



Europass Curriculum Vitae



Personal information

First name(s) /
Surname(s)

BENEA LIDIA

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Web page

<http://www.cc-ites.ugal.ro/>
<http://www.researcherid.com/rid/B-9653-2011>

Nationality

Romanian

Gender

F

Actual position / Institution / Domain

University Professor Ph.D., Dunărea de Jos University of Galati, Faculty of Engineering, 47 Domneasca St., 800008, GALATI, Romania, Phone: +40 236 460754, Fax: +40 236 461353;

Doctoral (Ph.D.) Studies Supervisor in Engineering Science / Materials Science and Engineering - Advanced Materials.

www.ugal.ro

Manger of Competences (Research) Centre Interfaces – Tribocorrosion – Electrochemical Systems (CC-ITES)

www.cc-ites.ugal.ro

Scientific interests Expertise domains

Applied Electrochemistry to materials science, engineering and environments: electrochemical methods for preparation of nano structured composite coatings, hybrid (inorganic – organic) layers, surface modifications, thin oxide layers, functional surfaces to improve corrosion and tribocorrosion of materials in specific environments, advanced materials, nanomaterials, micro and nanoparticles, electrochemical studies of nano (bio) electrode / environments solution interfaces, electrochemical corrosion and tribocorrosion. **Polymeric materials** used in membrane systems for nanofiltration, transdermic drug delivery or implant materials. **Characterization of materials surfaces:** Structural, morphological, compositional, micro topographic and mechanical studies of material surfaces (SEM-EDX, AFM, ultrahigh microtopography, microhardness).

Work experience

Dates

January 1991 – These days

Occupation or position
held

University Professor (Ph.D.) and Senior Researcher.
General Manager CC-ITES – Competences Center Interfaces – Tribocorrosion and Electrochemical Systems (CC-ITES). www.cc-ites.ugal.ro .
Supervisor Doctoral (Ph.D.) Studies: Materials Engineering.
Associate Professor Ph.D.

Main activities and responsibilities	Lecturer Ph.D. Professor Assistant. Teaching (licence; master; doctoral degrees) and Research (fundamental and application research). International programs. Licence courses: Chemistry lectures (general and inorganic); Chemical Technology; Corrosion and Corrosion Protection. Technical Methods for Chemical Analysis; Crystallography; Physical Chemistry - Applied Electrochemistry. Master courses: Fundamentals of Metal Electrodeposition; Micro and Nano Structued Composite Coatings; Advanced Materials; Strategies and European Projects in the domain of Nanotechnologies and Nanomaterials. Environmental Impact of Materials Degradation; Interface materials - environment; Interactions material - tissue. Supervisor master degree in Nanotechnologies and Multi-Functional Materials; Interactions material - tissue. Ph.D. Courses: Electrochemical techniques and methods to study and evaluate materials degradation in specific environments. Supervisor Ph.D. Thesis. Domain of Engineering Science - Materials Engineering. Organising of laboratory practice for: Chemistry, Corrosion and Corrosion Protection; Electrodeposition; Materials Characterization by electrochemical methods. Bilateral Agreements with International Universities for students and academic staff mobility. Ecole Centrale Paris - France; Katholieke Universiteit Leuven-Belgium; Trento University- Italy; Minho University- Portugal; Aquila University - Italy; Duisburg Essen University - Germany. Fundamental and applied research: Obtaining and characterization of micro and nanostructured composite coatings; Thin oxide layers; Mechanism and kinetic of materials degradation; Corrosion; Biocorrosion; Tribocorrosion; Surface modification by electrochemical methods; Biomaterials and Biocoatings., Biocompatibility. European Research Programs and Actions. ESF-COST Actions: Member of Management Committee of European Projects in the Chemistry and Materials Domains: ESF – COST: 520, 521, 533, 532, D19, D33. Vice Chair of COST D33 Action. International Bilateral Research Projects with Ecole Centrale Paris (France); Katholieke Universiteit Leuven (Belgium).
Name and address of employer	Dunarea de Jos University of Galati, Faculty of Metallurgy, Materials Science and Environment. Faculty of Materials Engineering and Environment. Faculty of Engineering. 47 Domneasca Street, 800008 Galati, Romania.
Type of business or sector	University Engineering School (Faculty) in Metallurgy, Materials Science and Environment.
Dates	Jun 2000-Jun 2001; September - December 2001; February 2002; September- December 2002; January – December 2003; September 2003 - December 2003; February 2004; May-Jun 2004; Jun – July 2005; Jun – July 2006; December 2007; December 2008; Jun-July 2009; Jun- July 2010; October 2011; July 2013, Jun - July 2014.
Occupation or position held	Invited (Visiting) Professor and Invited Researcher..
Main activities and responsibilities	Teaching and Research Applied Electrochemistry. Electrodeposition of metals alloys and nanostructured composite. Corrosion and corrosion protection. Tribocorrosion of nanostructured composite coatings and passivable metals and alloys. Research and laboratory courses. Supervisor of master students and research projects on experimental methods and materials for human implants. Resin-modified glass ionomer restorative material for tooth structures. Composite coatings obtained by electrochemical co-deposition. Supervisor joint PhD Thesis.
Name and address of	ECOLE CENTRALE PARIS, Grand Voie des Vignes, 92295 Chatenay Malabry cedex,

