

Curriculum Vitae

PERSONAL INFORMATION



Ciuprina Florin

 Universitatea POLITEHNICA din Bucuresti (UPB), Facultatea de Inginerie Electrica Laboratorul de Materiale Electrotehnice – ELMAT- (EB122), Spl.Independentei 313, sector 6, 060042
 Bucharest (Romania)

- +40.21.402.92.91
- 🔀 florin.ciuprina@upb.ro
- http://www.elmat.pub.ro/~florin

Sex M | Date of birth 02 May 1965 | Nationality Romanian

POSITION Professor

WORK EXPERIENCE

01/10/2007-Present

Professor

"Politehnica" University of Bucharest, Bucharest (Romania)

Teaching

Courses, seminars and laboratories:

- Electrical materials
- Science des materiaux de l'electrotechnique (in French)
- Techniques for professional communication
- Software tools for design in electrical engineering
- Management of experimental data for the characterization of electrical materials
- New electrical materials

Research

Coordination of research activities in the frame of national programmes (CEEX) and of international collaborations with G2E Lab Grenoble (France), BOREALIS AB Stenungsund (Sweden), NEETRAC Georgia (SUA) and INEOS Olefins & Polymers Europe (Belgium). Project leader for 3 national projects and one international project.

Research publications:6 books, 62 articles published in International Journals (19 ISI) and in International Conference Proceedings (IEEE - CEIDP, ISEI, ICSD etc.).

Business or sector Higher education

01/10/2001-01/10/2007 Associate professor

"Politehnica" University of Bucharest, Bucharest (Romania)

Teaching courses, seminar and laboratories:

- Electrical materials- Science des materiaux de l'electrotechnique (in French)- Techniques for professional communication Research activities in the frame of national programmes (CNCSIS, CEEX) and international programmes (FP5, Brancusi).

Business or sector Higher education

01/03/1998-01/10/2001 Lecturer

"Politehnica" University of Bucharest, Bucharest (Romania)

Teaching courses, seminar and laboratories:

- Electrical materials

- Science des materiaux de l'electrotechnique (in French)- Insulating systems- Techniques for professional communication Research activities in the frame of national programmes (CNCSIS, Word Bank) and international programmes (COPERNICUS, TEMPRA).

Business or sector Higher education

01/10/1992-01/03/1998

Teaching assistent

"Politehnica" University of Bucharest, Bucharest (Romania)

Teaching seminar and laboratories:

- Electrical materials
- Science des materiaux de l'electrotechnique (in French)
- Numerical methods
- Basis of electrical engineering

Research activities in the frame of national and international programmes (TEMPUS, COPERNICUS, TEMPRA, Research and training network between Central and Eastern Europe (UPB - UT Cluj – LEMD/CNRS Grenoble))

Business or sector Higher education

01/09/1989-01/02/1991 Electrical engineer

Intreprinderea de semnalizări și automatizări feroviare (Entreprise for the railways signalling and automation) Str Giulesti no. 14, 78251 Bucharest (Romania)

Electrical maintenance of railways

Business or sector Transport

EDUCATION AND TRAINING

01 October 1991–01 September 1997

Doctor inginer (Ph.D)

"Politehnica" University of Bucharest Spl. Independentei 313, 060042 Bucharest (Romania)

Ph.D. in Electrical Engineering:

- Electrical materials ;
- Electromagnetic field theory
- Numerial methods for the analysis of electromagnetic field
- Design and research on polymer dielectrics ;
- Preparation of scientific research papers for national and international conferences.

01/10/1984-01/08/1989

Electrical Engineer

9.06 / 10 (Final exam 10/10)

"Politehnica" University of Bucharest Spl. Independentei 313, 060042 Bucharest (Romania)

- mathematics

- electrical circuits
- electromagnetism
- computer programming
- numerical methods
- electrical machines and drives
- electrical apparatus
- analytical and numerical computation of the electromagnetic field

