



PERSONAL INFORMATION

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

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Nationality Romanian

POSITION

Full Professor
Gheorghe Asachi Technical University of Iasi, Romania

WORK EXPERIENCE

Dates **1 October 2000 - present**

Occupation or position held **Professor**

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

Main activities and responsibilities

- teaching activity at undergraduate, master, doctoral, postgraduate programs (lectures, tutorials, seminars and projects);
- scientific research in several areas, such as: *Chemical and Biological Process Engineering, Environmental Engineering, Biotechnologies in Environmental Protection, Ecological and Human Health Risks, Source Reduction and Waste Minimization* (waste treatment, valorization and management, sustainable industrial production, ecodesign, integrated pollution prevention and control);
- director of national research grants and member in the research teams of national and international grants
- management and completion of research projects
- PhD supervisor in *Chemical engineering* (2002-2013) and *Environmental engineering* (since 2009);
- managing Editor / Editor-in-Chief of *Environmental Engineering and Management Journal*, included in international databases from beginning of publication (2002), ranked as ISI journal based on ISI impact factor, from 2007;
- Editor-in-chief of *Procedia-Environmental Science, Engineering and Management*, included in international databases
- Series Editor of *Annals of the Academy of Romanian Scientists-Series of Chemistry Sciences*
- expert evaluator for national research programs launched by the Ministry of Education and Research (CNCSIS, PN-I, PN-II, Calist etc.);
- expert evaluator of the European Commission for research projects in FP7, Horizon 2020 programs;
- member of the experts group of *European Federation of Biotechnology Section Environmental Biotechnology*
- scientific reviewer of numerous national and international journals;
- organization and coordination of students' scientific sessions;
- coordination of the activity of scientific student groups;
- organizer of national and international scientific conferences and member of scientific committees
- member of the board of the Doctoral School of the Faculty of Chemical Engineering and Environmental Protection
- director of the department of scientific research / coordinator of the Research Centre for Environmental Engineering and Impact Assessment of the "Gheorghe Asachi" Technical University of Iasi, accredited by CNCSIS
- member of the Council of the Department of Engineering and Environmental Management
- member of the Faculty Council and University Senate;
- vice-dean of the Faculty Council, responsible with scientific research
- member of the Commission for quality of the Senate of the "Gheorghe Asachi" Technical University of Iasi
- member of the Commission for ethics of the Senate of the "Gheorghe Asachi" Technical University of Iasi
- member of the Commission for international relations, university image and honorary titles of the Senate of the "Gheorghe Asachi" Technical University of Iasi

Name and address of employer	<ul style="list-style-type: none"> - member in commissions for the evaluation of doctoral projects and reports, and committees for the evaluation of doctoral theses - member/president of the committees for license/diploma exams - member of the committee for evaluation and defense of dissertation theses - member in the committee for admittance of the faculty - member of the committee for granting the <i>Doctor Honoris Causa</i> title of the "Gheorghe Asachi" Technical University of Iasi - elaboration and development of materials of common academic interest (for the accreditation of undergraduate and master specializations by ARACIS, accreditation by CNATDCU of the doctoral school in <i>Environmental Engineering</i>, research reports etc.) <p>"Gheorghe Asachi" Technical University of Iasi, Romania (Faculty of Chemical Engineering and Environmental Protection – Department of Environmental Engineering and Management), 73 Prof.Dr.Doc. Dimitrie Mangeron Street, 700050, Iasi, Romania</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>1 October 1998 - 30 September 2000</p> <p>Associate Professor</p> <ul style="list-style-type: none"> - teaching activity within undergraduate, master and postgraduate programs (courses, tutorials, seminars, projects); - research activities in Chemical and Biological Process Engineering, Environmental Engineering, Biotechnology/Environmental Biotechnology - director of national research grants - management and completion of national grants- expert evaluator CNCSIS, ANSTI; - expert evaluator for national research programs launched by the Ministry of Education and Research (CNCSIS, ANSTI) - organizing and coordinating students' scientific sessions; - coordination of the activity of scientific students groups; - organizer of national and international scientific conferences and member of scientific committees; - coordinator for diploma projects and master theses (daily and distance learning programs); - member of the Council of the Department of Engineering and Environmental Management - director of the department of scientific research of the Research Centre for Environmental Engineering and Impact Assessment of the Technical University "Gheorghe Asachi" University (accredited by CNCSIS) - member of the committees for graduation exams and dissertation exams (daily and distance learning programs); - member of faculty admissions committee; - member in commissions for the evaluation of doctoral projects and reports, and committees for the evaluation of doctoral theses; - reviewer for national and international journals.
Name and address of employer	<p>"Gheorghe Asachi" Technical University of Iasi, Romania (Faculty of Chemical Engineering – Department of Environmental Engineering), 71 Mangeron Bd., 700050, Iasi, Romania</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>1st March 1996- 30th September 1998</p> <p>Senior Scientist II (equivalent to Associate Professor)</p> <ul style="list-style-type: none"> - head of the research group <i>Engineering of Biotechnological Processes</i>; - coordination and development of laboratory, pilot and industrial-scale research studies on biosynthesis of antibiotics, (bio) separations, (bio) purification, unconventional bioreactors and equipment; - development and management of research projects; - micro-scale production; - development and public defense of the PhD Thesis: <i>Study on the flow of heterogeneous systems gas-lift reactors</i> (June, 1997); - studies, research and technical assistance for implementing new biosynthesis technologies (erythromycin, penicillin, vitamin B12; streptomycin); - teaching activities as associate professor at the Faculty of Chemical Engineering of the <i>Gheorghe Asachi</i> Technical University of Iasi, Department of Environmental Engineering
Name and address of employer	<p>Chemical-Pharmaceutical Research Institute Bucharest - Research Center for Antibiotics, Iasi, 1 Valea Lupului Road, Iasi, Romania</p>
<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>1st November 1990- 29th February 1996</p> <p>Senior Scientist III (equivalent to Lecturer)</p> <ul style="list-style-type: none"> - head of the research group <i>Engineering of Biotechnological Processes</i>; - coordination and development of fundamental and applicative studies and research on momentum, heat and mass transfer in bioreactors at laboratory, pilot and industrial scales; - development and management of research projects;