employer	France.
Type of business or sector	University – Engineering School.
Dates	March 1999 - Jun 2000, July 2001, July – August 2004, May 2007.
Occupation or position held	Invited professor. Invited Senior Researcher.
Main activities and responsibilities	Course in English: on Surface treatments to improve the corrosion and wear resistance of materials. Laboratory Practice Organization: Electrodeposition of composite coatings; Evaluation of corrosion behaviour of materials and coatings. Research work on Electrocodeposition of ceramic nano-crystals with metals and properties investigations (wear-corrosion, SEM, XRD, electrochemical corrosion) of obtained composite coatings. Materials Engineering.
Name and address of employer	Trento University, Department of Materials Engineering, Via Mesiano 77, 38050 Trento, Italy
Type of business or sector	University – Engineering School.
Dates	October - November 1999
Occupation or position held	Post doctoral Research Grant of French Government.
Main activities and responsibilities	-Research on composite coatings from preparation to characterization. -Research on electrochemical techniques (EIS) to study the electro-codeposition mechanism and kinetic of nanoparticles with metals.
Name and address of employer	CNRS, UPR 15, Laboratory “Physique des Liquides et Electrochimie”, Université Pierre et Marie Curie (Paris VI), 4 Place Jussieu, 75252 Paris Cedex 05, France.
Type of business or sector	University Pierre et Marie Curie Paris - France.
Dates	March 1998 - December 1998
Occupation or position held	NATO Post Doc Research Grant in the Research Domain of Composite coatings and Electrochemical Methods of Surface modification and Characterization.
Main activities and responsibilities	Research on Electrochemical and Wear Corrosion of Composite Coatings Obtained by Electrodeposition.
Name and address of employer	ECOLE CENTRALE PARIS, Grand Voie des Vignes, 92295 CHATENAY Malabry cedex, France.
Type of business or sector	Engineering University.
Dates	March - July 1997
Occupation or position held	TEMPUS INDIVIDUAL MOBILITY GRANT, from European Community to improve the courses in Chemistry, Electrochemistry and Corrosion.
Main activities and responsibilities	Research on Corrosion Study of Concrete Reinforcing Steel by Impedance Spectroscopy and Linear Polarisation Methods.
Name and address of employer	ECOLE CENTRALE PARIS, Grand Voie des Vignes, 92295 CHATENAY Malabry cedex, France.
Type of business or sector	Engineering University.
Dates	1980 - 1990
Occupation or position held	Researcher, Senior Researcher, Laboratory head.
Main activities and responsibilities	Research Projects Director. Electrochemistry, Corrosion, Surface Finishing, Protective Coatings and Materials

	Science from technology to industrial application. Partial work: Assistant Professor "Dunarea de Jos" University of Galati. Teaching activity: Corrosion and Protection, Electrochemical Processes, Physical Chemistry, Crystallography, New performed materials and General and Inorganic Chemistry for engineering degree.
Name and address of employer	Research Institute for Steel Plate and Metal Coatings (I.C.P.P.A.M.) of Galati, Romania.
Type of business or sector	Research Institute (R&D).
Dates	1977 - 1980
Occupation or position held	Chemist From Technical Office to head of Laboratory for Quality Control.
Main activities and responsibilities	Work organizer. Laboratory analysis: water, chemical products. Water technology demineralization. Water technology purification. Ammoniac, sulphuric acid, phosphoric acid and urea technology fabrication.
Name and address of employer	Chemical Fertilisers Factory, in the city of Bacau, Romania.
Type of business or sector	Chemical Industry.

Education and training	
Dates	1991 - 1996
Title of qualification awarded	DOCTOR OF SCIENCE IN CHEMISTRY. DIPLOMA Series N No. 001335 Doctor Degree (Ph.D. – Doctor of Philosophy)
Principal subjects/occupational skills covered	Ph.D Studies. Materials. Electrochemical Impedance Spectroscopy Method to Study the Composite Coating Codeposition and Electrochemical Corrosion. Comparative Surface Morphology of Metal and Composite Coatings obtained by Electrodeposition, Comparative Corrosion Properties of Modified Surfaces.
Name and type of organisation providing education and training	Dunarea de Jos University, Faculty of Metallurgy and Materials Science, 47 Domneasca street, 80000 Galati, Romania. University Doctoral School. Doctoral studies.
Level in national or international classification	DOCTOR OF SCIENCE IN CHEMISTRY. Doctor Degree (Ph.D. Doctor of Philosophy). Thesis: Obtaining and Structural Analysis of Composite Coating Materials.
Dates	1994 - 1995 (Government Grant for doctoral studies and degree research work).
Title of qualification awarded	To whom it may concern for the work done on PhD research subjects (Attestation - Certificate).
Principal subjects/occupational skills covered	Postgraduate studies in Physical Chemistry - Electrochemistry focusing on: -Electrochemical impedance spectroscopy and potentiodynamic measurements to obtain and characterise the composite coatings materials. -Scanning Electron Microscopy (SEM) and X-ray Energy Dispersive Analyse (EDS).
Name and type of organisation providing education and training	Eötvös Lorand University of Budapest and Hungarian Academy of Sciences, Hungary Department of Physical Chemistry; H-1518 BUDAPEST 112; Po Box 32.
Level in national or international classification	Doctoral scholarship (Grant). Scientific Reports: Review of composite coatings materials; Thermodynamic and kinetic of metals electrodeposition; Structural methods for coating analysis.

Electrochemical methods for surfaces investigation.

