

# Dr. Shmuel Barzilai - Curriculum Vitae

## Personal Details:

**Name:** Shmuel Barzilai

**Born:** At 1969 in Beer-Sheva, Israel.

**Status:** Israeli citizen; married, +3.

**Address:** Department of Materials Science,  
Nuclear Research Center Negev, POB 9001, Beer Sheva,  
ISRAEL.  
Tel. 972-8-6568843 (work); 972-77-4249926 (home); 972-50-  
6239137 (mobile); Fax. 972-8-6567878;  
e-mail: [barzilai.shmuel@gmail.com](mailto:barzilai.shmuel@gmail.com)



## Education:

**B.Sc.**, 1990-1994 Department of Physics, Ben-Gurion University.  
Summa cum laude

**B.Sc.**, 1990-1994 Department of Materials science and engineering, Ben-Gurion University.  
Summa cum laude

**M.Sc.**, 1995-1998 Department of Industrial Management, Ben-Gurion University.  
Summa cum laude

**M.Sc.**, 2001-2004 Department of Materials science and engineering, Ben-Gurion University.  
Summa cum laude

**Ph.D.**, 2005-2010 Department of Materials science and engineering, Ben-Gurion University.

## Employment:

**1995-present** - Research member at materials science department, the Nuclear Research Center Negev (NRCN).

**2007-2008** – Sabbatical at Ben-Gurion University, in the group of Prof. Frage.

**2011-2013** – Post doc in Materials science division at NIST (Maryland), in the group of Dr. Lyle Levine.

## Awards

2011 Pazy award for research achievements and excellence studies.

2012 Award for the best paper in the Journal of Materials Science, for Dec 2012.

2015 The head of the NRCN award for excellent research.

2018 The head of the NRCN award for excellent research.

### Research areas

1. *Ab initio* calculations using Density functional theory.
2. Thermodynamic evaluation
3. Dynamic wetting and interfaces between doped metals and ceramics. Wettability measurements, infiltration and thermodynamic evaluation of contact interaction.
4. Material coating by plasma sputtering

### Summary of publications in scientific (refereed) journals

Area	# of papers (first author)
<i>Ab initio</i> calculations	20 (16)
Thermodynamics, wettability and interface interactions	16 (12)
Coatings	4 (4)
others	2 (1)
<b>Total</b>	<b>42</b> <b>(33)</b>

\*This table includes only the peer review publications. There are around 60 additional proceedings/posters/oral presentations that are not included.