- studies on the performance (mixing time, dispersion, oxygen transfer, specific energy consumption etc.) of conventional and unconventional (bubble columns, gas-lift contactors), respectively, in heterogeneous conditions (gas-liquid-solid systems), applied in antibiotic biosyntheses;
- scale-up of bioreactors and bioprocesses;
- studies on the rheology of biosynthesis fluids;
- studies, research and technical assistance for implementing new biosynthesis technologies (erythromycin, penicillin, vitamin B12; streptomycin);
- studies, research for improving biosynthesis and separation/purification yields through laboratory selection and ingredient dosage in biosynthesis liquids.

Name and address of employer Chemical-Pharmaceutical Research Institute Bucharest - Research Center for Antibiotics, Iasi, 1 Valea Lupului Road, Iasi, Romania

Dates **1st June 1988 – 31 October 1990**

Occupation or position held Scientific Researcher (equivalent to Assistant Professor)

Main activities and responsibilities

- head of the research group *Engineering of Biotechnological Processes*;
- development and management of research projects;
- micro-scale production;
- research on momentum, heat and mass transfer in bioreactors at laboratory, pilot and industrial scales, in non-Newtonian liquids (antibiotic biosynthesis liquids);
- study of conventional and unconventional bioreactors applied for antibiotic biosynthesis;
- study the correlation between oxygen demand of aerobic microorganisms and growth conditions in laboratory, pilot and industrial scale;
- studies and research within research contracts on optimization of technologies for the production of biosynthetic and semisynthetic rifamycins (laboratory, pilot and industrial scales);
- studies and research within research contracts on optimization of the technology for Penicillin G biosynthesis (pilot and industrial scales).

Name and address of employer Chemical-Pharmaceutical Research Institute Bucharest - Research Center for Antibiotics, Iasi, 1 Valea Lupului Road, Iasi, Romania

Dates **4th August 1983 - 31 May 1988**

Occupation or position held Chemical Engineer

Main activities and responsibilities

- research within the group *Engineering of Biotechnological Processes*;
- methods for determining the oxygen demand of aerobic microorganisms in antibiotic biosynthesis in relation to dissolved oxygen levels;
- screening of methods for the characterization and comparison of bioreactor performance;
- studies and research within research contracts on improving and optimization of technologies for the production of biosynthetic and semisynthetic rifamycins (biosynthesis, separation, purification, conditioning, chemical stability studies) (laboratory, pilot and industrial scales).

