

PERSONAL INFORMATION



Adrian Traian PLESCA

Str. Alea Rozelor, 2, Bl. D1, sc.A, ap.4, Iasi – 700202, Iasi, Romania

+40 232 278683 +40 723055173

aplesca@tuiasi.ro

Sex M | Date of birth 16/04/1972 | Nationality Romanian

WORK EXPERIENCE

from 2015 – to present

Professor

Gheorghe Asachi Technical University of Iasi

Str. Prof.dr.doc. Dimitrie Mangeron, 21-23, 700050 Iasi (Romania)

Research: Member of the research team of industrial research contracts. The research subjects: new type of load switch-disconnector for medium voltage; new alloys/materials for M-effect of high breaking capacity fuses; thermal transfer analysis of power electrical equipment.

Teaching: Special Electrical Apparatus, Switching Techniques, Modelling and Simulation of Electrical Apparatus (undergraduate and master specialization)

Business or sector Academic and scientific activity

from 2009 – to 2015

Associate-professor

Gheorghe Asachi Technical University of Iasi

Str. Prof.dr.doc. Dimitrie Mangeron, 21-23, 700050 Iasi (Romania)

Research: Director of two national research grants and two bilateral grants (China) and member of the research team of 6 grants and research contracts. The research subjects: new types of on-load tap-changers, special fuses; testing devices for low voltage electrical apparatus.

Teaching: Special Electrical Apparatus, Modelling and Simulation of Electrical Apparatus (undergraduate and master specialization)

Business or sector Academic and scientific activity

from 2003 – to 2009

Lecturer

Gheorghe Asachi Technical University of Iasi

Str. Prof.dr.doc. Dimitrie Mangeron, 21-23, 700050 Iasi (Romania)

Research: Director of a national research grant and member of the research team of 6 grants and research contracts. The research subjects: new types of on-load tap-changers, testing devices for low voltage electrical apparatus.

Teaching: Special Electrical Apparatus, Transient Conditions of Electrical Apparatus, Manufacturing Technology of Electrical Apparatus

Business or sector Academic and scientific activity

from 1999 – to 2003

Assistant-professor

Gheorghe Asachi Technical University of Iasi

Str. Prof.dr.doc. Dimitrie Mangeron, 21-23, 700050 Iasi (Romania)

Research: Member of the research team of 4 grants and research contracts. The research subjects: testing devices for low voltage electrical apparatus, monitoring and diagnose of electrical equipment

Practical laboratory applications: Electrical Apparatus, Transient Conditions of Electrical Apparatus, Manufacturing Technology of Electrical Apparatus

Business or sector Academic and scientific activity

from 1996 – to 1999

Instructor

Gheorghe Asachi Technical University of Iasi

Str. Prof.dr.doc. Dimitrie Mangeron, 21-23, 700050 Iasi (Romania)

Research: Member of the research team of 2 grants and research contracts. The research subjects: monitoring and diagnose of electrical equipment, protection of power semiconductor installations.
Practical laboratory applications: Electrical Apparatus, Manufacturing Technology of Electrical Apparatus

Business or sector Academic and scientific activity

EDUCATION AND TRAINING

from 2015 – to present

PhD Supervisor in Electrical Engineering

Gheorghe Asachi Technical University of Iasi (Romania)

Habilitation Thesis: Thermal analysis of power electronic and electrical assemblies

from 2003 – to 2005

Postdoctoral fellowship type Marie Curie Industry Host Fellowship in the framework of FP5

Green Power Solutions, Genoa (Italy)

- 3D modelling and simulation of power semiconductor devices, power assemblies; testing of heat sinks in natural and/or forced cooling; test benches to check the thermal contact at power semiconductor assemblies

from 1/04/2000 – to 1/10/2000

Fellowship within Tempus Jep Program

Politecnico di Torino, Turin (Italy)