Dates	1985 - 1986
Title of qualification awarded	Postgraduate - Post-universities (Master) Diploma in <i>Corrosion and Corrosion Protection</i>: DIPLOMA Series B No.2392.
Principal subjects/occupational skills covered	-Fundamentals of Corrosion. -Surface Finishing and Protective Coatings. -Electrochemical Methods for Corrosion Research. -Electrodeposition Studies for Alloys Electro crystallisation Mechanism. -Corrosion Inhibitors.
Name and type of organisation providing education and training	Polytechnica University of Bucharest, Faculty of Chemical Engineering Calea Grivitei 132; 78122 BUCHAREST, Romania.
Level in national or international classification	Post university (Master Degree) - Corrosion and Corrosion Protection. Thesis: Zn-Fe alloys obtained by electrodeposition.
Dates	1978
Title of qualification awarded	Quality Assurance Certificate. Certificate number: 9912/28-11-1978.
Principal subjects/occupational skills covered	Fiability, maintenance, quality control, quality assurance in industrial chemistry. Analytical methods for quality control. Assurance Quality laws.
Name and type of organisation providing education and training	Polytechnica University of Bucharest, Faculty of Chemical Engineering. Calea Grivitei 132; 78122 BUCHAREST, Romania.
Level in national or international classification	Certificate (Attestation) of skills obtained in Quality Assurance for Chemical Industry. Thesis: Statistic methods to improve the quality control of sulfuric acid production.
Dates	1972 - 1977
Title of qualification awarded	M.S. IN CHEMISTRY. Faculty Degree in Chemistry. DIPLOMA No.493/ 06.03.1978 With the Senate Recommendation for research work and skills.
Principal subjects/occupational skills covered	Licence Student in Chemistry. University Degree. Diploma in Chemistry. -General Chemistry; Inorganic Chemistry; Organic and Macromolecular Chemistry; Chemical technologies; Analytical Chemistry; Electrochemistry; Applied Mathematics; Applied Physics; -Catalytic processes. -Physical Chemistry. -Surface Chemistry. Organo-metallic Chemistry.
Name and type of organisation providing education and training	Polytechnica University of Bucharest, Faculty of Chemistry. Calea Grivitei 132; 78122 BUCHAREST, Romania.
Level in national or international classification	M.S. IN CHEMISTRY. Diploma of Licence in Chemistry. Thesis: Obtaining and adsorption properties of silicon oxide particles for using in the catalytic area.
Dates	1959 - 1971
Title of qualification awarded	High SCHOOL LEAVING DIPLOMA. Diploma Series E No. 16765.
Principal	Primary School

subjects/occupational skills covered	Secondary and High School.
Name and type of organisation providing education and training	High School no. 2 of Radauti, county of Suceava, Romania.
Level in national or international classification	Mathematic, Physique and Chemistry. Bachelor degree.

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (*)

Language

Language

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
C1	English	C1	Proficient user	C2	Proficient user	C2	Proficient user
C1	French	C1	Proficient user	C2	Proficient user	C2	Proficient user
A2	Italian	A2	Basic user	A2	Basic user	A2	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences

-Team spirit.
-Good ability to adapt to multicultural environments, gained though my work experience abroad.
-Good communication skills gained through my experience as member of Management Committee of COST European Projects.

Studying and working experience in multicultural environment.

I have experience in multicultural environment: Romanian, Hungarian, French and Italian the most important as time of studies and work.

- During University studies and work in Romania I achieved experience to work in industrial environment during three years. After in a Research Institute as Researcher and Research Projects manager, where I have coordinate many research groups I achieved competencies to manage and doing research in materials engineering (surface treatments, new materials, electrochemistry, corrosion and corrosion protection) in Romanian environment. Starting from 1991 I achieved experience to teach and work with Romanian student groups in the same area at Galati University.
- During 1994 - 1995 I studied (for doctoral thesis, PhD) in Hungary at Eötvös Lorand University of Budapest and Hungarian Academy of Sciences focusing on the electrochemical impedance spectroscopy and potentiodynamic measurements to obtain and characterise the composite coatings materials. Competencies and experience achieved on electrochemical techniques to study the materials behaviour in different corrosive systems in the Hungarian environment.
- 1997 and 1998 as TEMPUS and NATO grant for a postdoctoral formation at Ecole Centrale Paris, France, I achieved experience in tribocorrosion and corrosion behaviour of materials, structural analysis of materials by electronic microscope techniques, X. ray disperse analysis and 2D - 3D surface micro-topography and image analysis.

I achieved experience to work with French students and co-workers as well as with different nationalities postgraduate co-workers: Italian, Polish, Czech, and Arabian.

- April 1999 to Jun 2000: Temporary work at Trento University Department of Materials Engineering, Italy, as invited professor, and senior researcher, Working

group of Prof. P. L. Bonora. I give courses in Surface treatments by electrodeposition to improve the corrosion and wear resistance of materials. Research work on codeposition of ceramic nano-crystals with metals and properties of obtained composite coatings.

I achieved experience to teach, manage and do research work with Italian students and co-workers.

- Jun 2000 to Jun 2001, September 2001-February 2002, September 2002-February 2003, September 2003-December 2003, February 2004, Mai- Jun 2004, Jun – July 2005, Jun – July 2006 : As Invited Senior Researcher Scientific and Invited Professor (Temporary work) at ECOLE CENTRALE PARIS, C.F.H. Laboratory. I achieved competencies in doing Research and Teaching on electrodeposition and wear corrosion of materials. Experience in work with French co-workers, French students and others Students nationalities as Swedish, German, Italian, Arabian, Czech, and Polish, which studied at that time at Ecole Centrale Paris. Also in the same time I achieved experience in Management and Organisation of the French Research Projects and Laboratory Practice as well as European Project (EREBIO -FP5).