Name and address of employer Chemical-Pharmaceutical Research Institute Bucharest - Research Center for Antibiotics, Iasi, 1 Valea Lupului Road, Iasi, Romania

Dates **1981-1983**

Occupation or position held Chemical Engineer

Main activities and responsibilities Head of working formation

Name and address of employer Integrated Artificial Yarns Factory, Braila, Romania and Integrated Factory for Synthetic Fibers Iasi, Romania

EDUCATION, TRAINING, TEACHING AND EXCHANGES

Dates **2009** - International Training on Concepts in Environmental Science and Engineering, Iasi, Romania, 1-4 iunie 2009

Activities developed, title/qualification awarded Training in engineering and environmental management, estimation and management of environmental and human health risks / Certificate of completion

Name and type of organization Michigan State University, Institute of International Health and Fogarty International Center Program on Environmental Health, Training and Research in Environmental Health in the Balkans (TREHB)

Dates	2005 - <i>E-learning: formation des formateurs</i>
Activities developed, title/qualification	Trainer in learning activities platform e-learning (development in C++, <i>Dreamweaver</i> , <i>Microsoft Frontpage</i>)
Name and type of organization	<i>University Henry Poincare Nancy</i> , Association of Francophone Universities and <i>Gheorghe Asachi</i> Technical University Iasi
Dates	2005 - <i>Eco-certification in tourism</i>
Activities developed, title/qualification	Postgraduate course on Eco-tourism certification/Certificate of attending
Name and type of organization	Department of Environmental Engineering and Management – <i>Gheorghe Asachi</i> Technical University Iasi, Center for Research in Tourism <i>Bucovina</i> , Campulung Moldovenesc and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - <i>How to Manage European Funds</i>
Activities developed, title/qualification	Intensive course / Certificate of attending
Name and type of organization	APART Project School and <i>Gheorghe Asachi</i> Technical University Iasi
Dates	2004 - <i>Sustainable Tourism, Certification, Ecolabelling</i>
Activities developed, title/qualification	Intensive course / Certificate of attending
Name and type of organization	Department of Environmental Engineering and Management – <i>Gheorghe Asachi</i> Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - <i>Ecodesign and Product Innovation</i>
Activities developed, title/qualification	Intensive course / Certificate of attending
Name and type of organization	Department of Environmental Engineering and Management – <i>Gheorghe Asachi</i> Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - <i>Waste Management</i>
Activities developed, title/qualification	Intensive course / Certificate of attending
Name and type of organization	Department of Environmental Engineering and Management – <i>Gheorghe Asachi</i> Technical University Iasi and International Institute of Industrial Environment Economics, Lund, Sweden
Dates	2004 - Environmental Management Systems Audit: ISO 14001-1996
Activities developed, title/qualification	Intensive Course/Certificate of Internal Auditor in Environmental Management Systems according to ISO 14001:1996, No. 0034, 2004.
Name and type of organization	Chamber of Commerce Iasi and SGS Belgium-Romania
Dates	2003 - <i>How to Apply with Success in the Sixth Framework Programme (FP6)</i>
Activities developed, title/qualification	Intensive course/ Certificate of attending
Name and type of organization	Romanian Ministry of Education-UEFISCSU and Hyperion Ltd. Ireland
Dates	2003 - Exchanges on Curricula
Activities developed, title/qualification	Documentation visit and experience exchange
Name and type of organization	International Institute of Industrial Environment Economics, Lund, Sweden

