



Europass Curriculum Vitae



Personal information

First names / Surname

Elena Enescu

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Nationality

Romanian

Date of birth

October 7th, 1949, Bucharest, Romania

Gender

Female

Employment / Occupational field

**National Institute for Research and Development in Electrical Engineering
ICPE – CA (INCDIE ICPE – CA)**

Work experience

Dates	2004 – present
Occupation or position held	Technical Director, Senior scientific researcher, 1 st degree, Ph.D.
Main activities and responsibilities	Director of the nucleus R&D programmes from INCDIE ICPE-CA; Coordinator of research projects for hydrogen storage materials (Mg with Ni, Fe); Coordinator of research projects for magnetic and conductive nanomaterials (Co, CoNi, CoAg, CoAl ₂ O ₃) obtained by sol-gel procedure or magnetron sputtering used for new devices; 2009-2011 Technical Manager for the acquiring of equipment in the project POS CCE 221 104/2008.
Name and address of employer	INCDIE ICPE-CA, 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research and management activity
Dates	2001-2004
Occupation or position held	Deputy Director, Senior scientific researcher, 1 st degree
Main activities and responsibilities	Coordinator of research projects for electrical materials, magnetic and conductive materials Member of research group for carbonic composite materials; Deputy Director of SC ICPE-CA SA
Name and address of employer	SC ICPE-CA SA, 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research and management activity
Dates	1999-2001
Occupation or position held	Head of Electrotechnical Materials Department, Senior scientific researcher, 1 st degree
Main activities and responsibilities	Management of the Electrotechnical Materials Department with 5 laboratories (conductive materials, magnetic materials, carbonic materials, ceramic materials, materials characterization) with ~120 employees
Name and address of employer	Research Institute for Electrical Engineering, ICPE, Department of Electrotechnical Materials, 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research and management activity
Dates	1997-1999
Occupation or position held	Head of Quality Assurance for Electrotechnical Materials Department Deputy Head of Electrotechnical Materials Department, Senior scientific researcher, 2 nd degree

Main activities and responsibilities	Research and quality assurance activity
Name and address of employer	Research Institute for Electrical Engineering, ICPE, Department of Electrotechnical Materials, 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research activity, AC activity
Dates	1995-1999
Occupation or position held	Senior scientific researcher, 2 nd degree
Main activities and responsibilities	Coordinator of internal research projects for soft magnetic materials on iron basis obtained by powder metallurgy techniques as sintered or bonded cores
Name and address of employer	Research Institute for Electrical Engineering, ICPE, Department of Electrotechnical Materials 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research activity
Dates	1990-1995
Occupation or position held	Senior scientific researcher, 3 rd degree
Main activities and responsibilities	Responsible of research projects that focused on obtaining acicular powders for recording media with small coercitivity, 300 Oe of $\gamma\text{Fe}_2\text{O}_3$, CO- $\gamma\text{Fe}_2\text{O}$ type and recording media with high coercitivity, 3000 Oe of $\text{BaFe}_{12}\text{O}_{19}$ type, magnetic memories for displacement sensors.
Name and address of employer	Research Institute for Electrical Engineering, ICPE, Department of Electrotechnical Materials 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research activity
Dates	1973 - 1990
Occupation or position held	Junior scientific researcher from 1977, Chemist Engineer
Main activities and responsibilities	Responsible of some research projects and contracts execution for electrical contacts based on silver for air switching devices (AgCdO, AgNi, AgNiC, AgW). Participant in different research projects and contracts execution
Name and address of employer	Research Institute for Electrical Engineering, ICPE, Department of Electrotechnical Materials 313 Splaiul Unirii, 030138, Sector 3, Bucharest, Romania
Type of business or sector	Research activity
Education and training	
Dates	2007
Title of qualification awarded	Ph.D. in Electrical Engineering
Principal subjects/occupational skills covered	Title of thesis: "Soft magnetic composite materials- new theoretical development, experiment and applications"
Name and type of organisation providing education and training	Politechnica" University of Bucharest, Faculty of Electrical Engineering
Level in national or international classification	ISCED 6
Dates	1968-1973
Title of qualification awarded	Chemist engineer
Principal subjects/occupational skills covered	Degree in Inorganic Chemistry, 1973
Name and type of organisation providing education and training	Politechnical Institute of Bucharest, Faculty of Industrial Chemistry
Level in national or international classification	ISCED 6
Dates	1997
Title of qualification awarded	Certificate
Principal subjects/occupational skills covered	Powder metallurgy specialisation
Name and type of organisation providing education and training	HÖGANÄS, Suedia
Level in national or international classification	ISCED 5

