



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **HRISTEA GABRIELA**
Address(es) 34 Tg. Neamt, Bucharest, Romania
Telephone(s)
Fax(es) 40213468299
E-mail ghristea@icpe-ca.ro

Nationality romanian

Date of birth 06.09.1968

Gender female

Work experience

Dates **2011**

Occupation or position held **Senior researcher I**

- Main activities and responsibilities
- Conducting research projects which have been focused on: carbon *nanoparticles/nanomaterials* synthesis and modeling for development and improvement of new and existing products/materials, e.g: carbon aerogels/xerogels for different industrial applications(water treatments), carbon nanowhiskers for fuels cell and catalysis processes,)
 - Developing interactive heating elements based *nanocarbons* for textile structures: evaluate technical performance of thermochromic dyes in conjunction with integrated heating mechanisms;
 - Research in *carbon sensors* development for multifunctional textiles: (perspiration sensors and a device for biological motilities sensing)
 - Development, improvement and customizing carbon based products, formulas and processes
 - Promotion of research links with outside bodies- participating at national and international trade fairs;
 - Write technical papers and reports; and prepare standards and specifications for processes, facilities, products, and tests
 - Confer with scientists and engineers to conduct analyses of research projects, interpret test results, and develop nonstandard tests.

Name and address of employer National Institute for Research & Development in Electrical Engineering ICPE - Advanced Research
Bucharest, INCDIE ICPE CA, Splaiul Unirii, no. 313, code 030138

Type of business or sector Research and Development

Dates **2002-2010**

Occupation or position held **Senior researcher II**

- Main activities and responsibilities
- Development, improvement and customizing carbon based products, formulas and processes.

	<ul style="list-style-type: none"> ❑ Conducting research projects which have been focused on: carbon nanoparticles/nanomaterials synthesis and modeling for development and improvement of new and existing products/materials, e.g: carbon aerogels/xerogels for different industrial applications, carbon nanowhiskers for <i>fuels cell and catalysis processes</i>, expandable graphite for waste oil recovery, graphite intercalated compounds for <i>biological applications</i> (see annex 1) ❑ Research in the field of <i>nanoporous carbons</i>: inducement and control of nanoporosity in carbon systems; development of carbon nanoparticles for <i>hydrogen storage</i> ❑ Micro/nanostructured <i>carbon materials</i> for natural <i>anti-oxidants biosynthesis</i>. (in vitro cultures) ❑ Research and development of <i>carbon biofilters</i> and new <i>carbon additives</i> for vegetal cell cultures (optimization of micropropagation processes in woody plants- vegetal cell cultures modified with carbon nanocomposites for rooting inducement and increasing of micropropagation)
Name and address of employer	National Institute for Research & Development in Electrical Engineering ICPE - Advanced Research Bucharest, INC DIE ICPE CA, Splaiul Unirii, no. 313, code 030138
Type of business or sector	Research and Development
Dates	1998-2002
Occupation or position held	Senior researcher III
Main activities and responsibilities	<ul style="list-style-type: none"> ❑ Research in porous carbon materials for oil sorption ❑ design and control of micro/nanostructured carbon materials with enhanced properties for biological application ❑ Conductive carbon substrates designed for cellular cultures growth; developing of carbon composites resisting at thermal shock used in microreactors structures; Synthesis of new carbon additives for different biotechnologies ❑ Direct, coordinate, and advise personnel in test procedures for analyzing components and physical properties of materials. ❑ Prepare test solutions, compounds, and reagents for laboratory personnel to conduct test.
Name and address of employer	Research Institute for Electrical Engineering, ICPE - Advanced Research: ICPE CA Bucharest, Splaiul Unirii, no. 313, code 030138
Type of business or sector	Research and Development
Dates	1995-1998
Occupation or position held	Assistant researcher
Main activities and responsibilities	<ul style="list-style-type: none"> ❑ Carbon/ carbon composites (electrographite, resin-graphite) ❑ Composites with polymer matrix and carbon functional phase. ❑ Prepare test solutions, compounds, and reagents for laboratory personnel to conduct test.
Name and address of employer	Research Institute for Electrical Engineering ICPE SA Bucharest, Splaiul Unirii, no. 313, code 030138
Type of business or sector	Research and Development
Dates	1994-1995
Occupation or position held	Chemical engineer
Main activities and responsibilities	<ul style="list-style-type: none"> ❑ electrographite type materials designed for electrical motors working in hard commutation conditions

□ conducting research as a member of a team and the production of conference and seminar papers and publications

Name and address of employer Research Institute for Electrical Engineering ICPE SA
Bucharest, Splaiul Unirii, no. 313, code 030138