Dates	June - July 2000
Activities developed, title/qualification	Open competition for Full Professor position (<i>Process Engineering, Bases of Technological Systems</i>) / Professor
Name and type of organization	<i>Gheorghe Asachi</i> Technical University of Iasi, Romania (Faculty of Chemical Engineering and Environmental Protection – Department of Environmental Engineering and Management), 73 Prof.Dr.Doc. Dimitrie Mangeron Street, 700050, Iasi, Romania
Dates	May - June 1998
Activities developed, title/qualification	Open competition for Associate Professor position (<i>Process Engineering, Bases of Technological Systems</i>) / Associate Professor
Name and type of organization	<i>Gheorghe Asachi</i> Technical University of Iasi, Romania (Faculty of Chemical Engineering – Department of Environmental Engineering), 71 Mangeron Bd., 700050, Iasi, Romania
Dates	1989 – 1997 - PhD Student
Activities developed, title/qualification	PhD degree in Chemical Engineering Thesis: "Study on the flow of heterogeneous systems in gas-lift reactors", supervisor Prof. dr. doc. eng. Radu Z. Tudose, Member of the Romanian Academy (public defense: June 1997), PhD title awarded by the Romanian Ministry of Education, <i>Doctor Engineer</i> diploma, Seria P, Nr. 0006233 din 10/12/1997 (972)
Name and type of organization	"Gheorghe Asachi" Technical University of Iasi, Romania
Dates	February 1996
Activities developed, title/qualification	Competition/ Certification as Senior Scientist, 2nd degree
Name and type of organization	Chemical-Pharmaceutical Research Institute, Bucharest, Romania
Dates	October 1990
Activities developed, title/qualification	Competition/ Certification as Senior Scientist, 3rd degree
Name and type of organization	Chemical-Pharmaceutical Research Institute, Bucharest, Romania
Dates	June 1988
Activities developed, title/qualification	Competition/ Certification as Scientific Researcher
Name and type of organization	Chemical-Pharmaceutical Research Institute, Bucharest, Romania
Dates	1987 -1988 , Postgraduate training on development of minicomputer programs and products (FELIX-Mini)
Activities developed, title/qualification	Cobol programming language, database management/ Certificate of graduation as Developer of software for minicomputers, Series A, No. 02270, din 01/08/1988 (5)
Name and type of organization	Computers Center, Iasi, Romania
Dates	1986 – 1987 , Postgraduate Intensive Course of English Language
Activities developed, title/qualification	English Language and Literature/ Postgraduation Diploma Series B, No. 1206, din 20/04/1988 (206)
Name and type of organization	"Al.I. Cuza" University of Iasi, Faculty of Philology, Iasi, Romania
Dates	1986 – 1987 , Intensive course of <i>Value Analysis</i>
Activities developed, title/qualification	Certificate of attendance
Name and type of organization	<i>Gheorghe Asachi</i> Polytechnic Institute of Iasi, Faculty of Industrial Chemistry, Iasi, Romania

Dates	1986 – 1987, Intensive course of <i>Process Optimization in Chemical Industry</i>
Activities developed, title/qualification	Certificate of attendance
Name and type of organisation	<i>Gheorghe Asachi</i> Polytechnic Institute of Iasi, Faculty of Industrial Chemistry, Iasi, Romania

Dates	1977 - 1981
Activities developed, title/qualification	Undergraduate courses and Diploma as Chemical Engineer , specialization <i>Technology of Organic Compounds</i>
Name and type of organization	<i>Gheorghe Asachi</i> Polytechnic Institute of Iasi, Faculty of Chemical Technology, Iasi, Romania

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, collaboration with other organizations, intercultural relations, mediation in conflict situations, involvement in young's and students' actions, teaching, training

SCIENTIFIC, TECHNICAL/RESEARCH AND ORGANIZATIONAL SKILLS AND COMPETENCES

Experience in teaching, theoretical and practical training, projects / contracts management, team management, motivation of co-workers, diplomacy in interpersonal relations:

Contexts in which the skills were acquired:

- **TEACHING, TRAINING AND EDUCATION**

Undergraduate studies:

Courses and applications (seminars, laboratories, projects):

Basis of Technological Systems, specializations: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)* and *Biochemical Engineering Protection (Chemical Engineering field of study)*

Analysis and Synthesis of Technological Processes, specialization: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)*

Sources, Processes and Pollutant Products, specialization: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)*

Process Engineering and Specific Operations in Environmental Engineering, specialization: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)*

Chemical and Biological Processes Engineering, specialization: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)*

Integrated Pollution Prevention and Control, specialization: *Technology and Biotechnology of Environmental Protection/Engineering and Environmental Protection in Industry (Environmental Engineering field of study)*

Master studies:

Courses and applications (seminars, projects):

Modeling and Simulation of Processes for Environmental Protection, specialization: *Environmental Management (Environmental Engineering field of study)* (Daily and Open Distance Learning programs, Romanian line)

Risk Assessment and Management, specialization: *Environmental Management (Environmental Engineering field of study)* (Daily and Open Distance Learning programs, Romanian line)
Source Reduction and Waste Minimization, specialization: *Environmental Management (Environmental Engineering field of study)* (Daily and Open Distance Learning programs, Romanian line)
Legislation in Environmental Protection, specialization: *Projects Management (Daily program, Romanian line)*, within the *Department of Programs* of the "Gheorghe Asachi" Technical University of Iasi
Sustainable Industrial Production, specialization: *Environmental Management (Environmental Engineering field of study)* (Daily and Open Distance Learning programs, Romanian line)
Sustainable Industrial Production, specialization: *Environmental Management and Sustainable Energy (Environmental Engineering field of study)* (Daily program, English line)

Doctoral studies:

Courses and applications (seminars, projects):

Elaboration, evaluation and presentation of scientific works, within the Doctoral School of the Gheorghe Asachi Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection and other Faculties

