



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Maria GAVRILESCU**

Address(es) 36 Păcurari Street, 700535 Iasi, Romania

Telephone(s) +40-232-257436 Mobile: +40-745-528184

Fax(es) +40-232-271311

E-mail mgav@ch.tuiasi.ro, mgav_ro@yahoo.com

Nationality Romanian

Date of birth 17.09.1956

Gender Female

Desired employment / Occupational field **Chemical and Environmental Engineering/Director of Idei Project *BIOSORPTION AND BIOACCUMULATION IN THE BIOREMEDIATION OF ENVIRONMENTAL COMPARTMENTS CONTAMINATED WITH PERSISTENT POLLUTANTS (BIOSACC)* PN-II-ID-PCE-2011-3-0559, contract 265/05.10.2011**

Work experience

Dates 1 October 2000 - present

Occupation or position held Professor

Name and address of employer Department of Environmental Engineering and Management, Faculty of Chemical Engineering and Environmental Protection - Gheorghe Asachi Technical University of Iasi, Romania

Main activities and responsibilities *Teaching Activities*
Courses:
Basis of Technological Systems, 3rd year of study to Environmental Engineering in Industrial Environment Protection specialty
Analysis and Synthesis of Technological Processes, 3rd year study to Environmental Engineering in Industrial Environment Protection specialty
Sources, Processes and Pollutant Products, 3rd year study to Environmental Engineering in Industrial Environment Protection specialty
Process Engineering and Specific Operations in Environmental Engineering, 4th year study to Environmental Engineering in Industrial Environment Protection specialty
Chemical and Biological Processes Engineering, 4th year study to Environmental Engineering in Industrial Environment Protection specialty
Integrated Pollution Prevention and Control, 5th year study to Environmental Engineering in Industrial Environment Protection specialty

Master courses:

Modeling and Simulation of Processes for Environmental Protection, Environmental Management master students (Daily and Open Distance Learning courses)

Risk Assessment and Management, Environmental Management master students (Daily and Open Distance Learning courses)

Source Reduction and Waste Minimization, Environmental Management master students (Daily and Open Distance Learning courses)

Legislation in Environmental Protection, Projects Management master students

Sustainable Industrial Production, Environmental Management master students (Daily and Open Distance Learning courses)

Doctoral school:

Elaboration and evaluation of scientific works, within the Doctoral School of the Faculty of Chemical Engineering and Environmental Protection

Postgraduate studies:

Design and implementation of occupational health and safety systems

Socrates/Erasmus agreements: 4

Chemical and Biological Process Engineering (transfer phenomena, unit processes and operations, equipment/apparatus, reactors/bioreactors, process intensification; applications in environmental protection and control; fate and migration of persistent organic pollutant, dyes and heavy metals in the environment, sorption/desorption on biosorbents; modelling and simulation of chemical and biological processes with applications in environmental protection and control)

Biotechnology/Environmental Biotechnology,

Management of Occupational Health and Safety

Risk Assessment and Management and Safety (chemical risk, environmental risk, land-use planning)

Integrated Pollution Prevention and Control (Source Reduction and Waste Minimization), *Sustainable Industrial Production, Eco-design, Eco-technologies, Cleaner Production, Cleaner Products, Sustainable development and resource conservation*

Environmental balances

Department of Environmental Engineering and Management, Faculty of Chemical Engineering and Environmental Protection - *Gheorghe Asachi* Technical University of Iasi, Romania

Research Areas

Chemical and Biological Process Engineering, with applications in environmental protection

• *transfer phenomena in chemical and biological processes:*

- flow of heterogeneous systems in mechanical and pneumatic contactors
- rheology of biological liquids

- mass transfer in mixing vessels, pneumatic contactors, extraction devices, filters, centrifuges

- heat transfer in chemical/biochemical processes and separation-purification operations and processes

• migration and fate of persistent organic pollutants, heavy metals, personal care compounds, dyes in soils and natural sorbents

• *bases of technological systems, analysis and synthesis*

• *intensification of transfer processes in chemical engineering and biotechnology:*

- advanced mixing devices of stirred tank bioreactors

- application of motionless mixers, on pilot and industrial scales, to intensify transfer phenomena;

unit processes and operations in chemical and biological processes, applied in biotechnology and environment protection.