Type of business or sector Research and Development

Education and training

Dates 1994-2001

Title of qualification awarded **PhD**

Principal subjects/occupational skills covered Graphite intercalated compounds/ Synthesis , characterisation, applications

Name and type of organisation providing education and training University Politehnica Bucharest, Faculty of Industrial Chemistry

Level in national or international classification Post-graduate studies

Dates 1989-1994

Title of qualification awarded Chemical engineer diploma, **licence**

Principal subjects/occupational skills covered Carbon chemistry and petrochemistry

Name and type of organisation providing education and training University Politehnica Bucharest, Faculty of Industrial Chemistry

Level in national or international classification University education

1998 - participation at **NATO Advanced Study Institute** courses on: *Design and control of structure of advanced carbon materials for enhanced performance*, Turkey.

2002 - 3 months research stage at **Joint Institute for Nuclear Research, Frank Laboratory of Neutron Physics**, Dubna, Russia. (small angle neutron scattering studies/experiments)

2003-research stage at **Budapesta Neutron Center- Hungarian Academy of Science, Hungary**: (small angle neutron scattering experiments on graphite intercalated compounds)

2009 **IEC (International Electrotechnical Commission) expert-** in Romanian Technical Committee, CT 378- Nanotechnologies-mirror committee: CEI:IEC_TC113, CEN:CEN/TC352, ISO:ISO/TC229

Awards: - Silver medal (medail d'argent): *Salon International Des Inventions, Geneva* 2006, for invention: Carbon material for antocyanines biosynthesis and method of obtaining, authors: G.Hristea, G. Cogalniceanu, A.Brezeanu.

- **Gold Medal Eureka-Trade and International Trade Fair for Technological Innovations, Brussels, 2009** for: Doped carbon xerogel material designed for proton exchange membrane fuel cells, authors: Hristea Gabriela, Alexandru Camelia

Personal skills and competences

Mother tongue(s) Romanian

Other language(s) **A. English; B. Russian**

Self-assessment
European level ()*

Language A

Language B

Understanding		Speaking		Writing	
Listening	Reading	Spoken interaction	Spoken production		
C1	C1	C1	C1	C1	
A1	A1	A1	A1	A2	

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

Social skills and competences

Good abilities for synthetic and global views over concrete situations

- * End-oriented work capacity
- * Problem-solving attitude
- * Responsibility, Self-respect and self-reliance
- * Strong referential values of fairness, equity and dignity
- * Ability to establish and maintain good working relations with people of different national and cultural backgrounds

Organisational skills and competences

Several activities to which I committed myself (see annex 1) gave me the opportunity to exercise, prove and improve my organizational/leading abilities and my social skills as a very organized person with a problem-solving attitude.

Expertise in project writing, budgeting, logical framework design and reporting, as well as consultancy to governmental programme management; relevant experience I gained during my work within different project under the supervision of the team leaders, in Romanian and overseas experienced research institutes

Experience in organizing scientific events (seminars, workshops etc):

1999 – member in organizing committee of International Congress of Coal Petrology '99, held in Bucharest, Romania

2004- member in organizing committee of FECS 2004 Meeting (Federation of European Chemical Society), held in Bucharest, Romania

Technical skills and competences

In-depth knowledge of synthesis (powder metallurgy and sol-gel) and testing/characterization of carbon materials on small and medium scale; Experience in synthesis of nanomaterials by wet chemistry

Experience in synthesis of nanomaterials (carbon related) for hydrogen storage and/or catalytic applications

Solid experience to conduct researches, techniques and processes to develop new compounds or/and materials and to identify the reactive properties of processed materials;

Knowledge of analyzing techniques such as: *Pore and Surface area characterization*- nitrogen adsorption, *Small angle neutron scattering*, *Optical microscopy* –related to *petrographical characterization* of coal and cokes) and determine the relationship between structure and properties of products;

Computer skills and competences

Windows Microsoft Office , MicroCalOrigin

Other skills and competences	<p>since 1994 – member of Romanian Society of Carbon Materials; diploma in Management of Public Research and Development System accorded by AMCSIT-Romania, 2005 participation on general courses regarding- Statistical methods for use in proficiency testing by interlaboratory comparisons. – Bucharest 2005</p> <p>Referent for : Chemical Letters/ American Chemical Society Biochemical Engineering Journal/Elsevier Journal of Thermal Analysis and Calorimetry International Journal of Greenhouse Gas Control</p>
Driving licence	-
Additional information	
Annexes	List any items attached. (Remove heading if not relevant, see instructions)