Personal skills and competencies

Mother tongue

Romanian

Other language(s)

Self-assessment
European level (*)

French

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competencies

Organisational skills and competencies

teamwork, increased ability to adapt, communicative, serious, ambitious

- Management in R&D activities
- Director of the NUCLEUS R&D programmes ("EMATADUR", "MATER", "INGENIOS") of INCDIE ICPE-CA
- Coordinator of over 30 projects in the national programmes: ORIZONT 2000, RELANSIN, MATNANTECH, CERES, INOVARE, CEEX, PARTENERIATE (1993 - 2010)
- Participant in project POS CCE O2.1.1 "Advanced Research for the development of heat resistant carbographic materials subjected to irradiation, with high lifetime for sealing rings" – CARBOTIR
- Participant in project NATO SfP no. 972414, „Carbon-ceramic composite materials with application in electrical engineering”, 2000-2003
- Participant in project NATO Science for Peace (SfP) no. 974083 - „Improvement of Low Voltage Vacuum Circuit Breaker on the Basis of Vacuum Switching Electric Arc Investigation”, acronym LOVARC, 2000 – 2004
- Participant in bilateral project, Contract no. 4131/2003, between INCDIE ICPE-CA, Bucharest, Romania and IMT Ljubljana - Republic of Slovenia – “Ecological recycling technologies of the fine grained scrapes in the form of slimes wastes resulted from the steel working industry”, 2004 – 2005
- Participant in project FP6 - SSA- INDUMAT, Contract no. 17240/2004 – „Strengthening of the RDT potential for advanced material and composites to enhance the performance of the electrical industry”, 2004 – 2007
- Participant in FP7 – REGPOT / Contract no. 229906/2009 - „Developing RDT potential of INCDIE ICPE-CA in the field of hydrogen and fuel cell technologies”, 2009 - 2012
- Technical Manager for the acquiring of equipment in the project POS CCE 221 104/2008 - Structural funds

Technical skills and competencies

Obtaining of micro/nanomaterials by chemical synthesis, mechanical homogenization or mechanical milling

Obtaining of different products by conventional powder metallurgy techniques

Computer skills and competencies

Basic computer works in Microsoft Office (Word, Excel, PowerPoint), internet

Other skills and competencies

- 1985 – Intellectual property course;
- 1993 – 1994 –Management and book-keeping course;
- 1995 - Quality assurance specialisation;
- 2001 - Top Management”, Austria, Chamber of Commerce from Vienna;
- 2004 – “Realizing National Research Potential: Advanced Training in Effective Science Management”, EARMA.
- 2008 – “Allocation and efficient management of EU funds”- European Academy for Taxes, Economics & Law, 2008, Berlin, Germany;
- Participation to international scientific meetings: Paris, France 1994; Praga, Cehia 1990, 1996; Granada, 1998, Oviedo, 2001, Leeds, 2003 England, Barcelona, 2009, Spain, Turkey 2005, Portugal 2008, Nurenberg, 2010, Germany, Switzerland 2010, etc.

Driving licence

Type B

Additional information

Member of professional associations:

- IEEE Senior Member;
- Member of the Romanian Society of Powder Metallurgy;
- Member of the Romanian Society of Magnetic Materials;
- Member of the Romanian Society of Ceramic Materials
- Member of the Mirror Group of the European Platform for "Hydrogen and Fuel Cells, 2004 – 2008.