• *new technical systems, (bio)reactors, in chemical and biochemical industrial processes modelling, simulation and optimization of processes, including environmental applications*

Biotechnology/ Environmental Biotechnology,

• *bases of biological reactions; mass conversion assisted by microorganisms or enzymes, depending on transfer phenomena laws and kinetics, microbial strains manipulation in bioreactors, oxygen uptake of microorganisms, microbial agents resistance to shear stress, applications in environmental protection, kinetics and thermodynamics*

- *biological treatment of gaseous and liquid fluxes that contain biodegradable pollutants*
- *environmental bioremediation of components affected by pollution phenomena, (bio)degradation of refractory pollutants*
- *biosorption of heavy metals, persistent organic pollutants on living and non-living biomass (algae, yeasts, vegetable waste)*

Environmental Risk Assessment and Management, Ecological Risks, Industrial Safety

Integrated Pollution Prevention and Control: Practices for Processes, Products, Services (source reduction and waste minimization practices, waste management hierarchy)

Sustainable Industrial Production, Eco-design, Eco-technologies, Cleaner production

Environmental Evaluations (within the group of the Department of Environmental Engineering and Management, attested by the Ministry of the Environment and water Management)

PhD Supervisor since 2002:
Engineering Sciences – *Chemical Engineering*, for 9 PhD students

PhD Supervisor since 2009:
Engineering Sciences – *Environmental Engineering*, for 5 PhD students

Type of business or sector Education and scientific research; active member of the academic community



Dates 1 October 1998 - 30 September 2000

Occupation or position held Associate Professor

Main activities and responsibilities

- teaching activity license cycles, master, doctoral, graduate courses (courses, tutorials, seminars and projects);
- scientific research in Chemical Engineering, Environmental Engineering;
- expert evaluator CNCSIS, ANSTI;
- scientific reviewer for national and international journals;
- student scientific sessions;
- scientific coordinator;
- member of the management office of the Department of Environment Engineering and Management
- member of the licensing exam
- member of the committee to support the work of master thesis in environmental management program, day and ID;
- referent in doctoral committees;
- member of the board exams and papers in preparation for doctoral program;
- member of the faculty admissions committee.

Name and address of employer Department of Environmental Engineering, Faculty of Chemical Engineering, *Gheorghe Asachi* Technical University of Iasi, Romania

Type of business or sector research, design, micro - production



Dates 1996-1998

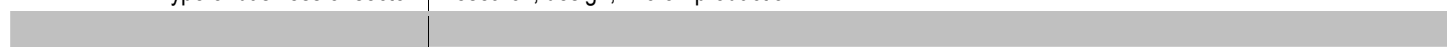
Occupation or position held Senior Scientist II (Associate Professor)

Main activities and responsibilities

- responsible of team biotechnology research on process engineering
- coordination and development of laboratory-scale research studies, pilot, industrial biotechnology and bioengineering processes of biosynthesis of antibiotics, (bio) separations, (bio) purification, unconventional bioreactors and equipment
- management and completion of research projects
- developing and supporting the thesis: Study of heterogeneous systems flow in gas-lift reactors

Name and address of employer Chemical-Pharmaceutical Research Institute/Research Center for Antibiotics, Iasi

Type of business or sector research, design, micro - production



Dates 1990-1996

Occupation or position held Senior Scientist III (Lecturer)