Postgraduate studies:

*Design and implementation of occupational health and safety systems
 Major accidents and environmental disasters*

- **SCIENTIFIC EVENTS ORGANIZED AT LOCAL, NATIONAL AND INTERNATIONAL LEVELS, MEMBER OF ORGANIZING AND SCIENTIFIC COMMITTEES:**

Over 50 events (included in the List of scientific activity, annexed)

- **ACTIVITIES IN THE ACADEMIC COMMUNITY**

- organizing and coordinating students' scientific sessions;
- coordination of the activity of scientific students groups;
- director/member of the board of the Doctoral School of the Faculty of Chemical Engineering and Environmental Protection
- member of the Council of the Department of Engineering and Environmental Management
- member of the Faculty Council and University Senate;
- vice-dean of the Faculty Council, responsible with scientific research
- member of the Commission for quality of the Senate of the "Gheorghe Asachi" Technical University of Iasi
- member of the Commission for ethics of the Senate of the "Gheorghe Asachi" Technical University of Iasi
- member of the Commission for international relations, university image and honorary titles of the Senate of the "Gheorghe Asachi" Technical University of Iasi
- elaboration and development of materials of common academic interest (for the accreditation of undergraduate and master specializations by ARACIS, accreditation by CNATDCU of the doctoral school in *Environmental Engineering*, research reports etc.)
- vice-president of the *Commission of Environmental Engineering*– Romanian Ministry of Education and Research (since 2016) (O_MECS 4160/10.06.2016)
- member of the General Council of the National Council For the Recognition of Academic Degrees, Diplomas and Certificates (CNATDCU) and president of the *Commission of Environmental Engineering*– Romanian Ministry of Education and Research (since 2012) (O_MEC 5644/05.09.2012)
- member of the *Commission Earth Sciences* of Panel 1 (*Mathematics and Natural Sciences*) of the National Council For the Recognition of Academic Degrees, Diplomas and Certificates – Romanian Ministry of Education and Research (2011-2012) (O_MEC 3980/2011)
- 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, (2006-2010) (O_MEC 3904/2006)

- **SCIENTIFIC COMPETENCES AND RESEARCH DIRECTIONS**

Chemical and Biological Process Engineering (with applications in environmental protection and resource conservation)

- *transfer phenomena in chemical, biochemical 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 inorganic and organic persistent pollutants (heavy metals, persistent organic pollutants POPs, 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, biochemical and biological processes, applied in biotechnology and environment protection:* filtration, centrifugation, extraction, distillation-rectification, evaporation-crystallization, adsorption on ion exchange, membrane separation, bioremediation, biosorption, absorption
- *new technical systems, (bio)reactors, in chemical and biochemical industrial processes* for energy saving and efficiency
- *process scaleup*, with applications in environmental engineering
- *modelling, simulation and optimization of processes*, including environmental applications

Biotechnology/ Environmental Biotechnology:

- *bases of biochemical and biological reactions;* mass conversion assisted by microorganisms or enzymes; transfer phenomena; microbial strains manipulation in bioreactors; oxygen uptake by microorganisms; resistance of microbial agents to shear stress, with applications in environmental protection, equilibrium, kinetics and thermodynamics
- *biological treatment of gaseous and liquid fluxes* containing biodegradable pollutants
- *environmental bioremediation of components affected by pollution phenomena, (bio)degradation of refractory pollutants*
 - *biosorption and bioaccumulation of heavy metals, persistent organic pollutants by living and non-living biomass (yeasts, fungi, bacteria), agricultural and vegetable waste (algae, vegetable waste, seed hulls)*
 - *bioavailability, bioaccumulation, persistence, ecotoxicology, phytotoxicity for various environmental contaminants*

Integrated Pollution Prevention and Control: Practices for Processes, Products, Services (source reduction and waste minimization, waste management hierarchy, risk management, life cycle assessment, cost-benefit analysis, ecological footprints, multi-criteria decision analysis)

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

Environmental Risk Assessment and Management, Ecological Risks, Health risks

Environmental Evaluations (attested by the Ministry of the Environment, Water and Forest for elaborating Safety Reports, in the frame of Seveso Directives)

PhD Supervisor since 2002 (until 2011):

Engineering Sciences – *Chemical Engineering*, 7 PhDs

PhD Supervisor since 2009:

Engineering Sciences – *Environmental Engineering*, 5 PhDs and 7 PhD students

• **EXPERIENCE IN RESEARCH PROJECT MANAGEMENT / CONTRACTS:**

Project director/responsible and member in research groups and accomplishments:

- **original technologies applied in industry: 8**
- **research themes with industrial companies: 20** (10 as responsible or director)
- **national grants (CNCSIS, PNCDI-I, PNCDI-II): 25** (15 as project director)
- **international grants: 6** (in cooperation, as member of research teams)

• **COMPETENCES AND EXPERIENCE IN EVALUATION OF SCIENTIFIC WORKS AND EDITING SCIENTIFIC MATERIALS**

- **as editor of scientific journal:**

Environmental Engineering and Management Journal (Managing Editor, Editor-in-Chief, since 2002)

Procedia – Environmental Science, Engineering and Management (Editor-in-Chief, since 2014)

Annals of the Academy of Romanian Scientists - Series on Chemistry Sciences (Series Editor, since 2014)

Bulletin of the Polytechnic Institute of Iasi – Section Chemistry and Chemical Engineering (2000-2004)

- **peer-reviewer for international journals:**

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, Journal of Environmental Management, Journal of Hazardous Materials, Clean-Soil Air, Water, Journal of Environmental Engineering and Landscape Management, Journal of Cleaner Production, Geoderma, International Journal of Environment and Pollution, Journal of Hazardous Materials, Bioprocess and Biosystems Engineering, Arid Land Research and Management,

Universal Journal of Education and General Studies, Current Biotechnology, Journal of Research in International Business and Management, Separation Science and Technology, Resources, Conservation & Recycling, Desalination and Water Treatment, Water, Air, & Soil Pollution, Bioresource Technology etc.
Reviewer of ECOZONE Publishing House, Iasi, Romania

- expert:

- National Council for Scientific Research CNCSIS/UEFISCDI: 2001-2015
- National Agency ANSTI: 2001-2002
- Program CALIST: 2004
- National Program PN-II (program IDEI)
- Member of the Ministry's Register of Experts MEC-CNCSIS
- 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 (2011-2012) (O_MEC 3980/2011)
- President of the *Commission of Environmental Engineering of the National Council For the Recognition of Academic Degrees, Diplomas and Certificates* – Romanian Ministry of Education, Research and Innovation, Member of the General Council (since 2012) (O_MEC 5644/05.09.2012)
- Independent Expert European Commission (FP6, FP7, Horizon 2020)
- External Expert for the evaluation of MSc and PhD Theses
- Expert of the Ministry of Environment and Forests for Safety Reports
- Expert in three POSDRU doctoral programs and two POSDRU postdoctoral programs at Gheorghe Asachi Technical University of Iasi, Romania, funded by the European Social Fund

- **MEMBER OF ENTITIES/ASSOCIATIONS/ PROFESSIONAL AND SCIENTIFIC COMMITTEES**

- Member of the Academy of Romanian Scientists
- 2002-2014 Managing Editor and, since 2024, **Editor-in-Chief** of *Environmental Engineering and Management Journal*, edited by the Department of Environmental Engineering and Management, *Gheorghe Asachi* Technical University of Iasi, Romania and by Ecozone Publishers, Romania (indexed by 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/2013=16.00); Journal Citation Reports® (IF/2014=1.065); MedSci; ProQuest (since 2002); CNCSIS (RO); Science Citation Index Expanded™ (Thomson ISI); SJR (SCImago Journal&Country Rank); SCOPUS (din 2008); Thomson ISI Master Journal List; Web of Science® (Thomson ISI) (H=21) (<http://omicron.ch.tuiasi.ro/EEMJ/>))
- 2002-2004 – **Editor of the Bulletin of the Polytechnic Institute of Iasi**, Chemistry and Chemical Engineering Section
- 2014 – Founder and Editor-in-Chief of *Procedia-Environmental Science, Engineering and Management* (www.procedia-esem.eu)
- 2014 – **Series Editor** of *Annals of the Academy of Romanian Scientists – Chemical Sciences Series* (<http://aos.ro/editura/analeleaosr/annals-on-chemistry/>)
- 2011 – founding member of the *National Society of Environmental Science and Engineering*, Cluj-Napoca, Romania (http://snsim.ro/?page_id=6), vice-president since 2015
- 2012 – member of the *European Federation of Microbiology Societies*, FEMS
- 2012 – member of the editing staff of the journal *Soil Forming Factors and Processes in the Temperate Region*, edited by the *Al. I. Cuza* University of Iasi
- 2011 – Member of the Editorial Advisory Board for the journal *Scientific Study & Research- Chemistry & Chemical Engineering, Biotechnology, Food Industry*, published by the *Vasile Alecsandri* University of Bacau, Romania
- 2011 – Member of the Editorial Advisory Board for the journal *Journal of Engineering Studies and Research (JESR)*, published by the *Vasile Alecsandri* University of Bacau, Romania
- 2011-Member of the Editorial Staff of the *Journal of Applied Sciences in Environmental Sanitation (J.ASES)*, edited by Department of Environmental Engineering, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia, and Indonesian Society of Sanitary and Environmental Engineers
- 2009-Member of the Romanian Chemistry Society
- 2009-Member of the *Editorial Advisory Board* of the *European Journal of Science and Theology*, published by EcoZone Publishers, Iasi, Romania
- 2009 – Member of *Editorial Advisory Board* at *Journal of Environmental Engineering and Landcape Management*
- 2009 – Member of the Editorial Board of *International Journal of Conservation Science*
- 2008-Member of the European Membrane Society
- 2007-Member of the *Editorial Scientific Board* of *The Open Biotechnology Journal*, published by Bentham Science Publishers
- 2006- Member of the *International Organization for Biotechnology and Bioengineering*
- 2006- Member of the *European Federation of Biotechnology* and member of the *Experts Board* of the **Environmental Biotechnology Section** (2011)
- 2005- Member of *INTERMEDIUNET* Romania (INRO)