Publications:

- Number of paper and communication in refereed journals: over 90;
- Number of paper and communication to international meetings or journals: 47;
- Number of books: 2 and 1 chapter in book;
- Number of patents: 25 Romanian patents;
- Number of citations of papers in ISI journals: 8 in ISI Web of Knowledge and Scopus (h-index of 2);
- Number of awards: 9

ISI quoted published articles:

- 1) M. Lungu, E. Enescu, F. Grigore, N. Buruntia, M. Lucaci, G. Rimbu, C. Panzaru, C. R. Ionescu, "Chemical Preparation and Properties of Some High Concentrated Colloidal Silver Solutions for Antimicrobial Applications", *Revue Roumaine de Chimie*, 2011, in review.
- 2) V. Tsakiris, W. Kappel, E. Enescu, G. Alecu, F. Albu, F. Grigore, V. Marinescu, M. Lungu, "Characterization of Al matrix composites reinforced with alumina nanoparticles obtained by PM method", *JOAM*, Vol. 13, Issue 9, p. 1172 – 1175, ISSN 1454-4164, ISI impact factor in 2010 of 0.412, relative influence score of 0.3299;
- 3) S. Gavriliiu, M. Lungu, E. Enescu, L. Gavriliiu, "Composite nanopowder for antibacterial textiles", *Review "Industria Textilă"*, Vol. 61, No. 2, April 2010, p. 86 - 90, ISSN 1222-5347, ISI impact factor in 2009 of 0.364
- 4) S. Gavriliiu, M. Lungu, E. Enescu, S. Nitu, D. Patroi, "A Comparative Study Concerning the Obtaining and the Using of Some Ag-CdO, Ag-ZnO and Ag-SnO₂ Sintered Electrical Contact Materials", *OAM – RC*, vol. 3, issue 7, July 2009, p. 688 – 692, ISSN 1842-6573, ISI impact factor in 2009 of 0.451, relative influence score of 0.2268;
- 5) S. Gavriliiu, M. Lungu, E. Enescu, F. Grigore, C. R. Ionescu, "Stable colloidal silver solutions for different applications", *OAM – RC*, vol. 3, issue 6, June 2009, p. 634 - 637, ISSN 1842-6573, ISI impact factor in 2009 of 0.451, relative influence score of 0.2268;
- 6) E. Enescu, P. Lungu, I. Pasuk, G. Stoian – "The Synthesis of Nanocrystalline Mg-Ni Alloys for Hydrogen Storage", *Journal of Optoelectronics and Advanced Materials (JOAM)*, vol. 8, nr. 2, p. 699 - 701, 2006, ISSN 1454-4164, ISI impact factor in 2006 of 1.106, relative influence score of 0.3299;
- 7) E. Enescu, P. Lungu, S. Marinescu, P. Dragoi – "The Effect of Processing Conditions on Magnetic and Electric Properties of Composite Materials used in Nonconventional Magnetic Circuits", *Journal of Optoelectronics and Advanced Materials (JOAM)*, vol. 8, no. 2, 2006, p. 745 – 748, ISSN 1454-4164, ISI impact factor in 2006 of 1.106, relative influence score of 0.3299;
- 8) M. Lungu, S. Gavriliiu, T. Canta, M. Lucaci, E. Enescu, „AgSnO₂ Sintered Electrical Contacts with Fine and Uniform Dispersed Microstructure”, *Journal of Optoelectronics and Advanced Materials (JOAM)*, Vol. 8, No. 2, April 2006, p. 576 – 581, ISSN 1454-4164, ISI impact factor in 2006 of 1.106, relative influence score of 0.3299;
- 9) S. Gavriliiu, M. Lungu, M. Lucaci, E. Enescu, "New WAg Electrical Contacts with Ultrafine Structure for Low Voltage Devices", *Journal of Optoelectronics and Advanced Materials (JOAM)*, Vol. 8, No. 2, April 2006, p. 702 – 707, ISSN 1454-4164, ISI impact factor in 2006 of 1.106, relative influence score of 0.3299.