Main activities and responsibilities	<ul style="list-style-type: none"> - biotechnology Process Engineering team responsible - research studies in momentum transfer phenomena, heat and mass in bioreactors - studies on the performance of conventional contact systems, low energy (columns bubbling, gas-lift contactors) applied to the biosynthesis of antibiotics - systems for small mixing energy for in heterogeneous conditions (gas-liquid-solid) - transposition of the scale and bio-reactors bio - processes - rheology of biosynthesized fluids
Name and address of employer	Chemical-Pharmaceutical Research Institute/Research Center for Antibiotics, Iasi
Type of business or sector	research, design, micro - production
Dates	1988-1990
Occupation or position held	Scientific Researcher (Assistant Professor)
Main activities and responsibilities	<ul style="list-style-type: none"> - head of the research team - Biotechnology Process Engineering - management and completion of research projects - research momentum transfer phenomena, mass and heat in heterogeneous systems, non-newtonian, such as antibiotic biosynthesis liquids - the study of conventional and unconventional bio reactors for the biosynthesis of antibiotics applied - study the correlation between oxygen demand of aerobic microorganisms in laboratory, pilot and industrial scale
Name and address of employer	Chemical-Pharmaceutical Research Institute/Research Center for Antibiotics, Iasi
Type of business or sector	research, design, micro - production
Dates	1983-1988
Occupation or position held	Chemical Engineer
Main activities and responsibilities	<ul style="list-style-type: none"> - research in Biotechnology Process Engineering - methods for determining the oxygen demand of aerobic microorganisms in the biosynthesis of antibiotics applied in relation to the dissolved oxygen - methods for characterization and comparison of performance bioreactors.
Name and address of employer	Chemical-Pharmaceutical Research Institute/Research Center for Antibiotics, Iasi
Type of business or sector	research, design, micro - production
Dates	1981-1983
Occupation or position held	Chemical Engineer
Main activities and responsibilities	Leader of working band
Name and address of employer	Artificial Yarns Factory, Braila
Type of business or sector	production
Education and training	
Dates	2005 - Minho University, Braga, Portugal
Title of qualification awarded	Exchange experience
Name and type of organisation providing education and training	Minho University, Braga, Portugal
Dates	2005 - <i>E-learning: formation des formateurs</i>
Title of qualification awarded	Trainer in learning activities platform e-learning
Name and type of organisation providing education and training	<i>University Henry Poincare Nancy, Association of Francophone Universities and Technical University Iasi</i>
Dates	2005 - <i>Eco-certification in tourism</i>
Title of qualification awarded	Postgraduate Certificate participation in Eco-tourism certification

Name and type of organisation providing education and training	Department of Environmental Engineering and Management – Technical University Iasi, Center for research in Tourism, Bucovina Campulung Moldovenesc and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - <i>How to Manage European Funds</i>
Title of qualification awarded	Certificate for intensive participation in How to Manage the European Funds
Name and type of organisation providing education and training	APART Project School and Technical University Iasi
Dates	2004 - <i>Sustainable Tourism, Certification, Ecolabelling</i>
Title of qualification awarded	<i>Sustainable Tourism, Certification, Ecolabelling</i>
Name and type of organisation providing education and training	Department of Environmental Engineering and Management – Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - Ecodesign and Product Innovation
Title of qualification awarded	Participation certificate
Name and type of organisation providing education and training	Department of Environmental Engineering and Management – Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - Waste Management
Title of qualification awarded	Participation certificate
Name and type of organisation providing education and training	Department of Environmental Engineering and Management – Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - Environmental Management Systems Audit: ISO 14001-1996
Title of qualification awarded	Internal Auditor Certificate of Environmental Management Systems ISO 14001:1996
Name and type of organisation providing education and training	Commerce Chamber Iasi and SGS Belgium-Romania
Dates	2003 - "How to Apply with Success in Sixth Framework Programme(FP6)"
Title of qualification awarded	Participation certificate
Name and type of organisation providing education and training	Romanian Ministry of Education-UEFISCSU and Hyperion Ltd. Ireland
Dates	2003 - Exchanges on Curricula
Title of qualification awarded	Documentation visit and experience exchange
Name and type of organisation providing education and training	International Institute of Industrial Environment Economics, Lund, Sweden
Dates	1989 – 1997 PhD Student
Title of qualification awarded	Ph.D. degree in Chemical Engineering Thesis: "Study of heterogeneous systems flow in gas-lift reactors", thesis supervisor Prof. dr. doc. eng. Radu Z. Tudose, Member of Romanian Academy (public defense: 1997), awarded by the Ministry of Education from Romania, "Gheorghe Asachi" Technical University of Iasi, Romania
Name and type of organisation providing education and training	"Gheorghe Asachi" Technical University of Iasi, Romania
Level in national or international classification	ISCED 6
Dates	1988 Engineering biosynthetic processes