- 2002-member of the *Association of Graduates* of the Faculty of Industrial Chemistry, Iași, Romania
- 1999-member of the *Academic organization for Environmental Engineering and Sustainable Development*, Iași, Romania
- 1997-2000- Member of the *Editorial Advisory Board* of the journal *Bioprocess Engineering*, published by *Springer Verlag*, Berlin, Germania
- 1996-Member of the Romanian Society of Chemical Engineering
- 1991-Founding member of the Romanian Society of Bioengineering and Biotechnology

- **VISITING PROFESSOR AND EXCHANGE PROGRAMS:**

- visiting professor

- 2015 - University of Natural Resources and Life Sciences, Vienna, Austria
- 2015 - Technical University of Crete, Greece
- 2014 - University Rennes, France
- 2014 - University of Maribor, Slovenia
- 2014 - University of Applied Sciences, Northwestern Switzerland, Muttenz, Switzerland
- 2013 - University del Insubria, Varese, Italy
- 2013 - University *Alma Mater Studiorum* Bologna, Italy
- 2013 - Vienna University of Technology, Vienna, Austria
- 2012 - University *Frederico II*, Naples, Italy
- 2012 - University *Alma Mater Studiorum*, Bologna, Italy
- 2012 - Vienna University of Technology, Vienna, Austria
- 2011 - University *Frederico II*, Naples, Italy
- 2011 - *TECHNION* - Israel Institute of Technology, Haifa, Israel
- 2011 - University *Alma Mater Studiorum* Bologna, Italy
- 2011 - University of Padova, Italy
- 2011 - Minho University, Braga, Portugal
- 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
- 2006 - *University Minho*, Portugal
- 2005 - *University Minho*, Portugal, 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*

- Erasmus and Erasmus+ agreements and programs

- | | |
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| 2011-2014 | University Maribor, Slovenia |
| 2011-2014 | University of Study dell'Insubria, Varese, Italy, |
| 2010-2014 | University of Study, <i>Federico II</i> , Naples, Italy, |
| 2010-2014 | <i>Alma Mater Studiorum</i> University of Study, Bologna, Italy, |
| 2009-2014 | Twente University Netherlands, |
| 2008-2013 | University Minho, Portugal, |
| 2007-2013 | University Minho, Portugal, |
| 2014-2021 | University of Natural Resources and Life Sciences, Austria |
| 2014-2021 | Technical University of Crete, Grecia |
| 2014-2021 | Universita degli Study di Napoli <i>Federico II</i> , Italia |
| 2014-2017 | University of Twente, Olanda |
| 2014-2021 | Universidade do Minho, Portugalia |
| 2014-2021 | University of Maribor, Slovenia |
| 2014-2021 | Hacettepe University Ankara, Turcia |
| 2014-2021 | Karabuk University, Turcia |

- **PRIZES, NOMINATIONS**

- Prizes:

- "Nicolae Teclu" Prize of the Romanian Academy, Section of Chemistry, awarded in 1995 for the group of papers "*Study of Transfer Phenomena in Polydisperse Systems, with Applications in Bioreactors*";