- During 1998-2010 as member of Management Committee of COST 533 Materials (Materials for Improved Wear Resistance of Total Artificial Joints), COST D33 (Nanoscale Electrochemical and Bio-Processes at Solid-Aqueous Interfaces of Industrial Materials), COST D19 CHEMISTRY – Chemical Functionality to Nanometer Scale, COST 520 (Biofouling and Materials) and COST 521 (Corrosion of Steel in Reinforced Concrete Structures) european actions. I achieved experience and competencies in working with many nationalities partners (French, Italian, German, Swedish, Finnish, Spanish, Portugal, Hungarian, English, in the management of budgets and projects. At the same time I have been the manager of Romanian projects:

- RO1-Comparative corrosion studies of Zn-Fe alloy coatings and Zn coatings on steel reinforcing structures, RO-Marine bio - corrosion of SiC-Ni nano-structured composite coatings, RO-Electrochemical Aspects and Bio - Tribocorrosion Properties of Actually Used Nickel Based Alloys and Alternative Materials and Coatings in artificial joints, WG2-RO-Electrochemical and biotribocorrosion studies of interfaces between (composites, metallic, polymeric, ceramic) materials and micro organisms, M1-WG3-Tribochemistry: *Nano-structured composite coatings obtained by electrodeposition to be used in tribocorrosion systems: processing and properties investigation.*

- 2005-2006: Competencies and experience in working and organise exchange of researchers with French people, as director of Romanian part, in the Bilateral Research Project between Romania and France PAI-BRANCUSI ("Dunarea de Jos" University of GALATI, Romania – Ecole Centrale Paris, Laboratoire LGPM). *Etude de dépôts composites nanostructurés, pour la protection des surfaces métalliques contre la tribocorrosion.*

- 2003-2005: Competencies and experience in working and organise exchange of researchers with Belgium people, as director of Romanian part, in the Bilateral Research Project between Romania and Belgium ("Dunarea de Jos" University of GALATI, Romania - Katholieke Universiteit Leuven, Belgium): "*Tribocorrosion of engineering materials in view of their industrial use as sliding parts in pumps, shafts, and motors operated in water-lubricated conditions*".

- 2002: Competencies in working with German people in the frame of bilateral research project between Dunarea de Jos" University of GALATI, Romania and Chemnitz University of Technology - Germany, as co-worker.

- Good writing and redactional skills acquired in many publications with different nationality co-workers: Italian, French, and Belgian (Publications List and Books).

- Oratory speaker during plenary, keynote and oral presentations at national and international level acquired at National and International Scientific Congresses, Europe, Japan, USA and Canada, see Conferences at International Congresses.

Organisational and management skills

- Individual and team work, team-oriented and good communication skills.
- Research management experience at national and European level.

and competences

- Coordination of people and projects in Romania as project manager and working group manager as well as organization of student's courses, student's laboratory practice at "Dunarea de Jos" University of Galati.
- Budgets administration of managed research projects during the Romanian work at Research Institute as well as at University, Dept. of Metallurgy and Materials Science.
- Coordination, administration of people, projects and students during temporary work in France, and Italy in the periods mentioned above.
- **Management competences** achieved during the period of Management Committee Member of European Projects:

MANAGEMENT COMMITTEE OF EUROPEAN RESEARCH ACTIONS AND PROJECTS:

COST 521 - Corrosion of Steel in Reinforced Concrete Structures.

<http://www.cc-ites.ugal.ro/finalizate.htm>

COST 520 - Biofouling and Materials.

<http://www.cc-ites.ugal.ro/finalizate.htm>

COST D19 – Chemistry - Chemical Functionality Specific to the Nanometer Scale.

http://www.cost.eu/COST_Actions/cmst/D19?management

Vice-Chair of COST D33 – Nanoscale Electrochemical and Bio-Processes at Solid-Aqueous Interfaces of Industrial Materials, Director of the Project.

http://www.cost.eu/COST_Actions/cmst/D33?management

COST 532 - WG3 Tribochemistry: <http://www.cc-ites.ugal.ro/finalizate.htm>

COST 533 – Materials – Materials for Improved Wear Resistance of Total Artificial Joints. http://www.cost.eu/COST_Actions/mpns/533?management

COST 636 - Xenobiotics in the Urban Water Cycle.

► **Organisation and Coordination skills** achieved as member in International Scientific Committee and Chairman of sessions at different International Congresses and Scientific organisation:

2007: Member of International Scientific Committee BIOCORYS 2007 – International Conference on Biocorrosion of Materials. 11-14 June, Paris, France.

2002: CHAIRMAN of WP 18 Tribocorrosion - Knowledge dissemination and training, European Federation of Corrosion.

2003: Member of International Scientific Committee EUROCORR 2003, Budapest, Hungary.

2008: Chairman of WG1-WG2 Workshop event COST D33 2008: COST D33 EU Project: Nanoscale Electrochemical and Bioprocesses (Corrosion) at Solid-aqueous Interfaces of Industrial Materials. Period: 6th to 8th November 2008, Bucharest Romania.

2008: Member of International Scientific Committee for the Conference on Corrosion and Modern Technologies in the Military. November 5-8, 2008. Bucharest, ROMANIA.

2009: Chairman of COST D33 final workshop: Nanoscale Electrochemical and Bioprocesses (Corrosion) at Solid-aqueous Interfaces of Industrial Materials, 13-15 May 2009, Cluj Napoca, Romania.

2009: Member of International Scientific Committee Membru UGALMAT 2009.

2010: Member of International Scientific Committee (Program). CPA 2010: Conference on Corrosion and Corrosion Protection (Conferinta de Coroziiune si Protectie Anticoroziva) 2010 - a V-a Conferință Națională cu Participare Internațională de Coroziiune și Protecție Anticorozivă.