Title of qualification awarded | Researcher Certified level III
 Name and type of organisation providing education and training | Chemical-Pharmaceutical Research Institute, Bucharest, Romania
 Dates | 1990 Engineering biosynthetic processes
 Title of qualification awarded | Researcher Certified level II
 Name and type of organisation providing education and training | Chemical-Pharmaceutical Research Institute, Bucharest, Romania
 Dates | 1996 Engineering biosynthetic processes
 Title of qualification awarded | Researcher Certified level I
 Name and type of organisation providing education and training | Chemical-Pharmaceutical Research Institute, Bucharest, Romania

Dates | 1988 - Minicomputers Programming
 Title of qualification awarded | Participation certificate
 Name and type of organisation providing education and training | Computers Center, Iasi, Romania

Dates | 1986 - 1987 - Intensive Course of English Language
 Title of qualification awarded | Participation certificate
 Name and type of organisation providing education and training | "Al.I. Cuza" University of Iasi, Faculty of Philology, Romania

Dates | 1986 - 1987 - Value Analysis
 Title of qualification awarded | Participation certificate
 Name and type of organisation providing education and training | Technical University Iasi, Faculty of Industrial Chemistry, Iasi, Romania

Dates | 1986 - 1987 - Process Optimization in Chemical Industry,
 Title of qualification awarded | Participation certificate
 Name and type of organisation providing education and training | Technical University Iasi, Faculty of Industrial Chemistry, Iasi, Romania

Dates | 1977 - 1981
 Title of qualification awarded | Engineer in Technology of Organic Compounds
 Name and type of organisation providing education and training | Faculty of Industrial Chemistry, "Gheorghe Asachi" Technical University of Iasi, Romania
 Level in national or international classification | ISCED 5

Personal skills and competences

Mother tongue(s) | Romanian

Other language(s)

Self-assessment

European level ()*

English

French

German

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	High experience	C2	High experience	C2	High experience	C2	High experience	C2	High experience
B2	Medium experience	B2	Medium experience	B2	Medium experience	B1	Medium experience	B2	Medium experience
A2	Basic knowledge	A2	Basic knowledge	A2	Basic knowledge	A1	Basic knowledge	A2	Basic knowledge

