

## CV of Gábor Varga

### Personal data

Name Gábor Varga  
Position Associate professor  
Current institution Department of Physics,  
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### Education

1984 Mechanical Engineer (mathematician-engineer), BME, Hungary  
1996 Dr. University in Physics “Solid surface physics”, BME Hungary  
1997 PhD in Physics “Solid surface physics “, BME Hungary

### Employment

1984-1996	Assistant lecturer	BME, Hungary
1996-1997	Assistant professor	BME, Hungary
1997-	Associate professor	BME, Hungary

### Research interest

- Atom/molecule-solid surface scattering scattering, direct and inverse scattering, adsorption. desorption, transfer width, surface impurity
- Numerical Solution of Time Dependent Schrödinger equation.
- Classical and quantum chaotic scattering .
- Nano-technology
- Computer simulation of nano-electronic devices
- Industrial application of computer simulation
- Computer simulation

### Teaching activity

- Experimental physics
- Quantum mechanics
- Solid state physics
- Computer simulation
- MATLAB programming

## Students supervised

- BSC student: Milán Mészáros (2008)

## GScholarships, fellowships, projects (since 1984)

1985	Scholarship, ICTP Trieste, Italy
1988-1992	OTKA “Thermal energy atomic scattering” (2 mFt)
2002-2005	OTKA 38158 “Space-time dynamic simulation of nano-electronic devices considering the effect of the environment” (8.52 mFt)

## Invited talks

2009, 2010, 2011, 2013, 2014, 2015      Computer Simulation Conference of Furukawa Electric Group

## Languages

English, Russian

## Scientific impact (as of 01/2015)

36 publications

Total number of independent citations: 17

H-index: 4

Complete list of publications: <https://vm.mtmt.hu/www/index.php?lang=1&AuthorID=10041501>

## Five selected publications

1. Szabolcs Gyimóthy, József Pávó, Péter Kis, Tomoaki Toratani, Ryuichi Katsumi, Gábor Varga, Simulation of the absorbing clamp method for optimizing the shielding of power cables, COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING 32:(5) pp. 1567-1580. (2013)
2. Z Várallyay, Y Arashitani, G Varga, Reducing stress-induced birefringence in optical fiber ribbons, OPTICAL FIBER TECHNOLOGY 17:(1) pp. 70-78. (2011)
3. Nyakas P, Varga G, Puskas Z, Hashizume N, Karpati T, Veszpremi T, Zsombok G, Self-consistent real three-dimensional simulation of vertical-cavity surface-emitting lasers, JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 23:(9) pp. 1761-1769. (2006)
4. G Varga, Computer simulation by the quantum mechanical time-dependent wavepacket method, especially for atom/molecule-solid-surface interaction, JOURNAL OF PHYSICS-CONDENSED MATTER 14: pp. 6081-6107. (2002)
5. Balázs E, Varga G, Comparison of 3D classical and quantum mechanical He scattering on Rh(311), SURFACE SCIENCE 482-485:(Part 2) pp. 1145-1151. (2001)