NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY POLITEHNICA BUCUREȘTI
FACULTY OF CHEMICAL ENGINEERING AND BIOTEHNOLOGIES
"Costin Neniţescu" Departament of Organic Chemistry



Curriculum vitae Europass

Personal information

Surname / First name	**Balaure, Paul Cătălin**
Address)	1-7 Polizu Gheorghe Street, Bucharest, 011061, Romania
Telefonphone number	-
Fax	
E-mail addresses	pbalaure@gmail.com; paul.balaure@upb.ro
Nationality)	Romanian
Date of birth	05.05.1961
Sex	male

Work experience

Dates (from-to)	**2014 – present**
Occupation or position held	Associate Professor
Main activities and responsibilities	Teaching and research activities
Employer's name and locality	National University of Science and Techology Politehnica Bucureşti
Business or sector	Education/Research
Dates (from-to)	**2001 - 2014**
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching and research activities
Employer's name and locality	National University of Science and Techology Politehnica Bucureşti
Business or sector	Education/Research
Dates (from-to)	**1996 – 2001**
Occupation or position held	Senior Research Associate
Main activities and responsibilities	Research
Employer's name and locality	Romanian Academy, "Costin D. Nenițescu" Institute of Organic Chemistry, Bucharest
Business or sector	Research
Dates (from-to)	**1991-1996**
Occupation or position held	Research Associate
Main activities and responsibilities	Research
Employer's name and locality	Romanian Academy, "Costin D. Nenițescu" Institute of Organic Chemistry, Bucharest
Business or sector	Research

Pentru mai multe informaţii despre Europass accesaţi pagina: http://europass.cedefop.europa.eu
© Comunităţile Europene, 2003 20060628

Dates (from-to)	**1989-1991**
Occupation or position held	Research Assistant
Main activities and responsibilities	Research
Employer's name and locality	Romanian Academy, "Costin D. Nenițescu" Institute of Organic Chemistry, Bucharest
Business or sector	Research
Dates (from-to)	**1986-1989**
Occupation or position held	Trainee Engineer
Main activities and responsibilities	Production and interphase and final analysis and control activities
Employer's name and locality	Sugar Beat Processing Plant, Fundulea, Călărași
Business or sector	Production/food industry

Education and training

Dates	**2009-2010**
Qualification awarded	Postgraduate certificate in pedagogy
Principal subject studied / skills acquired	Educational Psychology, Pedagogy I (The fundamental Curriculum theory and methodology), Pedagogy II (Theory and methodology of instruction, Theory and methodology of educational assessment), Methods of teaching specialized matters, Computer assisted training, Classroom management, Teaching practice in pre-university education, Psycho-pedagogy of adolescents and young adults, Design and management of educational programs, Teaching and development in the teaching specialty area, Teaching practice in high school, secondary, tertiary, Multimedia Education, Psychosociology of education
Education or training organisation's name and locality	Ministry of Education, Research, Youth and Sport, POLITEHNICA University of Bucharest, Department of teacher training
Dates	**2007**
Qualification awarded	Certificate of research stage completion
Principal subject studied / skills acquired	Electrochemistry, Electroanalysis
Education or training organisation's name and locality	UNIVERSITÁ DEGLI STUDI MODENA E REGIO EMILIA, DIPARTIMENTO DI CHIMICA, ITALIA
Dates	**1990-1996**
Qualification awarded	PhD in Chemistry
Principal subject studied / skills acquired	Advanced Organic Synthesis, Reaction Mechanisms in Organic Chemistry, Advanced instrumental analysis of organic compounds
Education or training organisation's name and locality	Romanian Academy, Section of Chemical Sciences, "C. D. Nenițescu" Institute of Organic Chemistry, Bucharest
Dates	**1981-1986**
Qualification awarded	MS degree, specialty Organic Chemical Technology
Principal subject studied / skills acquired	Organic Chemistry, Reaction mechanisms in organic chemistry, Instrumental analysis, Chemistry and Technology of Basic Organic and Petrochemical Synthesis, Chemistry and Technology of Natural and Synthetic Drugs, Chemistry and Technology of Pesticide Synthesis, Chemistry and Technology of Natural and Synthetic Dyes
Education or training organisation's name and locality	Polytechnic Institute of Bucharest, Faculty of Chemical Technology

Pentru mai multe informaţii despre Europass accesaţi pagina: http://europass.cedefop.europa.eu
© Comunităţile Europene, 2003 20060628

Dates	**1976-1980**
Qualification awarded	High School Diploma, specialty Physics-Chemistry
Principal subject studied / skills acquired	Mathematics, Physics, Chemistry, Chemistry Lab, Biology, Biochemistry, Biophysics, Romanian Language and Literature, English Language
Education or training organisation's name and locality	"C. A. Rosetti"High School of Natural Sciences, Bucharest