2011: Member of International Scientific Committee MATERIALS 2011, Guimarães, Portugal and VI International Materials Symposium MATERIALS 2011, XV meeting of SPM - Sociedade Portuguesa de Materiais 18-20 April 2011, Guimarães, Portugal.

2011: Member of International Scientific Committee: The 1st Edition of the International Conference of Young Researchers. New trends in environmental and materials engineering. May 18 - 20, 2011 in Galati, Romania.

2011: Member of International Scientific Committee: International workshop research quality in doctoral school, Increased industrial and international visibility (POSDRU 19524) / 13 – 14 July 2011, Galati, Romania.

Chair person for Sessions during International Congresses and Conferences:

-2002: Chairperson of Session "Coatings", at 15th International Corrosion Congress, Granada Spain.

-1998: Chairperson of Session "Deposition", International Society of Electrochemistry, 49th Annual Meeting, Kitakyushu, Japan, September 13-19, 1998.

-2003: Chairperson of Session: "*Tribocorrosion Aspects of Coatings*" Eurocorr 2003.

-2008: Co-chair of Session 5 ORAL COMMUNICATIONS. *Sfantu Gheorghe* Hall (Chair: Dr. Srinivasa RAO, Prof. Lidia BENEĂ). International Conference on Corrosion and Modern Technologies in the Military. November 5-8, 2008. Bucharest, Romania.

-Coordinator of 3th International Workshop on Achievement and Challenges for Functional Surfaces Obtained by Electrochemical Methods – Processing and Characterization, NanoSurf 03/2014 jointly with PERFORM, 23 – 25 July 2014, Galati, România.

http://www.cc-ites.ugal.ro/Invitation_Workshop_NanoSurf_03_-2014_&_PERFORM_2014.pdf

-Chairperson Session 2, Room D: International Scientific Conference CORROSION 2014, Session 2, 18 – 21 November 2014, Gliwice, Poland.

<http://www.corrosion2014.polsl.pl/index.php?lang=en>

-Chairperson: Professor Dr. Ing. Lidia BENEĂ, Dunarea de Jos University of Galati, Romania. Session Tribochemistry (Tchem). BALKANTRIB'14 8th International Conference on tribology. 30thOct.-1stNov.2014, Sinaia, Romania. Organized by Balkan Tribological Association.

-Coordinator of International Seminar: Scientific Approach in Research Methodology & Universe of Biomaterials. Organized in the frame of Research Project PNII-PCE - New hybrid (inorganic-organic) functionalization of biomaterials (metals alloys) surfaces with functional molecules by electrochemical techniques. Acronym: HyBioElect Contract 10 / 30-08-2013 (2013-2016) - UEFISCDI, 23 of July 2015.

<http://www.hybioelect.ugal.ro>

► **Organisation of people and scientific activities at European level:**

-During 2002 with Prof J. P. Celis (Katholieke Universiteit Leuven) Dr. P. Ponthiaux and F. Wenger (Ecole Centrale Paris), I participate at organization and implementation of a new Working Party, WP18 -Tribocorrosion, in the European Federation of Corrosion.

-Vice chairman of COST D33 –Chemistry, European action. WG1 Leader and Project manager.

► **Organisation and administration of Socrates Erasmus Programme** for academic staff and students mobility and training between Dunarea de Jos University of Galati, Ecole Centrale Paris, Trento University, Katholieke Universiteit Leuven, on the signed bilateral agreements for Materials Science and Engineering Domain.

► **Organisation and administration of people and projects** during the EU project as manager titled: "Nano-structured composite coatings obtained by electrodeposition to be used in tribocorrosion systems: processing and properties investigation", accepted in the COST 532 action: Triboscience and Tribotechnology, WG3 Tribochemistry Project M1. The project is collaboration between Romania, France, Belgium, Italy and Hungary and Others European Projects.

Peer review activity and evaluation

EXPERT EVALUATOR and RAPPORTEUR:

European Commission – RDG Science Research and Development, Engineering Science Panel, Chemistry Panel.

Identification: FP5: EE19981A24009.

Intas Expert: ID-4458.

FP6: EX2002B002205, FP7: Expert CNCSIS 2004-2015.

National Expert Register 2005-2015.

Scientific reviewer for ISI International Journals:

ACS Nano, Corrosion Science, Electrochimica Acta, Solid State Electrochemistry, Surface and Coatings Technology, Scripta Materialia, Journal of Electroanalytical Chemistry, Journal of Biomedical Materials Research: Part B – Applied Biomaterials, Wear, Tribology International, Composites Part B, Materials and Design, Applied Surface Science, Materials Chemistry and Physics, Science and Technology of Advanced Materials.

Scientific Reviewer for International Ph.D. Thesis:

Dicarboxylic acids as corrosion inhibitors for carbon steel in ground water. Autor Felicia Rajammal Selvarani, Supervisor: S. Rajendran. Universitatea Madurai Kamaraj University – India.

Inhibition of corrosion of mild steel in acidic media by some mannich bases. Autor:

Mr. M. ANWAR SATHIQ. Supervisor: Dr. A. Jamal Abdul Nasser. Jamal Mohamed College (Autonomous), Tiruchirappalli - 620 020, Tamil Nadu, India.
Inhibition of corrosion of mild steel in well water by phenolic compounds. authored by: Mrs. H BENITA SHERINE. Bharathidasan University, Thiruchirappalli - 620 024 – India.

