Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Carmen Mihaela Topală**
Address(es)	[redacted]
Telephone(s)	[redacted] Mobile: [redacted]
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E-mail	carmen.topala@upb.ro[redacted]
Nationality	Romanian
Date of birth	
Gender	female

Desired employment / Occupational field

Associate Professor

Work experience

Dates	September 2006 onwards
Occupation or position held	Associate Professor
Main activities and responsibilities	teaching the courses and laboratory work for the following academic disciplines Organic Chemistry and Biochemistry; scientific research of organic compounds
Name and address of employer	Faculty of Science, Physical Education and Informatics, University of Pitesti, Romania
Type of business or sector	Education and Scientific research
Dates	March 1999- September 2002
Occupation or position held	lecturer
Main activities and responsibilities	teaching the courses and laboratory work for the following academic disciplines Organic Chemistry and Biochemistry; scientific research of organic compounds
Name and address of employer	Faculty of Science, Physical Education and Informatics, University of Pitesti
Type of business or sector	Education and Scientific research
Dates	March 2003- September 2003
Occupation or position held	lecturer
Main activities and responsibilities	teaching the courses and laboratory work for the following academic discipline Organic Chemistry
Name and address of employer	Faculty of Chemistry, University of Bucharest
Type of business or sector	Education and Scientific research
Dates	March 1994-September 2006
Occupation or position held	assistant
Main activities and responsibilities	laboratory work for the following academic discipline Organic Chemistry
Name and address of employer	Faculty of Science, University of Pitesti
Type of business or sector	Education and Scientific research
Dates	September 1992 – March 1994

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Occupation or position held	High school teacher
Main activities and responsibilities	Teaching chemistry, biology
Name and address of employer	Economic High School Pitesti
Type of business or sector	Education

Education and training

2025-Erasmus Teaching Mobility Firat University, Elazig, Turkey

2023- Erasmus Teaching Mobility - in Universitat Politecnica de Valenci, Spain

2021 Erasmus Teaching Mobility - Training to develop skills and competencies necessary for academic career in The University of Birjand, Iran

2019 Erasmus Teaching Mobility - Training to develop skills and competencies necessary for academic career in Tarbiat Modares University, Teheran, Iran

2016- Erasmus Teaching Mobility - in Universitat Politecnica de Valenci, Spain;

2014 - Erasmus Training Mobility - Training to develop skills and competencies necessary for academic career in Universita Degli Studii Della Basilicata, Italia;

Dates	September 1996- May 2002
Title of qualification awarded	PhD. Thesis Organic Chemistry
Principal subjects/occupational skills covered	Synthesis of new steroid derivatives with nitrogen and sulfur
Name and type of organisation providing education and training	University of Bucharest, Faculty of Chemistry
Level in national or international classification	ISCED 6

Dates	June 1992
Title of qualification awarded	Bachelor of Science
Principal subjects/occupational skills covered	Organic Chemistry
Name and type of organisation providing education and training	University of Bucharest, Faculty of Chemistry
Level in national or international classification	ISCED 5

Personal skills and competences

Evaluator The Romanian Agency for Quality Assurance in Higher Education (ARACIS)
Training „Strategic Planning for University Leaders", Bucuresti 2010

Mother tongue(s) **Romanian**

Other language(s)

Language	Understanding		Speaking		Writing
Self-assessment	Listening	Reading	Spoken interaction	Spoken production	
European level (*)					
English	B1	B1	B1	B1	B1

(*) Common European Framework of Reference for Languages

Social skills and competences	Responsibility, Teamwork skills, communication skills, negotiations
Organisational skills and competences	Problem identification capacity, problem solving capacity, Systemic thinking, research and planning skills.
Technical skills and competences	Computer aided design, modelling, simulation