Modelling and simulation of power semiconductor devices, power rectifiers; analysis of current harmonics of power rectifiers; testing of electric fuses

from 1996 – to 2001

PhD Degree in Electrical Engineering

ISCED 6

Gheorghe Asachi Technical University of Iasi (Romania)

from 1995 – to 1996

Master's Degree in Electrical Engineering

ISCED 6

Gheorghe Asachi Technical University of Iasi (Romania)

- Special electrical apparatus; Finite element method; Special electrical machines; Theory of the electromagnetic field; Vector control of electrical drives

from 1990 – to 1995

Engineer diploma in Electrical Engineering

ISCED 5

Gheorghe Asachi Technical University of Iasi (Romania)

- Special mathematics; Physics; Theory of electric circuits; Theory of the electromagnetic field; Theory of the mechanics; Electrical apparatus; Electrical machines; Electrical drives; Programming of the computers; Microprocessors; Computers' control of the industrial processes

from 1986 – to 1990

High school diploma

ISCED 3

Dimitrie Cantemir High School, Iasi (Romania)

- Mathematics; Physics; Chemistry; History; Geography; Romanian language and literature; Technical knowledge; English; French; Sport; Drawing

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	B1	B1	A2	A2	B1
Italian	C1	C2	C1	B2	B2
English	C1	C2	C1	C2	C2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Readiness of speech (teaching activities performed with students from different years of study);
- Teamwork skills (research projects that involved the participation of a large number of members from various institutions and companies);
- Adaptability to different cultural backgrounds (experience gained during the fellowships/research activities and international conferences);
- Timeliness and efficiency in carrying out different types of tasks (various internal department activities, upgrading laboratories).

Organisational / managerial skills

- Coordinator of the programme Alewijnse Training Center Romania (Dutch funding programme), specialized training in the field of power electrical equipment (study group of 24 persons);
- Supervisor of undergraduate and dissertation projects;
- Member of the graduation Bachelor Committee (specialization of Electrical Systems);
- Member of the graduation Master Committee (specialization of Advanced Electrical Systems);
- Member of the Accreditation Committee of the university study programme "Management, Energy, Environment" for Master specialization in the field of Power Electrical Engineering - 2008;
- Member of the Accreditation Committee of the university study programme "Management of Energy" for Licence specialization in the field of Power Electrical Engineering - 2013;
- Member of the Evaluation Committee of the cogeneration group acquisition for the students' campus, Iasi, Romania, 2012 – 2013.
- Experience in coordinating national and international grants/research projects;

Chairman:

- Sixth International Conference of Electric Fuses and their Applications, ICEFA, Torino, Italy, 1999; Chairman of session 5 – Fuse Operation II;
- IASTED International Conference, Applied Simulation and Modelling, Rodos, Greece, 2006, Chairman of Session: Power and Energy Systems;
- ASME 10th Biennial Conference on Engineering Systems Design and Analysis (ESDA 2010), Istanbul, Turkey, 2010, Chairman of session: Thermal Management of Electronic Devices
- 11th International Conference on Electromechanical and Power Systems (SIELMEN 2017), Chisinau, Rep. Moldova, 2017, Chairman of session: Electrical Apparatus & Reliability and Diagnosis

Job-related skills

Teaching (disciplines):

- Electrical Apparatus; Manufacturing Technology of Power Electrical Equipment; CAD of Electrical Apparatus; Modelling and Simulation of Electrical Apparatus; Protection of Low Voltage Electrical Installations; Switching Techniques; Special Electrical Equipment

Earned grants as director :

- Modelling and simulation of the current limiting fuses, Capacities, Module III, Bilateral Research Project China - Romania, Contract no. 610/01.01.2013, 2013-2014;
- Modelling of metal vapor arc for high current interruption in vacuum, Capacities, Module III, Bilateral Research Project China - Romania, Contract no. 515/14.04.2011, 2011-2012;
- New concepts related to the fuse operating using specific methods of virtual instrumentation, grant no. 706/19.01.2009, PNII IDEI, 2009-2011, National Agency for Science, Technology and Innovation;
- New intelligent device to improve the energy quality using specific methods of virtual instrumentation, CEEX National Programme: Funding Application for Excellences Research Projects. Code project: 5, Contract no: 1489, 2006-2008.