PERSONAL SKILLS

Mother tongue(s) Ro

Romanian



Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B2	B1	B2
French	C2	C1	C2	C2	C1
	Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user Common European Framework of Reference for Languages				
Communication skills	 communicating skill working in research environments (e.g. G 	nunicating with students from UPB during classes; ills with fellow colleagues from the Faculty of Electrical Engineering, UPB. th teams in national and international projects- working in international research G2E Lab Grenoble (France), BOREALIS AB Stenungsund (Suedia) and a (USA) for research related to water trees in cable insulation, during 2006 - 2010)			
	 ability to work in a team for research projects referring to water trees in polymeric insulation and polymeric nano composites with dielectric and electric properties, presented at important international conferences and published in international journals, ISI indexed, with a high impact factor. 				
Organisational / managerial skills	 Project manager of Grant T 105 CNCSIS (World Bank) "Influence of radiations and water trees on the polymers properties", 2000-2002; Project manager for Grant A CNCSIS cod 1461 "Caracterization and modelling of microscopic phenomena in dielectrics ", 2004-2006; Project manager of CEEX-PoNaDIP-234/2006 "Methodologies for development and characterization of polymer nanocomposite dielectrics with insulating properties " 2006-2008; Head of the "Dielectrics Lab." in the frame of the Electrical Engineering Faculty; This lab. hosts research and training activities for Ph.D students in the dielectrics domain, and its main facilities are a dielectric spectrometer NOVOCONTROL for the study of dielectric behaviour of materials in the frequency range 3 µHz - 20 MHz, 6 computers and FLUX 3D licence, for the analysis of the electromagnetic field Member of the organizing commitee of international conferences (MmdE) 				
	 Coordination of research caried out in colaboration with partners from France (LEMD-Grenoble), Sweden (Borealis Polymers AB), USA (NEETRAC Georgia) and Belgium (INEOS Olefins & Polymers Europe), resulting 4 ISI indexed articles. 				
	- Head organizer for the students reasearch workshops, editions 2007-2014, in the frame of the MMAE Department of UPB.				
Job-related skills	- Electrical conduction in polymers: Numerous studies carried out in the frame of the Ph.D thesis entitled "Contributions on electrical conduction phenomena in electro-insulating materials" as well as other researches carried out in the frame of over 30 research projects, finalized by 17 scientific papers published in journals and volumes of national and international conferences.				
	-Water trees in polymers: I have designed and manufactured experimental setups and I have carried out studies related to the influence of various factors (heat, radiations, etc) on the water trees propagation. I benefit from numerous research stages in this domain at LEMD-CNRS/UJF Grenoble (1995-2005), in the frame of the Research and Training Network for Central and Eastern Europe in the frame of the TEMPRA, project (coordinated by de Prof.dr.ing. Petru NOTINGHER), as well as in the frame of CNCSIS Grants for which I have been the director. During 2011-2013 I have been the project manager of an international research project (INEOS Belgia – UPB/ELMAT) referring to the development of new materials based on polyethylene with high resistance that will prevent the water trees development. The results of this research were presented in over 30 scientific papers.				
	-Ageing of polymers: I have carried out numerous experimental studies referring to the degradation of polymers under the simple or combined action of stresses - electrical, thermal and radiations, resulting 16 scientific papers.				
	-Numerical modeling of the electromagnetic field: I have published 11 papers in the domain of numerical modeling, presented at various conferences. During 2006-2008 I was the project manager of the research project CEEX-PoNaDIP, having as one major objective the modeling of phenomena in nanodielectrics.				

-Electric *characterization of polymeric nanocomposites materials.* I have studied the influence of the type and concentration of nanoparticles, temperature and radiations on the properties (especially electrical) of polymeric nanocomposites. The obtained results were published in 18 scientific papers.

Computer skills - Operating systems: Microsoft Windows, Linux;

- Programming languages : Pascal, C;
- Software for mathematical computations: Matlab, Origin;

- Software for the electromagnetic field analysis by the finite element method: FLUX 3D, COMSOL-Multiphysics;

Other skills - Reviewer for Journals: IET Science, Measurement & Technology, Journal of Applied Polymer Science, Iranian Polymer Journal, Revue Romaine de Sciences Techniques - Electrotechnique et Energetique and Scientific Bulletin of UPB.

- Reviewer in the programe Fulbright Science and Technology Award - 2010;- Expert reviewer in the programme Earth Sciences and Engineering program, Georgian NSF (<u>http://www.gnsf.ge/</u>), Georgia, 2009-2011.

-Author of lecture notes for the course *Materiale electrotehnice*, both in Romanian and in French have been published in 2001.

- Coauthor of the book *Materiale pentru electrotehnica – Culegere de probleme*, published in 2005, at Editura Matrix Rom.

Single author of the book *Materiale electrotehnce – Fenomene si aplicatii*, published in 2007, at Editura Printech.

-Electronic versions of the taught courses are available on the personal web page <u>elmat.pub.ro/~florin</u>).

Reviewer for the Journals IEEE Transactions on Dielectrics and Electrical Insulation, *IEEE Transactions on Power Delivery, IET Science, Measurement & Technology, Journal of Applied Polymer Science (Wiley), Applied Physics Letters, Express Polymer Letters, International Transactions on Electrical Energy Systems (Wiley), Materials Science and Engineering: B - Advanced Functional Solid-state Materials (Elsevier), Polymer International (Wiley), Revue Romaine de Sciences Techniques - Electrotechnique et Energetique si Buletinul UPB.*

-Reviewer in the program Fulbright Science and Technology Award - 2010;

-Expert reviewer in the program *Earth Sciences and Engineering program, Georgian NSF* (<u>http://www.gnsf.ge/</u>), Georgia.

- Member in the National Register of Reviewer Experts in Romania.

- Member in the international scientific committee of the International Conference on Materials for Electrotehnics - MmdE & IEEE ROMSC, editions 2008 and 2010.

Driving licence B

ADDITIONAL INFORMATION

- Cited 130 times by journals that are indexed Thomson ISI and Google Scholar.
- Invited lecture at the conference IERD 2009, Bucuresti, 10-12 septembrie 2009.
- IEEE member since 1993, and Senior Member since 2012.
- ResearcherID C-4173-2011