Scientific Editorial Board:

Member of Scientific Editorial Board : *The Annals of “Dunarea de Jos” University of Galati, Fascicle IX.* Metallurgy and Materials Science. ISSN 1453-083X.
 ANALELE UNIVERSITĂȚII “DUNĂREA DE JOS” DIN GALAȚI. FASCICULA IX.
 METALLURGIE ȘI ȘTIINȚA MATERIALELOR
 Member of Scientific Editorial Board ISI Journal: *ISRN Corrosion*. ISSN: 2090-8903 (Online) doi:10.5402/CORROSION.

Technical skills and competences

Good command of quality control processes acquired through training.
 Skills and competences in specialized electrochemical instruments, scanning electron microscopy and ultra high microtopography acquired through work experience abroad.

Computer skills and competences

Very good computer technical skills: Microsoft Office, Word, Excel, PowerPoint, Photo Paint, CorelDraw, Origin, Internet. Art work.
 Acquired through work, seminars, conferences, etc.

Specific area of activity

TEACHING AND RESEARCH

Chemistry

- Electrochemical studies and methods. Chemical technologies. Surface Chemistry.
- Corrosion and wear corrosion (tribocorrosion) of materials (mechanisms and kinetics).
- Fundamentals of Metal Electrodeposition,
- Micro and Nano Structured Composite Coatings.
- Research on surface modifications technologies to improve the corrosion and wear resistance of materials.
- Research on environment compatibility of triboreactive materials and lubricants.
- Development and understating of surface reactivity.
- Research on lubricants and additives.
- Electro analytical methods of investigations.
- Kinetic and mechanism of materials (metallic, coatings) degradation by combined action of corrosion and wear= tribocorrosion.

Materials Science and Engineering

- Nano and micro structured composite coatings, complex degradation, biomaterials passive state, corrosion, kinetic, tribocorrosion.
- Surface treatments by electrodeposition of metals, alloys and composites to improve the corrosion and wear resistance of materials.
- Degradation of Materials by Corrosion and wear corrosion, Tribocorrosion, Biocorrosion.
- New materials obtained by co-deposition of dispersed particles with metals and alloys to obtain micro and nano structured coatings.
- Nanomaterials.
- Electrocatalytic activity of metal matrix composite coatings obtained by electrocodeposition.
- General and Inorganic Chemistry.
- Industrial Wastewater treatments.
- Resin-modified glass ionomer restorative materials for tooth structures.

Materials characterisation

- DC and AC electrochemical measurements.
- Scanning electronic microscope.
- Transmission electronic microscope.
- X-ray disperse analysis.
- 2D -3D surface micro topography and surface analysis.

Driving licence

Category B

Member of

MEMBERSHIP:

International Society of Electrochemistry (ISE).

**professional
associations**

ECS - The Electrochemical Society Inc. (ECS USA).
CEFRACOR France.
Royal Society of Chemistry (RSC).
Romanian Society of Chemistry.

CHAIRMAN (2002-2004) and Member- of WP 18 Tribocorrosion – Action: Knowledge dissemination and training, European Federation of Corrosion.

Vice Chair of COST D33 - Chemistry.

11 Prize and Diplomas at Scientific National Conferences for scientific and technical presentations.

**Special CRYSTAL
AWARD and
CERTIFICATE
SGEM 2018**

Awarded by Scientific Chairmen of the SGEM 2018 Conference as Best presenters awarded with special CRYSTAL AWARD and CERTIFICATE! of 18th International Multidisciplinary Scientific GeoConference SGEM 2018, 24. Section Micro and Nano Technologies, 30 June - 9 July, 2018, Albena, Bulgaria.

**DIPLOMA of
SILVER MEDAL
2017**

DIPLOMA of SILVER MEDAL, awarded in 2017 by EUROINVENT 2017 - EUROPEAN EXHIBITION OF CREATIVITY AND INNOVATION. for invention patent: Co/nano-ZrO₂ functional surfaces obtained by electrodeposition, authored by Lidia Benea and Florentina Sorcaru.

**Anghel Saligny
Diploma of Excellence
2017**

**ANGHEL SALIGNY DIPLOMA for excellence results as university professor position.
Awarded in 2017 by Engineering Faculty from Dunărea de Jos University of Galati.**

**Excellence Diploma
2016**

**EXCELLENCE DIPLOMA for Scientific and Technological Research Activity done in the frame of Bilateral cooperation Romania - France, Framework Programme "Brâncuși-Humbert Curien".
Awarded in 2016 by: France Embassy in Romania and Romanian National Authority for Research and Innovation (ANCSI).**

**Anghel Saligny
Diploma
2016**

**ANGHEL SALIGNY DIPLOMA for excellence results as university professor position.
Awarded in 2015 by Engineering Faculty from Dunărea de Jos University of Galati.**

**ACS
Certificate of
Appreciation
2011**

**CERTIFICATE OF APPRECIATION for valuable contribution and dedicated service in the peer review of manuscripts submitted to ACS Journals.
Awarded in 2011 by American Chemical Society (ACS) Publishing Group.**

**Excellence Diploma
2010**

Excellence Diploma for Research Activity in Corrosion and Corrosion Protection.