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Computer skills and competences	Microsoft Office (Word, Excel, Power Point), ISIS DRAW, CHEM DRAW, CHEM ChemSketch - ACD/Labs FTIR analysiss SPECTRA MANAGER
Artistic skills and competences	
Other skills and competences	Hoby: painting, bridge, Sports skiing
Driving licence	B category
Additional information	Publications: 70 ISI scientific papers, 20 conferences, 20 research projects, 7 student textbooks **Professional Affiliation:** Romanian Chemistry Society (SChR) – 2005 onwards; treasurer Arges subsidiary – SChR 2006- 2020; vice-president Arges subsidiary– SChR 2020-2025 Romanian Order of Biochemists, Biologists and Chemists (OBBCSSR) – 2016 onwards member of the Professional-Scientific, Education and Legislation OBBCSSR Commission
Annexes	**List of publications**

Publications (selections)

A. Books

1. C. Topală, Bazele Chimiei Organice, Ed. Universităţii din Piteşti, 2010, 261p. ISBN: 987-606-560-174-1
2. C. Topală, Chimie organica. Functiuni simple - note de curs, 2010, 120 pag. ISBN 978-606-560-136-9
3. C. Topală, Biochimie medicală, Ed. Universitatii din Pitesti, 2009, 135 p, ISBN: 978-973-690-835-4
4. C.Topală, S. Anghel, Compuşi organici volatili, Abordări teoretice, tehnice, legislative, Ed. Universitatii din Pitesti, 2009, 125p, ISBN: 978-973-690-876-7
5. C. Topala, Biochimie ecologica, Ed. Universitatii din Pitesti, 2007, 208 p, ISBN: 978-973-690-714-2

B. Papers (selections)

1. A.V.F. Neculae, I. Matei, A. Precupaș, V.T. Popa, V. Tecuceanu, C.M. Topală, S. Marque, J.P. Joly, G. Ioniță, Interaction of N-acyl derivative of 4-phenoxyaniline spin label with bovine serum albumin in water and in trehalose solution, Organic & Biomolecular Chemistry, **2025**, https://doi.org/10.1039/D5OB00186B
2. F.D. Stamin, C.M. Topală, I.C. Mazilu, G.I. Badea, L.E. Vijan, S. Cosmulescu, Optimization of Phenolic Compounds Extraction from Crataegi Fructus. *Appl. Sci.* **2025**, *15*, 9525. https://doi.org/10.3390/app15179525
3. M.B. Mandache, C.M. Topală, L.E. Vijan, S. Cosmulescu, Enhancing Biscuit Nutritional Value Through Apple and Sour Cherry Pomace Fortification. *Appl. Sci.* **2025**, *15*, 11823. https://doi.org/10.3390/app152111823
4. M. Mandache, C.M. Topală, L.E. Vijan, S. Cosmulescu, The Characterization of Peach Pomace and the Influence of Its Incorporation on the Chemical Composition of Biscuits. Appl. Sci. **2025**, 15, 6983. https://doi.org/10.3390/app15136983
5. F.D. Stamin, L.E.Vijan, C.M. Topală, S.N.Cosmulescu, The Influence of Genotype, Environmental Factors, and Location on the Nutraceutical Profile of *Rosa canina* L. Fruits. *Agronomy* **2024**, 14, 2847. https://doi.org/10.3390/agronomy14122847
6. N. A. Șuțan, A. Paunescu, C. Topala, C. Dobrescu, M.C. Ponepal,, L.C. Soare, R. Tamaian, Aconitine in Synergistic, Additive and Antagonistic Approaches. Toxins **2024**, 16, 460. https://doi.org/10.3390/toxins16110460
7. O.A. Luțu, L.C. Soare, I. Fierăscu, R,C, Fierăscu, C.M. Dobrescu, A. Păunescu, C.M. Ponepal, C.M. Topală, L.E. Vîjan, I. Deliu, A.D. Negrea, D.Ș. Vîlcoci, G. Cîrstea, F. Aldea, S.O. Honțaru, A.N. Șuțan, Phytotoxicity, cytogenotoxicity and antimicrobial potential of extracts with gold-silver bimetallic nanoparticles obtained from pteridophyte spores, Caryologia, **2024**,7(8), 65-82
8. L.E. Vîjan, I.C. Mazilu, C. Enache, S. Enache, C.M.Topala, Botanical Origin Influence on Some Honey Physicochemical Characteristics and Antioxidant Properties, Foods **2023**, 12, 2134. https://doi.org/10.3390/ foods12112134
9. C.M. Topală, L.D. Tătaru, ATR-FTIR Spectroscopy Coupled with Chemical and Chemometric Analysis to Distinguish Between Some Sweet Wines, Rev. Chim., 2019, 70(7), 2355-2361
10. E. M. Modan, C.M. Ducu, C.M. Topala, S.G. Moga, D.A. Negrea, A.D. Plaiasu, Nanostructured Iron Oxide Powders by Microwave Assisted Synthesis, 2021, Journal of Science and Arts, 4(57), 1081-1094
11. N.A.Șuțan, A.N. Matei, E. Oprea, V. Tecuceanu, L. D. Tataru, S.G. Moga, D.Ș. Manolescu, C.M. Topală, Chemical composition, antioxidant and cytogenotoxic effects of Ligularia sibirica (L.) Cass. roots and rhizomes extracts, Caryologia. International Journal of Cytology, Cytosystematics and Cytogenetics, 2020, 73(1): 83-92, 2020
12. C.M. Topală, A. G. Plăiașu, C. M. Ducu, S. G. Moga, Structural Characterization of ZnO and Al Doped ZnOPowders Synthesis in Aqueous Solutions, Rev. Chim., 2019, 70(9), 3232-3235
13. C. M. Topala, A. Paunescu, L.C. Soare, ATR-FTIR Spectral Analysis of Ferns Using as Fingerprint for Identification of Fern Species, Rev. Chim., 2019, 70(3), 875-880, 2019

