

Curriculum Vitae: Mordechai (Moti) Segev

Distinguished University Professor
The Trudy and Norman Louis Professor of Physics
 Physics Department and Solid State Institute
 Technion - Israel Institute of Technology

Academic Records

1985 **B.Sc.** (Cum Laude) in Electrical Engineering, Technion, Israel Institute of Technology.

December, 1990 **D.Sc.** in Sciences, Technion, Israel Institute of Technology.

November 21, 1990 -- Aug. 1992: **Research Fellow**, Applied Physics Dept., Caltech

Aug. 92 ---- Aug. 94: **Senior Research Fellow**, Applied Physics Dept., Caltech

Sep. 94 --- June 97 **Assistant Professor**, Dept. of Electrical Engineering, Princeton University

July 97 --- June 99 **Associate Professor**, Dept. of Electrical Engineering, Princeton University

Aug. 98 --- July 99 **Associate Professor**, Physics Department, Technion, Israel

July 99 --- August 2000 **Professor** of Electrical Engineering, Princeton University

July 2000 - May 2009 **Professor**, Physics Department, Technion, Israel

June 2009 -- present **Distinguished University Professor**, Technion, Israel

Recent Editorial Positions & Conference Committees (most recent first):

- **Chair**, the **2009 Committee of the Quantum Electronics Prize** (highest European award in optics / lasers/ quantum electronics and all related areas – same award Moti won in 2007; it is customary that the winner of this award chairs the next award committee)
- **General Chair**, the **IQEC 2009** Conference (the “fundamentals part” of CLEO: the largest and most important conference in all of optics)
- **Topical Editor** of the premiere optics journal **Optics Letters**, 2002 – 2008
- **Program Chair**, the **QELS 2007** Conference (the “fundamentals part” of CLEO: the largest and most important conference in all of optics)
- **Editor**, Special Issue of Optics and Photonics News, on Optical Solitons, February 2002.
- **Editor** of the Special Feature Issue of Journal of Optical Society of America B, on Nonlinear Wave Phenomena in Confined Structures, March and April 2002.
- **General Chair**, Nonlinear Guided Waves 2001 Conference (**NLGW'01**),
- **Program Chair**, Nonlinear Guided Waves 1999 Conference (**NLGW'99**).
- **Chairman of the Subcommittee** on Nonlinear Optics, the CLEO/QELS 2005 Conference.
- **Chairman of the Subcommittee** on Solitons, Nonlinear Guided Waves and their Applications 1998 Conference (**NLGW'98**).
- **Symposium Organizer**, Optical Society of America Annual Meeting 1997 (**OSA'97**), Symposium on Spatial Solitons and Transverse Effects.

Academic Achievements

More than 300 publications in refereed journals and 13 book chapters; more than 100 invited, keynote, and plenary conference presentations.

Citations: **H-Factor 67** (ISI Web of Knowledge), with more than 17,000 citations, and average of more than 60 citations per paper. Google Scholar: **H-Factor 79** with more than 24,000 citations. (notice there are some other people under "M.Segev", in nuclear physics, in medicine, etc., not related to Moti Segev)

Fields of interest: Solitons, Nonlinear Optics, Nonlinear Dynamics, Quantum Electronics, Lasers, Sub-wavelength imaging

Academic Awards

- (20) **Israel Prize in Physics and Chemistry** 2014
- (19) **Arthur L. Schawlow Prize** of the **American Physical Society**, 2014 (announced Sep. 2013).
- (18) Elected to the **Israel National Academy of Sciences and Humanities**, 2011
- (17) **Max Born Award** of the **Optical Society of America**, 2009.
- (16) ERC Advanced Grant in the first round, 2008
- (15) The Israeli **Landau Prize** 2008.
- (14) The Science Prize 2008 of the German Technion Society.
- (13) The **Quantum Electronics Prize of the European Physics Society** (highest European award in optics / lasers/ quantum electronics and all related areas), 2007.
- (12) The Hershel Rich Innovation Award (given by the Technion on a particular invention), 2007.
- (11) The Taub Prize (highest research excellence prize given by the Technion to its faculty), 2003.
- (10) The Braun-Roger-Siegl Research Award of the Israeli Science Foundation, 2002.
- (9) Elected as a **Fellow** of the American Physical Society, 2000.
- (8) Elected as a **Fellow** of the Optical Society of America, 1997.
- (7) The Sloan Research Award in Physics, 1995.
- (6) The Alon Award 1994 (Israeli-equivalent of the Young Presidential Award in the US). Award was declined since I decided to join Princeton University.
- (5) The Lester Deutsch Technion Post-Doctoral Fellowship, 1991.
- (4) The Lester Deutsch Technion Post-Doctoral Fellowship, 1990.
- (3) The Smolin Prize for outstanding member of the Junior Academic staff (best **teacher** among the Junior Academic staff in Electrical Engineering department), Technion, 1986.
- (2) The Special Gutwirth Fellowship for outstanding graduate students, 1989.
- (1) The Gutwirth Fellowship for graduate students, four years in a row: 1985-1988.

Short Biography: Mordechai (Moti) Segev

Mordechai (Moti) Segev is a Distinguished University Professor and the Trudy and Norman Louis Professor of Physics, at the Technion - Israel Institute of Technology, Haifa, Israel. He received his B.Sc. and D.Sc. from the Technion, Israel, in 1985 and 1990, respectively. Moti Segev has spent one year at Caltech as a post-doctoral fellow and two more years as a Senior Research Fellow. He joined Princeton in September of 1994 as an Assistant Professor, becoming an Associate Professor in 1997, and a Professor in 1999. In the summer of 1998, Moti Segev went back to his home country, Israel, and joined the Technion, eventually resigning from Princeton in 2000.

Moti Segev's research interests are mainly in Nonlinear Optics, Solitons, Sub-wavelength Imaging, Lasers and Quantum Electronics, although he finds much entertainment in more demanding fields such as basketball and hiking. He has more than 300 publications in refereed journals, many book chapters, and has given more than 100 invited, keynote, and plenary presentations at conferences.

Among his most significant contributions are the discoveries of photorefractive solitons, of solitons made of incoherent white light from a bulb, the first observation of 2D lattice solitons, the first experimental demonstration of Anderson localization in periodic systems containing disorder, and the demonstrating the first photonic topological insulator.

Moti Segev is a Fellow of the Optical Society of America – OSA (1997), a Fellow of the American Physical Society – APS (2000). In 2007, he won the Quantum Electronics Prize of the European Physics Society (highest EPS award in optics / lasers / quantum electronics and all related fields). In 2009 he won the Max Born Award of the OSA (most prestigious professional award of the OSA). Very recently, (October 2013), it was announced that he has won the 2014 Arthur L. Schawlow Award, which is the highest APS award in lasers physics. On the national level, he has won the 2008 Landau Prize. In 2009, he was appointed as Distinguished University Professor - the highest rank at the Technion, currently held by only five other professors. In 2011, Moti Segev was elected to the Israel Academy of Sciences and Humanities. Recently, it was announced that Moti Segev has won the 2014 Israel Prize in Physics and Chemistry.

However, above all his personal achievements, Moti Segev takes pride in the success of the graduate students and post-doctoral fellows that have worked with him over the years. Among those are currently 16 university professors in the United States (including at MIT, Princeton, and the University of Michigan), Germany, Taiwan, Croatia, Italy, India and 6 in Israel. Likewise, many of his former PhD students are currently holding senior R&D positions in the industry.