Computer skills

- MS Office, OrCAD PSpice, MATLAB, Pro/ENGINEERING, Pro/MECHANICA, LabVIEW

Other skills

- **Legal Technical Expert** with the Authorizations from Ministry of Justice, with the specializations of Electrical Engineering (authorization no. 24429052013), Power (authorization no. 34429052013), Industrial Energy (authorization no. 44429052013) and Power Engineering (authorization no. 14429052013);
- Expert in the project "National Network of Continuous Learning for Teachers from Technical High Schools – CONCORD Programme", ID 61397, 2012;
- Expert in the project "Specific Qualifications of University Studies in the Field of Electrical Engineering – DOCIS Programme", 2008 – 2011.

Driving licence

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ADDITIONAL INFORMATION

Publications Projects Conferences Honours and awards Memberships

Results of academic and research activity:

- 1 Book Chapter published at international Publishing House (Croatia)
- 3 Books published at international Publishing Houses (Germany)
- Books/monographs published at national Publishing House: 5 (4 – first author)
- Handbooks published at national Publishing House: 2 (single author)
- Articles published in ISI indexed journals with Impact Factor: 10 (9 – single author)
- Articles published in international databases journals: 23 (14 – first author)
- Articles published in other journals: 33 (9 – first author)
- Patents (national): 29 (17 – first author)
- Patent international application (US): 1 - first author
- Articles published in proceedings of the conferences indexed in international databases: 19 (16 – first author)
- Articles published in proceedings of other international conferences: 55 (21 – first author)

Research projects/grants:

- 2 bilateral grants (China) – grant director;
- 1 European Reintegration Grant (ERG) – main researcher; Contract no. MERG-7-CT-2005-014990, in the framework of FP6;
- 14 international research contracts (7 contracts - coordinator of the research team);
- 2 national grants – grant director;
- 8 national grants – member of the research team;
- 4 research contracts – coordinator of the research team.

Honours and awards:

- **2 Gold Medals and 2 Silver Medal** at World Exhibition of Invention, Research and Industrial Innovation, Brussels, Belgium, EUREKA, 2001, 2004;
- **Special Prize**, The First International Invention's Day Convention, Bangkok, Thailand, 2008;
- **Gold Medal and Diploma of Excellence** - Jubilee International Exhibition of Research, Invention and Technology Transfer, INVENTICA, Iasi, Romania, 2008;
- **Gold Medal and Excellence Diploma** - 4th International Exhibition of New Technologies, Sevastopol, Ucraina, 2008;
- **Bronze Medal** - 6th International Exhibition of Inventions, Suzhou, China, 2008;
- **Silver Medal** - International Exhibition of Inventions and New Technologies, INVENTIKA, Bucharest, Romania, 2008;
- **Gold Medal** - 4th International Warsaw Invention Show IWIS, 2010;
- **Bronze Medal** - 2nd International Exhibition of Inventions in Slovenia, 2010;
- **Diploma and Genius Medal** - 2nd International Invention Exhibition, Ljubljana, 2010;
- **Bronze Medal** – 2nd World Cup of Computer Implemented Inventions, Kaohsiung, Taiwan, 2011;
- **Gold Prize** – Seoul International Invention Fair, Korea, 2011
- **Diploma of Excellence with Fair Medal** – International Fair of Inventions and Practical Ideas, INVENT – INVEST, Iasi, Romania, 2015

Knight of the International Order of Merit of the Inventors (Identification Number : 116/2014)

Memberships

Member of International Scientific Committee :

