



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Elena Mănăilă (Cirstea, Mateescu)**

Address(es) Bucharest, Romania

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Nationality Romanian

Date of birth 28.12.1974

Gender F

Desired employment / Occupational field

**Research
Senior Scientist**

Work experience

Dates	May 2001 to present
Occupation or position held	Senior Researcher (3 rd degree)
Main activities and responsibilities	<ol style="list-style-type: none">1. Interaction of accelerated electrons and microwaves with matter2. Chemical synthesis and material processing in electron beam and microwave fields3. Electron beam chemical dosimetry4. Characterization of polymers and elastomers by chemical methods, spectrophotometry and infrared spectroscopy5. Head of Electron Accelerator Laboratory, october 2010 – march 20116. Project Manager of 4 research projects (see Annex 1)
Name and address of employer	National Institute of Research-Development for Laser, Plasma and Radiation Physics Bucharest – Electron Accelerator Laboratory, 409 Atomistilor St., PO Box MG-36, Bucharest-Magurele, Romania; Telephone: +40-21-457-44-69; Fax: +40-21-457-42-43
Type of business or sector	Scientific research and development
Dates	May 2000 – May 2001
Occupation or position held	Scientific Researcher
Main activities and responsibilities	<ol style="list-style-type: none">1. Interaction of accelerated electrons and microwaves with matter2. Electron beam chemical dosimetry3. Research activities as a team member of research projects (see Annex 1)
Name and address of employer	National Institute of Research-Development for Laser, Plasma and Radiation Physics Bucharest – Electron Accelerator Laboratory, 409 Atomistilor St., PO Box MG-36, Bucharest-Magurele, Romania; Telephone: +40-21-457-44-69; Fax: +40-21-457-42-43
Type of business or sector	Scientific research and development
Dates	September 1998 – May 2000
Occupation or position held	Research Assistant
Main activities and responsibilities	Applications of accelerated electrons in materials processing
Name and address of employer	National Institute of Research-Development for Laser, Plasma and Radiation Physics Bucharest – Electron Accelerator Laboratory, 409 Atomistilor St., PO Box MG-36, Bucharest-Magurele, Romania; Telephone: +40-21-457-44-69; Fax: +40-21-457-42-43
Type of business or sector	Scientific research and development

Education and training

Dates	1999 – 2004
Title of qualification awarded	PhD in Engineering Sciences – Chemical Engineering
Principal subjects/occupational skills covered	Thesis title: <i>Synthesis of new materials by radioinduced or microwave polymerization and crosslinking</i> Chemistry and technology of macromolecular compounds
Name and type of organisation providing education and training	“Politehnica” University of Bucharest, Romania
Dates	1998 – 1999
Title of qualification awarded	MSc in Chemistry and technology of macromolecular compounds
Name and type of organisation providing education and training	“Politehnica” University of Bucharest, Faculty of Industrial Chemistry, Romania
Dates	1993 – 1998
Title of qualification awarded	BSc in Chemistry, Chemistry and technology of macromolecular compounds
Name and type of organisation providing education and training	“Politehnica” University of Bucharest, Faculty of Industrial Chemistry, Romania

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level ()*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Threshold	C1	Threshold	C1	Threshold	C1	Threshold	C1	Threshold

(*) *Common European Framework of Reference for Languages*

Social skills and competences	Good team spirit gained through my work experience within research groups in different projects Good communication skills developed through my experience as member of different project team and participant in workshops, symposia and conferences Hard-worker and open mind
Organisational skills and competences	Experience in team and project management, coordination and administration; leadership competences gained through my work experience in different projects and as Head of Electron Accelerator Laboratory Good sense of organization developed through my work at the scientific publications as well as through my experience in coordination and administration of Electron Accelerator Laboratory
Technical skills and competences	Expertise in research and development regarding chemical synthesis and material processing in electron beam and microwave fields, electron beam chemical dosimetry, characterization of polymers and elastomers by chemical methods, spectrophotometry and infrared spectroscopy Development of scientific publications Analytical skills developed through my experimental research work
Computer skills and competences	Good command of Microsoft Office tools (Word, Excel, PowerPoint, and Outlook) Good knowledge of specialised scientific tools (Origin, CaryWin, Opus) Good Internet use
Driving licence	Category B, since, december 2008

Additional information

Additional Education, Qualification or Specialization

- *Validation and Process Control for Electron Beam Sterilization* (course and training on electron beam dosimetry using dosimetric systems as calorimeters, radiochromic films and alanine), Riso High Dose Reference Laboratory, Riso-DTU and Technical University of Denmark, Riso, Denmark, 08-15 June, 2008
- *Radioprotection at the use of particle accelerators - Level 2*, National Institute of Research-Development for Nuclear Physics and Engineering "Horia Hulubei", Bucharest, Romania, May 24 – June 9, 2006

Head of Electron Accelerator Laboratory, october 2010 – march 2011

Project Manager of 4 projects (see Annex 1)