**Awarded in 2010 by:
Technical University of Cluj –Napoca and Industrial Factory BETAK
S.A.**

Specific Achievements Scientific Results

- **Published books and / or participation at Chapters of Books : 23.**
- **Editorial work for books and DVD proceeding: 5.**
- **Total published papers in National and International Journals: 267.**
 - Total scientific papers published in ISI (Journals + Proceeding Volumes): 85.
 - Scientific papers published in ISI Thomson Reuters Journals: 47.
 - Cumulative impact factor (I.F.) = 97. 146.
 - Scientific papers published in ISI Proceedings Volumes: 38.
 - Scientific papers published in BDI journals: 62.
 - Scientific papers published in others national journals and Conference Proceedings: 120.
- **Scientific presented papers as Invited Lectures, Keynote, Oral and Posters at International and National Conferences: 325 (118 during 2014-2018).**
- **65 scientific research projects, as director and / or co - worker,** on metal, alloy and composite coating by electroplating technologies applied to technical products, mechanisms and kinetics of corrosion and tribocorrosion processes, chemical analyses, development of new products, materials and coatings.
- **Author of 11 invention patents and 35 innovators** in the fields of applied electrochemistry, materials engineering new materials, coatings and corrosion protection).
- 2016: 1 Article published in TOP 1 Journals in the research domain: MATERIALS SCIENCE, COATINGS & FILMS, after AIS (Classification PRECISI-UEFISDCI-Romanian Ministry of Education and Research).**

Scientific and academic international Recognition Hirsch Index and citations

Academic and scientific responsibilities:

- **Director of Doctoral (Ph.D.) School: Fundamentals and Engineering Sciences (SFI) at Dunarea de Jos University of Galati. Rector Decision: 2857 / 26-10-2017.**
- **Member of the National Council for Attesting Titles, Diplomas and Certificates Universitaires (CNATDCU), Ministry of National Education, Romania for the period 2016-2020, Materials Engineering Committee, Ministry Order: OMENCS nr. 4.106/10.06.2016.**
<http://www.edu.ro/index.php/articles/24513>
- **Director of Research Center Interfaces - Tribocorrosion and Electrochemical Systems (CC-ITES) at "Dunărea de Jos" University of Galați (institutional accreditation 2007).** www.cc-ites.ugal.ro
- **Coordinator of Erasmus Programmes** with Ecole Centrale Paris - France, Katholieke Universiteit Leuven - Belgium, Duisburg - Essen University - Germany, Trento University - Italy,
- CHAIRMAN of WP 18 Tribocorrosion – Action: Knowledge dissemination and training,** European Federation of Corrosion (2002-2004).
- VICE CHAIR OF COST D33 - CHEMISTRY - Chemistry to the nanoscale.**
- 10 PRIZE AND DIPLOMAS** at Scientific National Conferences for scientific and technical presentations.
- 40 Invited Conferences** at International Scientific Symposia and Congresses.
- TOP 25/2007 articles, 2007 TOP Cited Articles** within the journal: **Solid State Ionics.**
- Preparation and investigation of nanostructured SiC-nickel layers by electrodeposition.**

<http://top25.sciencedirect.com/subject/physics-and-astronomy/21/journal/solid-state-ionics/01672738/archive/11/>

Hirsch Index and citations

Citations in international ISI Journals: (Benea, L*, or Benea L*, or Lidia Benea):

● 1824 Citations of ISI published articles in ISI Journals in Google Scholar:

$$h_{BeneaLidia}^{GoogleSch} = 19$$

<https://scholar.google.ro/citations?user=rSniQ6sAAAAJ&hl=en>

● 1332 Citations of ISI published articles in ISI Journals in SCOPUS: Scopus – Science Direct: SCOPUS ID: 55954358700

$$h_{BeneaLidia}^{Scopus} = 18$$

<https://www.scopus.com/authid/detail.uri?authorId=55954358700>

● 1280 Citations of ISI published articles in ISI Journals in ISI Web of Knowledge:

$$h_{BeneaLidia}^{WebOfKn} = 20$$

http://apps.webofknowledge.com/CitationReport.do?product=UA&search_mode=CitationReport&SID=D482YHrkjojPrpJBjq2&page=1&cr_pqid=2&viewType=summary

Researcher ID web page:

<http://www.researcherid.com/rid/B-9653-2011>

ORCID:

<http://orcid.org/0000-0003-1551-3960>

2016
Highly Cited
Researcher

DESIGNED by Thomson Reuters as a 2016 Highly Cited Researcher because my work has been identified as being among the most valuable and significant in the field. Very few researchers earn this distinction – writing the greatest number of reports, officially designated by Essential Science Indicators as Highly Cited Papers. In addition, these reports rank among the top 1% most cited works for their subject field and year of publication, earning them the mark of exceptional impact.

October 2018

Prof. Univ. Dr. (Ph.D.) Lidia BENEÀ

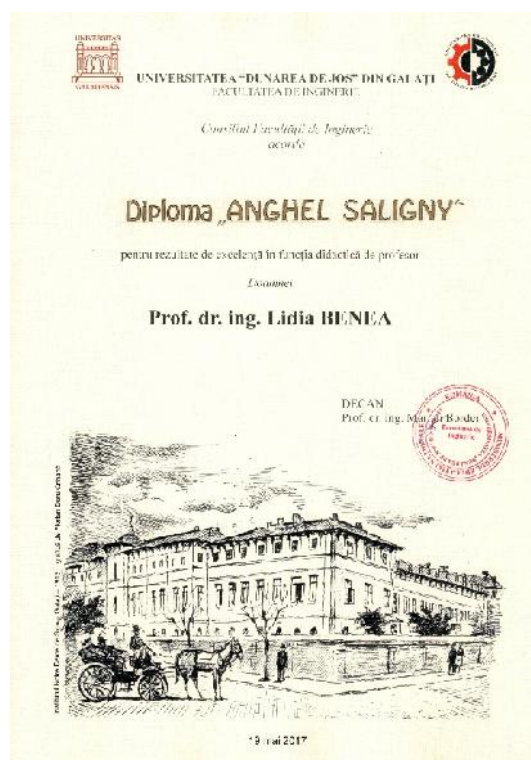
Special CRYSTAL AWARD and CERTIFICATE SGEM 2018: Awarded by Scientific Chairmen of the SGEM 2018 Conference as Best presenters awarded with special CRYSTAL AWARD and CERTIFICATE! of 18th International Multidisciplinary Scientific GeoConference SGEM 2018, 24. Section Micro and Nano Technologies, 30 June - 9 July, 2018, Albena, Bulgaria.



