

# CURRICULUM VITAE

## Valeriu M. FILIP, Professor emeritus

### I. ACADEMIC DEGREES:

**Ph.D. in Physics**, Faculty of Physics, University of Bucharest, Romania, January 20th, 1998.

Thesis title: **Contributions to the Study of Electron Emission from Semiconductors under High Electric Fields and Applications.**

**M.S., Solid-State Physics**, Faculty of Physics, University of Bucharest, Romania, 1979.

B.S. and M.S. Thesis on "Phonon Drag Effects in Solid State Transport Phenomena"

**B.S., Physics**, Faculty of Physics, University of Bucharest, Romania, 1978.

### II. FELLOWSHIPS:

**NUFFIC** Fellowship, Eindhoven University of Technology, Faculty of Physics, Eindhoven, the Netherlands, 1996.

**JSPS** Post Doctoral Fellowship, Nagoya Institute of Technology, Graduate School of Engineering, Nagoya, Japan, 1998-2000.

### III. PROFESSIONAL BACKGROUND:

Period	Positions	Institution
Oct.1979 - Oct.1982	Physicist	Research Institute for Nuclear Power Reactors (IRNE), Pitesti-Colibasi, Romania
Oct. 1982 - Oct. 1983	Research Physicist	IRNE, Reactor Security Division
Oct. 1983 - Feb. 1992	Assistant Professor	University of Bucharest, Faculty of Physics, Thermal Physics Department
Feb. 1992 - May 1998	Lecturer	University of Bucharest, Faculty of Physics, Thermal Physics Department
May 1998 – May 2000	JSPS Post Doctoral Fellow	Nagoya Institute of Technology, Graduate School of Engineering, Nagoya, Japan
May 2000 – January 2001	Lecturer	University of Bucharest, Faculty of Physics, Thermal Physics Department
January 2001 – July 2003	Associate Professor.	University of Bucharest, Faculty of Physics, Thermal Physics Department
July 2003 – April 2005	Senior Research Associate	City University of Hong Kong, Electronic Engineering Department and Optoelectronics Research Centre
April 2005 – June 2006	Associate Professor	University of Bucharest, Faculty of Physics, Thermal Physics Department
June 2006 – September 2006	Research Fellow	City University of Hong Kong, Electronic Engineering Department
September 2006 – February 2008	Associate Professor	University of Bucharest, Faculty of Physics, Thermal Physics Department

June 2008 – September 2008	Research Fellow	City University of Hong Kong, Electronic Engineering Department
June 2011 – September 2011	Research Fellow	City University of Hong Kong, Electronic Engineering Department
June 2013 – August 2013	Research Fellow	City University of Hong Kong, Electronic Engineering Department
April 2017 – July 2107	Senior Research Fellow	City University of Hong Kong, Electronic Engineering Department
February 2008 – October 2019	Professor	University of Bucharest, Faculty of Physics, Thermal Physics Department
October 2019 - present	Professor emeritus	University of Bucharest, Faculty of Physics
March 2018 – January 2022	Senior Research Scientist	National Institute for Airspace Research “Elie Carafoli”, Bucharest, Romania
January 2018 - present	Senior Research Scientist	Research Center for Surface Science and Nanotechnology, University POLITEHNICA of Bucharest

**Subjects of research:** Moderators for nuclear thermal reactors: ZrH<sub>2</sub> (1979-1983)  
Solid state transport phenomena: Drag effects (1983-1992)  
Solid state high field transient phenomena (1992-1996)  
Vacuum microelectronics (1994-1999)  
Vacuum nanoelectronics (1999-present)  
Charge transport in nano-structures (2003-present)  
Environmental physics (2005-present)

- 84 published papers in referred journals, 78 of them in the following international journals: Journal de Physique I, Applied Surface Science, Journal of Vacuum Science and Technology A, Journal of Vacuum Science and Technology B, Review of Scientific Instruments, Ultramicroscopy, Japanese Journal of Applied Physics, European Physical Journal - Applied Physics, Applied Physics Letters, Microelectronics Engineering, Microelectronics Reliability, Thin Solid Films, Journal of Nanoscience and Nanotechnology, Journal of Instrumentation, Journal of Atmospheric and Solar-Terrestrial Physics, Vacuum, Solid State Electronics Letters, Atmospheric Measurement Techniques.
- The published papers have been cited over 1500 times in the specialized literature.
- 33 papers presented at international conferences.
- Hirsch index =15
- i10 – index = 30