Project Member, 1999 to present, in 17 projects (see Annex 1)

Publications: 35 publications in scientific journals and *in proceedings* (*ISI Web of Knowledge indexed papers*), 21 refereed papers in scientific journals, 6 chapters in scientific books, 102 papers in Proceedings of scientific meetings, symposia, workshops or conferences (see Annex 2)

Patents: 2 patents in press and 3 patent applications (see Annex 3)

Annexes

Annex 1: List of projects

Annex 2: List of publications

Annex 2: List of patents

List of projects

I. Project manager

1. October 2005 – September 2008
 - Title: *Rubber materials obtained by new, complex methods of crosslinking and grafting by irradiation with accelerated electrons and microwave in presence of polyfunctional monomers*
 - Financed under the CEEX Program (project competition), by the Romanian Research Authority: Project CEEX-CALIST 6112/2005
2. October 2004 – July 2006
 - Title: *Study of changes induced by irradiation with accelerated electrons and microwave on sanguine proteins*
 - Financed under the National Research, Development and Innovation Program (project competition), by the Romanian Research Authority: Project PNCDI-CERES 4-145/2004
3. October 2003 – September 2005
 - Title: *Study of dose rate effect on radiochemical yield in radical processes induced by accelerated electron beam irradiation*
 - Financed by the Romanian Research Authority: Project NUCLEU-LAPLAS PN 03 – 17 05 04
4. October 2003 – March 2005
 - Title: *Effects of electrons and microwaves irradiation on properties of some biomaterials with applications in medicine*
 - Financed under the National Research, Development and Innovation Program (project competition), by the Romanian Research Authority: Project PNCDI-MATNANTECH 131(303)/2003

II. Member in other national projects

1. PN II-PARTNERSHIPS in Strategic Fields 21-025/2007: Increase of conversion performance of acidic gases from industrial gases by combined treatment with accelerated electrons and microwave (October 2008 – September 2010)
2. PNCDI II-PARTNERSHIPS in Strategic Fields 71-055/2007: Monitoring system of X, gamma, neutron irradiation levels and alpha-beta contamination, with data tele-transmission, for radiologic risks regions (October 2008 – September 2010)
3. PN II-PARTNERSHIPS in Strategic Fields 61-9/2007: Immunological staging and monitoring in skin malignant melanoma – innovative methods of diagnosis (October 2008 – September 2010)
4. CEEX-BIOTECH 34/2005: Elaboration of a biotechnology for specific prophylaxis of ruminant infectious pododermatitis, produced by *Fusobacterium necrophorum*, by using accelerated electrons and microwaves (October 2005 – September 2008)
5. CEEX-VIASAN PC-D01-PT11-827/2005: Innovative therapies for treatment of some cancers by synergetic action of some bioactive compounds, accelerated electrons and microwave (October 2005 – September 2008)
6. CEEX-RELANSIN 55/2005: Removal of volatile organic compounds from gases by combined treatment: accelerated electrons and microwaves (October 2005 – September 2008)
7. CEEX-RELANSIN 54/2005: Development of methods for recovery of nanometric powders from industrial gases emissions (October 2005 – September 2008)
8. NUCLEU-PN.60.36.05.01: Sanitation of depreciated foods by modern methods with accelerated electrons and microwave (October 2005 – September 2008)
9. MATNANTECH 206(403)/2004: Synthesis of bio-gels for electrophoretic separation of serum proteins with application in diagnosis and therapy (October 2004 – September 2006)
10. NUCLEU-LAPLAS 03 – 17 05 01: Research of some new effects of combined interaction of accelerated electrons and microwaves with matter, having applications in environment protection and medicine (October 2003 – September 2005)
11. PNCDI-BIOTECH 3307/2003: Effects study of combined irradiation with accelerated electrons and microwaves on some products with food and therapeutic utilization (October 2003 – June 2005)
12. MATNANTECH C97(203)/2002: Biocompatible polyelectrolytes for potable water treatment, synthesized by irradiation with accelerated electrons and microwave (December 2002 – July 2004)
13. MENER 067/2001: Researches and development engineering in order to elaborate a modern technology for simultaneous retention of sulphur and nitrogen oxides using "cold plasmas" (December 2001 – July 2004)
14. MENER 066/2001: Researches and development for realization of an experimental model required to establish the simultaneous retention technology for sulphur and nitrogen oxides using microwaves and accelerated electrons (December 2001 – June 2004)
15. RELANSIN 1048/2001: Technology for retention of gaseous pollutants (NO_x, SO₂ and CO₂) from industrial gaseous (April 2001 – October 2002)
16. RELANSIN 586/2000: Demonstrative installation for the establishing of technologies of retention of sulphur and nitrogen oxides by combined systems, microwave and short impulses (November 2000 – November 2002)
17. RELANSIN 450/1999: Realization of technology of polymeric materials synthesis by accelerated electron irradiation, for depollution of wastewaters (December 1999 – December 2002)