Professional skills and abilities

Deliver lectures and seminar/laboratory learning activities on

- Organic Chemistry - Bachelor of Science Degree Program (BS) in Chemical Engineering at Faculty of Chemical Engineering and Biotechnologies (FCEB), National University of Science and Techology Politehnica București (NUSTPB)
- Biochemistry - BS, at FCEB, NUSTPB
- Chemistry and Technology of Natural and Synthetic Pesticides - BS Programs in Chemical Engineering at FCEB and Faculty of Engineering in Foreign Languages, NUSTPB
- Environmental toxicology: toxicants and antidotes - BS Programs in Medical Equipment and Systems and Biomaterials and Medical Devices at Faculty of Medical Engineering, NUSTPB
- Food toxicology - BS Programs in Food Engineering at FCEB and Faculty of Biotechnical Systems Engineering, NUSTPB
- Pharmaceutical Technology (Master of Science Degree Program (MS) in Pharmaceutical and Cosmetic Products at FCEB, NUSTPB
- Application of Chromatographic Methods for the Structural and Compositional Study of Food Products – MS in Quality Control and Security of Food Products at FCEB, NUSTPB.
- Bachelor's and Master's Thesis Supervision

Research areas

• Designing and conducting advanced organic synthesis experiments.
• Syntheses of pharmacological active compounds from the class of dibezo[b,f]azepine.
• Syntheses and biomedical applications of nanostructured systems: syntheses of metal oxide nanoparticles with core/shell/adsorption extra shell morphology and interesting applications like biofilm development inhibition, augmentation of the antimicrobial activity of antibiotics, controlled drug delivery. Syntheses of modified-release dosage forms based on nanostructured silica network prepared by the molecular imprinting technology. Functionalization of silica nanoparticles with organic compounds and biomolecules.
• Domino reactions mediated by organic palladium complexes: applications in the synthesis of biological active molecules having the steroid and/or taxane carbon skeleton. Allene syntheses.
• Study of organic reaction mechanisms: oxidation, ring opening, cycloaddition, cationic rearrangement reactions.
• The chemistry of small ring systems: generation and dimerization of benzocyclobutadiene systems by classical methods and under ultrasonic activation.
• Synthesis of thiophene based conducting polymers for electrochemical sensors and biosensors.
• Polymeric membranes in separation processes: applications in ultrafiltration and pervaporation.
• Use of enzymes in determination of pharmaceuticals and toxicants in environmental and food matrices.

Other skills and responsibilities

Reviewer for several ISI journals
- New Journal of Chemistry
- RSC Advances
- Current Analytical Chemistry
- Drug Development and Industrial Pharmacy
- Journal of Biomaterials Science-Polymer Edition
- Pharmaceutics
- University Politehnica of Bucharest Scientific Bulletin Series B: Chemistry and Materials Science

Pentru mai multe informaţii despre Europass accesaţi pagina: http://europass.cedefop.europa.eu
© Comunităţile Europene, 2003 20060628

Mother tongue Romanian

Other Languages

Auto Evaluation

	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	C1	Proficient usert	C2	Proficient user	B2	Independent user	B2	Independent user	C2	Proficient user

(*) Common European Framework of Reference for Languages

Communication skills

- very good ability to communicate for successful adaptation in a multi-cultural environment gained through my experience during the research activity carried out at the University of Modena and Reggio Emilia, Italy

Organisational / managerial skills

2021-present Guest Editor of special issues of the ISI journals "Frontiers in Bioengineering and Biotechnology" (Impact factor 6.064)), "Materials" (Impact factor 3.748), "Coatings" (Impact factor 3.236)
2020 - present - Member of the Topical Advisory Panel of the ISI journals "Materials" and Coatings"
2011 - 2013; 2019 – present - Member of the Editorial Board of the ISI journal "Biointerface Research in Applied Chemistry"
2014- present - Member of the Editorial Board of the IDB journal "Austin Journal of Nanomedicine & Nanotechnology"
2012-2013 - Member of the Editorial Board of the IDB journal "Letters in Applied NanoBioScience"
1994-1999 – Member of the Board of Directors of S.C. IPROCHIM S.A. Bucharest

Technical skills and competences

User of the usual analytical techniques in organic chemistry (FT-IR, UV-VIS spectrometry, NMR, MS, chromatographic methods)

Computer skills

User of Microsoft office (Word, Power-point, Excel), Chemdraw, Chemwin, Adobe Acrobat

Driving licence

Category B

Supplemental Information

Published research papers

- 2 books
- 5 book chapters
- 43 in extenso papers (32 ISI articles from which 22 as main or correspondence author and 11 articles in journals indexed by international data bases)
- 7 ISI articles as main or correspondence author in Q1 journals according to the impact factor (red zone articles)
- 40 communications at international and national congresses and conferences

Date: 15.09.2023 **Signature**

Assoc.Prof.Dr.Eng. Paul Cătălin BALAURE

Pentru mai multe informaţii despre Europass accesaţi pagina: http://europass.cedefop.europa.eu
© Comunităţile Europene, 2003 20060628