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

Social skills and competences	Experience in teamwork, in collaboration with other organizations, intercultural relations, mediation in conflict situations, involvement in young students action
Organisational skills and competences	<p>Experience in project management / contract and team diplomacy in motivating employees and interpersonal relationships: Context in which the skills were acquired: The teaching and scientific activities:</p> <ul style="list-style-type: none">- teaching courses, support seminars, laboratory- student scientific sessions organization dedicated to Earth Day (May 1999-2002)- the scientific coordination of student activities (sources, processes, products polluting chemical and biological engineering processes for environmental protection, modeling and simulation of environmental processes, integrated pollution prevention and control, estimation and risk management)- scientific diploma projects and master's thesis (master)- research director of the Center for Environmental Engineering Research and Impact Assessment, Technical University "Gheorghe Asachi" Iasi, accredited CNCSIS- responsible of department collaboration - Programs Department of the "Gheorghe Asachi" Technical University Iasi <p>Activity in academia: 2012 – Founder Member of the <i>Romanian Society of Environmental Science and Engineering</i> 2009 - Member of <i>Romanian Society of Chemistry</i> 2006 - Member of <i>International Organization for Biotechnology and Bioengineering</i>, since 2006 - Member of <i>European Federation of Biotechnology</i> and member of Experts Board of the Environmental Biotechnology Section 2005 - Member of <i>INTERMEDIUNET Romania (INRO)</i>, since 2002 - Member of <i>Alumni, Faculty of Industrial Chemistry</i> since 1991 - Member of <i>Romanian Society of Bioengineering and Biotechnology</i> since 1996 - Member of <i>Romanian Society of Chemical Engineering</i> (president of the filial Iasi) since 1999 - Member of <i>Academic Organization for Environmental Engineering and Sustainable Development</i></p> <p><u>Scientific events organized or member of Scientific Committees</u> <i>The 3rd IASTED International Conference on Environmental Management and Engineering, EME 2011, July 4 – 6, 2011, Calgary, AB, Canada</i> <i>6th Dubrovnik Conference on Sustainable Development of Energy, Water and Environment System, September 25-29, 2011, Dubrovnik, Croatia (membru al the Scientific Advisory Board)</i> <i>The Second IASTED International Conference on Environmental Management and Engineering, EME 2010, July 15 – 17, 2010, Banff, Alberta, Canada</i> <i>International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES June 18-20, 2010, Brasov</i></p>

International Conference on Engineering, Environment, Economics, Safety and Health 2009 (CONVEESH'09), October 26-27, 2009, Organized by Faculty of Technical, Universitas Sam Ratulangi, Manado in Indonesia in Collaboration with Sustainable Architecture and Environment (SENVAR 10th, 2009), Manado, North Sulawesi, Indonesia (member of the International Advisory Committee)

5th Dubrovnik Conference on Sustainable Development of Energy, Water and Environment System, September 30-October 3, 2009, Dubrovnik, Croatia (member of the Scientific Advisory Board)

Fifth International Conference on Environmental Engineering and Management, 15-19 September 2009, Tulcea, Romania (member of the Organizing Committee and of the Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*)

BRAMAT, International Conference on Materials Science & Engineering, 26 – 28 February 2009, Brasov, Romania, Transilvania University of Brasov (member of the Scientific Committee)

The Fifth International Symposium „Advanced Technologies for Pulp and Paper Industry and Environment”, 3 – 5 September 2008, organized by CEPROHART S.A. BRĂILA and Technical Association for Romanian Pulp and Paper Industry (ATICHR)

Fourth International Conference on Environmental Engineering and Management, 13-15 September 2007, (member of the Organizing Committee and of the Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*)

Workshop, Process Engineering and Pollution Prevention, Technical University Vienna, Institute für Verfahrenstechnik, Umwelttechnik und Techn. Biowissenschaften, 24 – 30 august 2007

Third International Conference on Environmental Engineering and Management, 21-24 September 2006, member of the Organizing Committee and of the Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*

Workshop, Process Engineering and Pollution Prevention, Technical University Vienna, Institute für Verfahrenstechnik, Umwelttechnik und Techn. Biowissenschaften, 24 – 30 august 2007

Third International Conference on Environmental Engineering and Management, 21-24 September 2006, member of the Organizing Committee and of the Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*

Second International Conference on Environmental Engineering and Management, 23-26 September 2004, co-chairman, member of the Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*

European Summer School HUMAN ENVIRONMENT: ENERGY, FORESTS, HEALTH AND SOCIETY, organized by University *Henry Poincaré* Nancy, University *Nancy 1* and Technical University „Gh. Asachi” Iasi, 3-10 September 2004

Eco-Design and Product Innovations, Department of Environmental Engineering and Management and IIIIE Lund, Sweden, 2004

Waste management, Department of Environmental Engineering and Management and IIIIE Lund, Sweden, 2004