- *Diploma for Excellence and Medal „Inventica” 2008*, awarded by Society of Inventors from România and National Institute for Inventions, Iași, within the International Jubiliar Salon for Research, Inventions and Technological Transfer, „Inventica 2008”;
- *Diploma for Excellence in Research*, and *Medal „Gheorghe Asachi”* awarded by the Senate of the *Gheorghe Asachi* Technical University of Iași, 2007;
- *Diploma of excellence for innovative research and Gold Medal awarded within European Exhibition of Creativity and Innovation*, Iasi, Romania, 2010;
- *Diploma of excellence* awarded within the European Exhibition of Creativity and Innovation, 2011, Iasi, Romania;
- *Diploma and the Grand Prize of the National Salon and Scientifically Books of EuroInvent 2012, European Exhibition of Creativity and Innovation*, 11 May, Iasi, Romania;
- *Best Paper Award, 2012*, granted by Springer Publishers, for the paper *Soil and groundwater cleanup: benefits and limits of emerging technologies*, published in the journal *Clean Technologies and Environmental Policy*, vol. 13, No. 2, pp. 241-268, 2011;
- *Best Poster Award, 2012*, granted by the Global Conference on Global Warming GCGW-12, 8-12 July, 2012, Istanbul, Turkey;
- *Diploma of Excellence*, for *Environmental Engineering and Management Journal*, awarded by the *National Salon of Technical and Scientific Books, EuroInvent*, Iasi, Romania, 2013.
- *Diploma for Excellence in Research*, awarded by Senate of „Gheorghe Asachi” Technical University of Iași, Romania, 2014;
- AGIR Prize 2014 for the book *Methods of evaluating the effects of particulate matter air pollution on children's health*, ISBN 9786062501211, MatrixRom 2014
- *Diploma of Appreciation*, for *Environmental Engineering and Management Journal* and Editor-in-Chief, EuroInvent 2015, Iasi, Romania.

- Biographical Presentation and Nominations:

- "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; 2013
- *Women in Chemistry — Interview with Maria Gavrilescu*, published in ChemistryViews, 3 May 2011, DOI: [10.1002/chemv.201000059](https://doi.org/10.1002/chemv.201000059), on the occasion of 2011 - the International Year of Chemistry (IYC 2011) and the centenary of Marie Curie's Nobel prize in Chemistry.

COMPUTER SKILLS AND COMPETENCES	Windows, Word, Excel, Power Point, Corel PhotoPaint, web-browsing
DRIVING LICENSE	B Category
ADDITIONAL INFORMATION	<p>PORTOFOLIO:</p> <p>a) Publications, conferences, communications, reports: 629 titles as follows:</p> <ul style="list-style-type: none"> - 18 books (1 as editor) - 19 chapters in books of editors (Wiley, Springer, Elsevier, Signpost) (3 in press) - 9 manuals/student books (3 printed, 1 on CD, 5 in electronic format online) - papers: 286 - papers published in ISI ranked journals and Proceedings: 147+12 in ISI Proceedings - papers published in peer-reviewed Romanian and international journals: 90 - papers published in Proceedings of conferences, peer-reviewed: 37 - conferences and keynotes: 50 - public presentations at national and international scientific events (congresses, symposia, conferences, workshops – posters and oral presentations): 190 - research reports: 45 - patents: 12 (9 of them included in <i>Derwent Innovations Index</i>) <p>b) Over 2500 citing references of published papers (over 2000 without self-citations) (Hirsch index $h = 24$ in Web of Science and $h=24$ in Scopus) http://apps.webofknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=Y2hQU5kHi6kPDPhf3x&page=1&cr_pqid=1&viewType=summary&colName=WOS http://www.scopus.com/cto2/main.url?origin=resultslist&stateKey=CTOF_634150444</p> <p>c) organizer/member in committees of conferences, workshops: 55</p> <p>d) Erasmus and Erasmus+ agreements – as coordinator: 15</p>

e) Research themes/grants:

- **new products and original technologies: 8**
- **research themes with industrial companies – 20** (10 as responsible or director, and 10 as member of the research group)
- **national grants: 26** (16 as project director)
 - 10 grants awarded by CNCIS (6 as director)
 - 6 grants awarded within PNCDI-I (1 AGRAL, 5 CEEX type, member)
 - 3 grants awarded within PNCDI-II (IDEI Programme, as director)
 - 2 grant awarded within PNCDI-III (Bridge Grant, as director; PED as member)
 - 6 grants awarded by the Ministry of Research and Technology (as director)
- **international grants: 6** (member)

Annexes | List of Publications

January 2017

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