Israel Institute of Technology, Haifa, Israel.

**Professional and Research Experience:**

2011 – Present: Research Engineer  
R&D, RAFAEL, Advanced Defense Systems, Israel.  

- *Computational fluid dynamic (CFD) for internal flow in hydrodynamic bearings.*
- *Static and dynamic mechanical response of composite materials.*
- *Initiation of new research projects.*
- *Design of experiment devices.*

2012 – 2015: External Graduate Student for Ph.D, *direct doctoral track*  
Faculty of Mechanical Engineering  
Technion - Israel Institute of Technology, Haifa, Israel.

2010 – 2011: Internal Graduate Student for M.Sc. "*Brakim*" *excellent students program*  
Faculty of Mechanical Engineering  
Technion - Israel Institute of Technology, Haifa, Israel.

**Military service:**

2013 – 2016: Research Engineer (Rank: Captain)  
Enlisted Service, Israel Defense Forces  
Positioned at RAFAEL – Advanced Defense Systems, Israel.

2011 – 2013: Research Engineer (Rank: Lieutenant)  
Mandatory Service, Israel Defense Forces  
Positioned at RAFAEL – Advanced Defense Systems, Israel.

**Current Research Interests:**

Contact mechanics  
Thin film coating  
Hydrodynamic bearings

**Honors and Awards:**

2016: Katzir Scholarship – Ministry of Defense.  
2014: KLA Tencor Research Excellence Award.  
2009: Bahad 1 – IDF officers training school – finished with excellence.  
2006-2010: Dean List in every semester.

**Teaching Experience:**

2016 – Present: Lecturer, Technion - Israel Institute of Technology, Haifa, Israel.  
*036031 – Theoretical Tribology, graduate level.*

**Students and Trainees:**

Research consultative for M.Sc (with thesis) students:

- |                    |  |           |
|--------------------|--|-----------|
| 1. Shai Ronen      | B.Sc., Mechanical Eng., Technion Israel. | 2015-2017 |
| 2. Oleg Korchevnik | B.Sc., Mechanical Eng., Technion Israel. | 2015-2017 |

**Participation in Conferences:**

1. 52nd Israel Annual Conference on Aerospace Sciences, Tel-Aviv and Haifa, Israel, Feb. 29 – Mar. 1, 2012  
“The Onset of Plastic Yielding in a Coated Sphere Compressed by a Rigid Flat”
2. 32nd Israeli Conference on Mechanical Engineering, Tel-Aviv, Israel, Oct. 17 – 18, 2012  
“Extending the Classical Hertz Solution by an Equivalent Young's Modulus for a Coated Spherical Contact”
3. 69th STLE Annual Meeting, Orlando, Florida, May 18 – 22, 2014.  
“The Effect of Coating Properties on Various Contact Parameters in a Normally Loaded Coated Spherical Contact”
4. 34th Israeli Conference on Mechanical Engineering, Haifa, Israel, Nov. 22 – 23, 2016  
“Contact Area and Maximum Equivalent Stress in Elastic Spherical Contact with Thin Hard Coating”
5. 35th Israeli Conference on Mechanical Engineering, Beersheba, Israel, oct. 9 – 10, 2018  
“Electrical Resistance of a Bi-Layer Coated Spherical Contact”