The 8th Session for Scientific Communications: Actualities in Drug Research, Production and Use, Research Center for Antibiotics, Iasi, Romania, 25-26 May, 1989

Sustainable Tourism - Certification – Ecolabelling, Department of Environmental Engineering and Management and IIIIE Lund, Sweden, 2004

First International Conference on Environmental Engineering and Management, 26-28 September 2002, member of the Organizing Committee and of Scientific Advisory Board, Managing Editor for *Proceedings of the Conference*

The Third Conference of the Faculty of Industrial Chemistry Iasi, 13-15 November 2002, secretary of the Organizing Committee and Managing Editor for *Proceedings of the Conference*

Earth Day, Studentship Scientific Communications, May 1999-May 2002

Sessions for Scientific Research Reports Communications, Research Center for Antibiotics, Iasi, Romania, May, 1984-1986

Process Integration and Design for Pollution Prevention, Workshop organized by the Department of Environmental Engineering and Management, Technical University Iasi and the Department of Biological Engineering, University Minho, Portugal, June 2006

Environmental communication, reporting and transparency in Romania, Workshop organized by the Department of Environmental Engineering and Management, Technical University Iasi and IIIIE, Lund, Sweden, Iasi, May 2006

Management and environmental policy for sustainable production and consumption, Workshop organized by the Department of Environmental Engineering and Management, Technical University Iasi and IIIIE, Lund, Sweden, Iasi, 28-29.10.2005

Image Analysis Applications

2nd Living Knowledge Conference: “Advancing Science and Society Interactions”, Seville 3-5 February 2005

Biological Wastewater Treatment Process, Workshop organized by the Department of Environmental Engineering and Management, Technical University Iasi and the Department of Biological Engineering, University Minho, Portugal, April 2005.

Eco-certification in Tourism, Department of Environmental Engineering and Management and IIIIE Lund, Sweden, Research Center for Tourism, Campulung Moldovenesc, april 2005

Funding Opportunities at National Level, Department of Projects Management, Technical University Iasi, March, 2005

Project manager and member in research themes

- original technologies: 8
 - research themes with industrial companies – 20 (10 as responsible or director, and 10 as member of the research group)
 - national grants: 24 (14 as project director)
 - 10 grants awarded by CNCSIS (6 as director)
 - 6 grants awarded within PNCDI-I (1 AGRAL, 5 CEEEX type)
 - 1 grant awarded within PNCDI-I (IDEI Programme, as director)
 - 6 grants awarded by the Ministry of Research and Technology (as director)
- international grants: 6 (in cooperation)

Technical skills and competences

- processes and operations unit in chemical and biochemical processes with applications in biotechnology and environmental protection: filtration, centrifugation, extraction, distillation, rectification, evaporation and crystallization, adsorption by ion exchange, membrane separation, bioremediation, biosorption

- assimilation of technical systems, (bio) chemical processes and reactors, energy efficient, modernize systems of bioreactors, classical mechanical agitation with mechanical mixing, assimilation of static mixing promoters transposition of scale; applications in environmental engineering

- modeling and simulation of chemical and biological processes, including applications in environmental protection

Biotechnology in environmental protection

- the scientific basis of biological reaction engineering, mass conversion in the presence of microorganisms and / or enzymes according to the laws that describe the transfer, mass and heat and kinetics of biochemical reactions, microbial strains in bioreactors handling, oxygen demand of aerobic microorganisms, stability microbial agents on physical and mechanical factors, environmental applications

- biological treatment of gaseous and liquid effluents containing biodegradable organic pollutants;

- bioremediation of environmental components affected by the pollution phenomenon, (bio) degradation of refractory pollutants, biosorption

- risk assessment and management and technical security engineering

- health and safety

- integrated pollution prevention and control to processes, products

- eco-design services, eco-technology and clean production

- environmental assessment

under the Environmental Engineering and Management Department staff, certified in this regard by the Ministry of Environmental Protection and Water Management