Published books:

- 1) E. Enescu, M. Lungu, S. Gavriliiu, „Treatise of metallic materials science and engineering”, Vol. 3 – *Metalls. Alloys. Special Materials. Composite Materials*, Subchapters 20.1 – 20.4 (Electrical Materials), edited by AGIR, 2009, p. 1069 – 1113, ISBN 987-973-720-261-1/987-973-720-064-0.
- 2) E. Enescu, „Soft Magnetic Composites”, Vol. 1, „Theoretical Considerations”, edited by PRINTECH, Bucharest, ISBN 978-606-521-147-6, 2008;
- 3) E. Enescu, „Soft Magnetic Composites”, Vol. 2, „Obtaining and Characterization”, edited by PRINTECH, Bucharest, ISBN 978-606-521-149-0, 2008.
- 4) E. Enescu, M. Lungu, S. Gavriliiu, M. Sasu, „Electrical Contacts”, edited by PRINTECH, Bucharest, 2008, 178 pages, ISBN 978-606-521-148-3.

Patents:

- 1) V. Tsakiris, E. Enescu, M. Lucaci, G. Alecu, Fl. Albu, M. Lungu, Fl. Grigore – "Process for obtaining a composite material based on aluminium with alumina nanoparticles", Patent Request at OSIM No. A/00711 of 20.07.2011.
- 2) S. Gavriliiu, M. Lungu, E. Enescu, M. Lucaci, „Process for obtaining AgSnO₂ sintered electrical contacts with optimized microstructure”, patent RO 122445 of 30.06.2009.
- 3) C. Banciu, G. A. Rimbu, E. Enescu, A. M. Bondar, I. Stamatina, "Nanocomposite carbon material", patent RO 122293 of 30.03.2009.
- 4) S. Gavriliiu, M. Lungu, E. Enescu, "Composite nanostructures of silver-metal oxide type with antimicrobial activity and process for their obtaining", Patent Request at OSIM No. A/01079 of 23.12.2009.
- 5) M. Lucaci, E. Enescu, P. Lungu-Dodu – "Process for obtaining hydrogen storage materials", Patent Request at OSIM No. A/00637 of 13.08.2009.