- International Scientific Committee of IASTED Conference on Power and Energy Systems, PES 2008, Baltimore, USA
- International Scientific Committee of IASTED Conference on Applied Simulation and Modeling, ASM 2008, Corfu, Greece; 2009, Palma de Mallorca, Spain; 2011, Crete, Greece; 2012, Naples, Italy
- International Scientific Committee of IASTED Conference on Power and Energy Systems, EuroPES 2009, Palma de Mallorca, Spain; 2011, Crete, Greece; 2012, Naples, Italy
- International Scientific Committee of ICOMOS, International Conference on Modelling and Simulations, 2010, Capri, Naples, Italy
- International Scientific Committee of IASTED Conference on Modelling, Identification and Control, MIC 2016, MIC 2017, Innsbruck, Austria
- International Scientific Committee of International Conference on Energy, Power and Electrical Engineering, EPEE 2016, Bangkok, Thailand

Publications
Projects
Conferences
Honours and awards
Memberships

- Member of Promotion Committee for the following teaching positions:
- Associate-professor, Maritime University of Constanta, Romania, 2013
 - Assistant-professor, Gheorghe Asachi Technical University of Iasi, Romania, 2014
 - Associate-professor, Transilvania University of Brasov, Romania, 2015
 - Assistant-professor, Gheorghe Asachi Technical University of Iasi, Romania, 2015
 - Lecturer, Gheorghe Asachi Technical University of Iasi, Romania, 2016, 2017

Member of the Board of Power Engineering Department, 2016 – 2020
 Member of the Board of Faculty of Electrical Engineering, 2016 – 2020
 Member of the Ethics Committee, Faculty of Electrical Engineering, 2016 – 2020
 Member of the Senate of Gheorghe Asachi Technical University of Iasi, 2016 – 2020
 Member of the R&D Committee, Senate of Gheorghe Asachi Technical University of Iasi, 2016 – 2020
 Secretary of the International Relations and University Image Committee, Senate of Gheorghe Asachi Technical University of Iasi, 2016 – 2020

Professional memberships :

- Athens Institute for Education and Research – Electrical Engineering Research Unit
- Fuse Club
- Marie Curie Fellows Association (MCFA)
- Marie Curie Alumni Association (MCAA)
- Romania Engineers General Association (AGIR)
- Romania Inventors Association affiliated to International Federation of Inventor's Association (IFIA)
- Technical Committee TC 32/SC 32B (Low-voltage fuses) of International Electrotechnical Commission (IEC)
- Technical Committee SR 32B (Low-voltage fuses) of European Committee for Electrotechnical Standardization (CENELEC)

Erasmus Mundus Academic Staff Mobility Program, Faculty of Engineering, University of Peradeniya, Sri Lanka, 2015, 2016

Professorship of Institute of Electrical Engineering, Chinese Academy of Sciences, Beijing, China, 2016

Member of the three PhD Committee at Stefan cel Mare University of Suceava, Romania, in 2012, 2013 and 2014

Foreign Evaluator of PhD Thesis, Capital University of Science & Technology Islamabad, Pakistan, 2016

Foreign Expert Evaluator of the international research project: Research of sustainable power engineering and energies in transportation, smart industry and society, cod: OPVal-VA/DP/2016/1.2.1-03, Slovak Republic, 2016

National Expert Evaluator for research projects, PN III, Solutions, TE (Young Teams) 2017, PD (Postdoctoral) 2018

Member of the Editorial Board of the International Review on Modelling and Simulations (IREMOS), Praise Worthy Prize Publishing House, Italy

Technical Consultant for the following companies:

- PETRA – manufacturing of toroidal transformers (Romania)
- Sangari Engineering Services – Romanian Branch of Sangari International Group (experts in educational, research and technological equipment)
- Moeller Electric – Romanian Branch of Moeller an Eaton Brand
- GP SUN POWER – photovoltaic technology (Italy)
- Danieli Engineering –Romanian Branch of Danieli Group (Italy)
- SONOVISION - Romanian Branch of SONOVISION Group (French)
- Cited in: Dictionary of Contemporary Romanian Inventors , vol. III, RISOPRINT Publishing House, Cluj Napoca, pp. 379-388, 2012 – Publication issued under the Academy of Technical Sciences of Romania - Cluj Branch