Computer skills and competences

Windows, Word, Excel, Power Point, Corel PhotoPaint, web-browsing

Other skills and competences

Journals Reviewer:

Bulletin of Iasi Polytechnic Institute
Environmental Engineering and Management Journal
Iasi Polytechnic Magazine
Bioprocess Engineering
Brazilian Journal of Chemical Engineering
Cellulose Chemistry and Technology
Chemical Engineering Journal
Chemosphere
CLEAN-Water, Air, Soil
Critical Reviews in Biotechnology
Environment International
Environmental Science and Technology
Environmental Technology
Energy
Geoderma
International Journal of Environment and Pollution
Journal of Hazardous Materials
Reviewer of ECOZONE Press, Iasi, Romania

Expert:

- CNCSIS: 2001-2006
- ANSTI: 2001-2002
- CALIST: 2004
- PN_II (program IDEI)
- Member of the MEC-CNCSIS Register of Experts
- Member of the Commission *Chemical Engineering, Materials Engineering and Food Products Engineering of the National Council For the Recognition of Academic Degrees, Diplomas and Certificates* – Romanian Ministry of Education, Research and Innovation, for confirmation of PhD degrees, PhD supervising and University Doctoral Studies Organizing Institutions (2006-2010) (O_MEC 3904/2006)

- Member of the Commission *Earth Sciences of the National Council For the Recognition of Academic Degrees, Diplomas and Certificates* – Romanian Ministry of Education, Research and Innovation (2011-) (O_MEC 3980/2011)
- Independent Expert European Commission (FP6, FP7)
- External Expert PhD Thesis evaluation
- Expert of the Ministry of Environment and Forests for Security Reports

Professional memberships:

2011 - Member of the Editorial Advisory Board of *SCIENTIFIC STUDY & RESEARCH Chemistry & Chemical Engineering, Biotechnology, Food Industry*, published by University of Bacau, Romania

2011 - Member of the Editorial Advisory Board of *Journal of Engineering Studies and Research*, published by University of Bacau, Romania

2009 - Member of *Romanian Society of Chemistry*

2009 - *Member of Editorial Advisory Board of European Journal of Science and Theology*, published by EcoZone

2007 - *Member of Editorial Scientific Board of The Open Biotechnology Journal*, published by Bentham Science Publishers,

2006 - Member of *International Organization for Biotechnology and Bioengineering*, since 2006 - Member of *European Federation of Biotechnology* and member of Experts Board of the *Environmental Biotechnology Section*

2005 - Member of *INTERMEDIUNET Romania (INRO)*

since 2003 - Member of Scientific Advisory Board of ECOZONE Press, Iasi, Romania

since 2002 - Member of Alumni, Faculty of Industrial Chemistry

since – 2002 - *Managing Editor of Environmental Engineering and Management Journal*, published by Department of Environmental Engineering and Management - *Technical University Iasi*, Romania (included in CABI; Chemical Abstracts Service/SciFinder (ACS) (since 2002); EBSCO Database (since 2002); EVISA; ICAAP (International Consortium for Advancement of Academic Publications); Index Copernicus Journal Master List (ICV/2010=14.00); Journal Citation Reports® (IF=1.004); MedSci; ProQuest (since 2002); The National University Research Council (RO); Science Citation Index Expanded™ (Thomson ISI); SJR (SCImago Journal&Country Rank) (H=7, SJR index/2010 = 0.071, SNIP index/2010 = 0.20); SCOPUS (since 2008); Thomson ISI Master Journal List; Web of Science® (Thomson ISI) (H=10)

2000-2004 - *Editor of Bulletin of Iasi Polytechnic Institute*

since 1999 - Member of *Academic Organization for Environmental Engineering and Sustainable Development*

1997-2000 - *Member of Editorial Advisory Board of Bioprocess Engineering* journal, published by *Springer Verlag*, Berlin, Germany

since 1996 - Member of *Romanian Society of Chemical Engineering* (president of the filial Iasi)

since 1991 - Member of *Romanian Society of Bioengineering and Biotechnology*

Visiting Professor:

2011 University *Alma Mater Studiorum* Bologna, Italy

2011 University of Padova, Italy

2011 University *Frederic II*, Naples, Italy

2010 University of Twente, The Netherlands

2010 Vienna University of Technology, Austria

2009 *Pannon University*, Veszprem, Hungary

2007 *Danish University of Technology*, 2007, Copenhagen, Denmark

2007 *Vienna University of Technology*, Institute fur Verfahrenstechnik, Umwelttechnik und Techn. Biowissenschaften, August 2007, Courses: *Process Engineering and Pollution Prevention*

2006 Department of Biological Engineering, *University Minho*, Portugal, June 2006, Undergraduate Course in Biological Engineering. Seminars: *Integrated Pollution Prevention and Control in Industrial Sectors*

2005 Department of Biological Engineering, *University Minho*, Portugal, September 2005, Seminars: *Biological Engineering: Bioremediation in Environmental Engineering. Biosorption of Heavy Metals by Marine Algae*

2005 Lund University, *International Institute for Industrial Environmental Economics*

2004 *Henry Poincaré* University, Nancy1, European Summer School: *Human Environment: Energy, Forests, Health and Society*, September 3-10

2004 Lund University, *International Institute for Industrial Environmental Economics*

Prizes, nominalizations

Prizes:

- “Nicolae Teclu” Prize of Romanian Academy, Section of Chemistry, conferred in 1995 for the group of papers “*Study of Transfer Phenomena in Polydisperse Systems, Applied for Bioreactors*”
- *Diploma for excellence and Medal „Inventica” 2008*, awarded by Society of Inventors from România and National Institute for Inventions, Iași, within International Jubiliar Salon for Research, Inventions and Technological Transfer, „*Inventica 2008*”.
 - *Diploma for excellence in research, and Medal „Gheorghe Asachi”* awarded by Senate of „Gh. Asachi” Technical University of Iași.
 - *Diploma of excellence for innovative research and Gold Medal awarded within European Exhibition of Creativity and Innovation, 2010.*
 - *Diploma of excellence for innovative research and Gold Medal awarded within European Exhibition of Creativity and Innovation, 2011.*

Biographical Presentation and Nominalizations:

- “2000 outstanding people of the 20th century”, first edition, 1998;
- “International woman of the year” for 1997-2004, by International Biographical Centre - Cambridge, Anglia.
- “WHO's WHO” in Romania, 2002; 2010

Driving licence
Additional information

B Category

PORTOFOLIO:

a) Publications, conferences, Communications, reports:

570 titles as follows:

- 18 books
- 12 chapters in books of editors (Wiley, Springer, Elsevier, Signpost) (4 in press)
- 10 manuals/student books (6 in electronic format, 1 on CD, 3 in printed format)
- papers: 229
- papers published in ISI ranked journals: 118
- papers published in peer-reviewed Romanian and international journals: 68
- papers published in Proceedings of conferences, peer-reviewed: 43 (6 of them in ISI Proceedings)
- conferences and keynotes: 43
- public presentations at national and international symposia: 122
- research reports: 124
- patents: 12 (9 of them included in *Derwent Innovations Index*)

b) Over 1200 citations of published papers (Hirsch index $h = 17$)

c) Research themes:

- original technologies: 8
- research themes with industrial companies – 20 (10 as responsible or director, and 10 as member of the research group)
- national grants: 25 (16 as project director)
 - 10 grants awarded by CNCSIS (6 as director)
 - 6 grants awarded within PNCDI-I (1 AGRAL, 5 CEEX type)
 - 3 grant awarded within PNCDI-II (IDEI Programme, as director)
 - 6 grants awarded by the Ministry of Research and Technology (as director)
- international grants: 8 (in cooperation)
- 9 Erasmus agreements (7 as responsible)

Annexes

List of Publications

June 2013