- 6) M. Lucaci, E. Enescu, V. Tsakiris – "Process for obtaining shape memory materials of NiTi alloyed intermetallic compound type", Patent Request at OSIM No. A/00638 of 13.08.2009.
- 7) Iordache I., A. Bondar, I. Stamatina, E. Enescu, I. Poenaru, "Carbon/ceramic composite material for volume resistors", patent RO 121205 of 30.01.2007.
- 8) I. Iordache, A. Bondar, I. Stamatina, E. Enescu, I. Poenaru "Process for obtaining of some composite magnetic materials with shielding properties", patent RO 121204 of 30.01.2007.
- 9) S. Gavrilu, E. Enescu, "Process for obtaining AgSnO₂ sintered electrical contacts", patent RO 120853 of 30.08.2006.
- 10) S. Gavrilu, E. Enescu, „Process for recovering scale slurries from steel rolling”, patent RO 120616 of 30.05.2006.
- 11) C. Banciu, G. Rimbu, A. Bondar, E. Enescu, I. Stamatina, "Nanocomposite material transparent at electromagnetic waves", Patent Request at OSIM no. 00096 of 11.02.2005.
- 12) S. Marinescu, E. Enescu, M. Popescu, "Monophase asincron micromotor with shielded poles with monocoil", Patent Request at OSIM no. 00305 of 31.03.2005.
- 13) Gh. Hahui, V. Licu, N. Vasile, E. Enescu, „Motor vehicle starter coil with core of powders based on iron”, patent RO 117578.
- 14) E. Enescu, E. Soptea, C. Cazac, S. Jipa, C. Popa, „Process for obtaining fluorescent magnetic powders”, patent RO 117456.
- 15) E. Enescu, E. Soptea, W. Kappel, S. Alexandru, „Process for obtaining some magnetic components with memory”, patent RO 116754.
- 16) E. Enescu, E. Cristescu, E. Soptea, S. Gavrilu, „Process for obtaining acicular powders of γ Fe₂O₃ modified with cobalt”, patent RO 116733.
- 17) E. Enescu, E. Cristescu, E. Soptea, S. Gavrilu, „Process for obtaining fine powders barium ferite substituted with cobalt, zirconium and zinc, patent RO 116713.
- 18) E. Enescu, E. Soptea, W. Kappel, N. Buiescu, „Process for obtaining magnetoplastic composites for soft magnetic cores”, patent RO 112321.
- 19) S. Gavrilu, P. Roman, E. Enescu, E. Soptea, L. Marinete, L. Teodorescu, P. Dragus, „Process for obtaining sintered electrical contacts with reduced content of precious metal”, patent RO 101820, applied at SC Sinterom SA and ICPE.
- 20) E. Enescu, „Process for obtaining sintered electrical contacts of AgNiC and AgCuC with improved structure”, patent RO 98511, applied at SC Sinterom SA and ICPE.
- 21) E. Enescu, „Process for obtaining sintered electrical contacts of AgNiC with oriented structure”, patent RO 98510, applied at ICPE.
- 22) E. Enescu, „Process for obtaining sintered electrical contacts of silver-metallic oxides”, patent RO 89306, applied at ICPE.
- 23) E. Enescu, S. Gavrilu, P. Roman, "Process for obtaining sintered contacts of silver-cobalt", patent RO 89305, applied at ICPE.
- 24) E. Enescu, S. Gavrilu, P. Roman, E. Soptea, L. Teodorescu, „Process for obtaining sintered electrical contacts of AgNiC with fine dispersed structure”, patent RO 98509, applied at ICPE.
- 25) E. Enescu, „Process for obtaining sintered electrical contacts of AgNiC”, patent RO 80776, applied at SC Electroputere Craiova.

Awards:

- 1) **Diploma with Gold Medal** at "The 55th World Exhibition of Innovations, Research and New Technologies", EUREKA 2006, Brussels, Belgium, 17 - 23.11.2006, for the Patent No. 122,445.
- 2) **Diploma with Silver Medal** at "The 34th International Exhibition of Innovations, New Techniques and Products", Geneva, Switzerland, 5 - 9.04.2006 for the Patent No. 122,445.
- 3) **Diploma with Gold Medal** at "The 33th International Exhibition of Innovations, New Techniques and Products", Geneva, Switzerland, April 2005 for the Patent No. RO 121205.
- 4) **Diploma with Gold Medal** in "The 54th World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2005, Brussels, Belgium, for the Patent No. RO 121205.
- 5) **Diploma with Bronze Medal** in "The 53th World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2004, Brussels, Belgium, for the Patent No. RO 120616.
- 6) **Diploma with Silver Medal** in "The 52th World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2003, Brussels, Belgium, for the Patent No. RO 120853.
- 7) **Diploma with Gold Medal** at "The 30th International Exhibition of Innovations, New Techniques and Products", Geneva, Switzerland, April 2002, for the Patent No. RO 117578.
- 8) **Diploma with Gold Medal** in Innovations Salon, Iasi, 2002, for the Patent No. RO 120616, granted by the Romanian Academy, Commission of Innovations.
- 9) **Excellence Diploma** for the High Scientific and Technological Level for Manufacturing Ecological Sintered Electrical Contacts, CONRO 2002, granted by Ministry of Education and Research.

Date: October 11th, 2011

Dr. Eng. Enescu Elena