SILVER MEDAIL - DIPLOMA
for invention: Co/nano-ZrO₂ functional surfaces obtained by electrodeposition.
Awarded in 2017 by EUROINVENT 2017 - EUROPEAN EXHIBITION OF CREATIVITY AND INNOVATION.



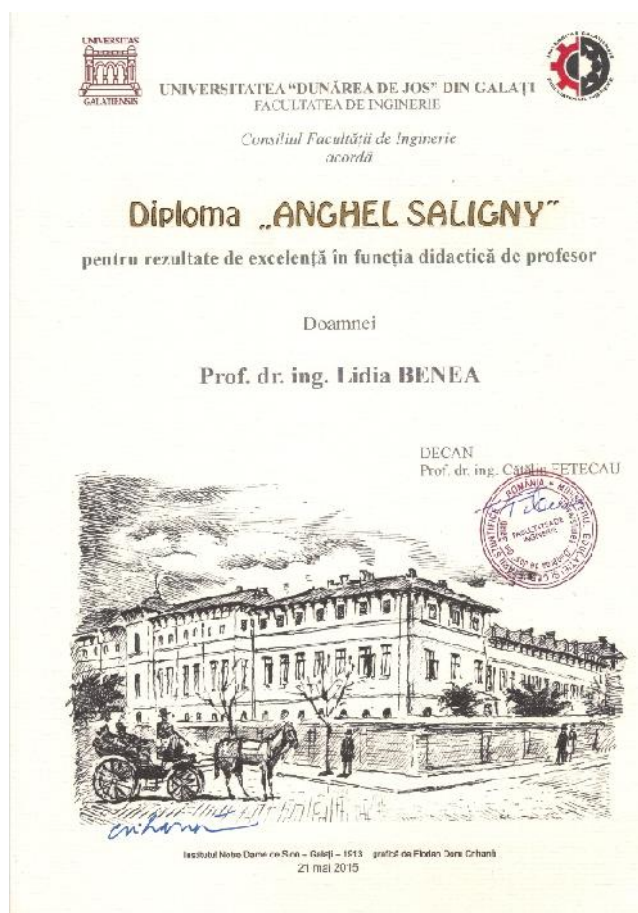
ANGHEL SALIGNY - EXCELLENCE DIPLOMA
for excellence results as university professor position.
Awarded in 2017 by Engineering Faculty from Dunărea de Jos University of Galati.



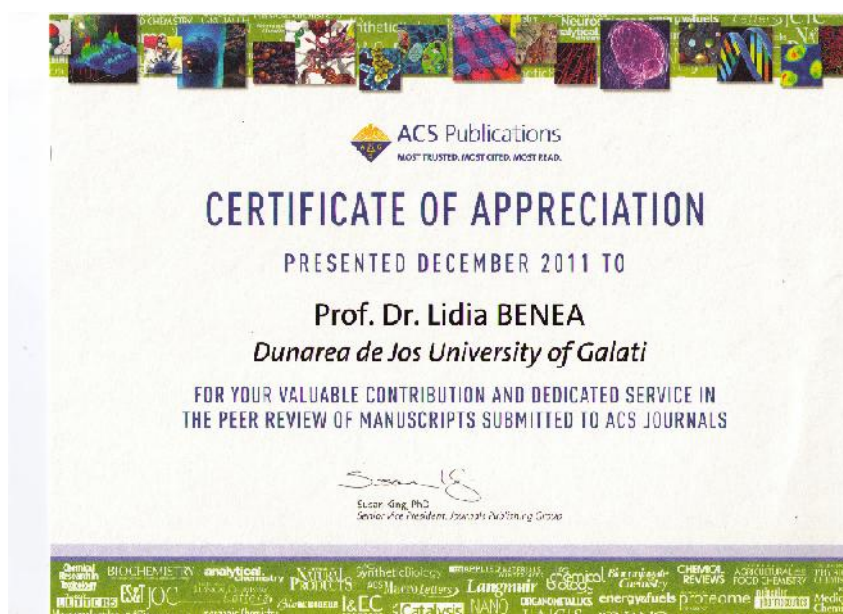
EXCELLENCE DIPLOMA for Scientific and Technological Research Activity done in the
frame of Bilateral cooperation Romania - France, Framework Programme "Brâncuși-
Humbert Curien".
Awarded in 2016 by: France Embassy in Romania and Romanian National Authority for
Research and Innovation (ANCSI)



ANGHEL SALIGNY DIPLOMA for excellence results as university professor position.
Awarded in 2015 by Engineering Faculty from Dunărea de Jos University of Galati.



CERTIFICATE OF APPRECIATION for valuable contribution and dedicated service in the peer review of manuscripts submitted to ACS Journals.
Awarded in 2011 by American Chemical Society (ACS) Publishing Group



Excellence Diploma 2010
acordată de Universitatea Tehnică Cluj Napoca și Societatea BETAK pentru activitatea
deosebită în domeniul Coroziei și Protecției Anticorozive.
Excellence Diploma for Research Activity in Corrosion and Corrosion Protection.
Awarded by: Technical University of Cluj –Napoca and Industrial Factory BETAK S.A.



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October 2018

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