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14. C. M.Topală, L.D. Tătaru, Rapid Method for the Discrimination of Romanian Wines Based on Mid-Infrared Spectroscopy and Chemometrics, Rev. Chim. (Bucharest), 2018, 69(2), 469-473.
15. C. M. Topală, L. D. Tătaru, ATR-FTIR Study Of Thyme And Rosemary Oils Extracted By Supercritical Carbon Dioxide, Rev. Chim.(Bucharest), 2016, 67(5), 842-846
16. L.E. Vîjan, C. M. Topală, Study of Ribavirin - Nucleic Acids Interaction, Chemical Engineering Communications, 2016, 203,(12), 1562-1571, 2016, 1562-1571, DOI: 10.1080/00986445.2016.1153469
17. M. V. Neacșu, G. Ioniță, C. Topală, E. Oprea, V. Tecuceanu, I. Matei, Poly(ethylene glycol)/b-cyclodextrin covalent gel networks: host matrices for studying radical processes in plant extract–riboflavin systems following UV irradiation, Chem. Pap., 2016, DOI 10.1007/s11696-016-0047-x
18. C.M. Topală, L.D. Tătaru, Infrared Spectra of Green Arabica Coffee Extraction using Supercritical Carbon Dioxide and Soxhlet Technique, Rev. Chim.(Bucharest), 2015, 66(8), 1128-1131
19. C.M. Topală, Temperature Effects on the FTIR Spectra of Ribavirin, Rev. Chim.(Bucharest), 2013, 64(3)
20. C.M. Topală, Temperature Effect on the FTIR Spectra of Tyrosine Derivatives, Rev. Chim.(Bucharest), 2012, 63(11), 1096-1098
21. C. Topala, E. Dumitru, C. Draghici, Spectral Study of Some Cholesteryl Carbamates, Rev. Chim. (Bucuresti), 2010, 61, 6, 557-562
22. C. Topala, E. Dumitru, C. Draghici, Synthesis of new cholesteryl butyrates, Rev. Chim. (Bucuresti), 2009, 60(12),1306-1308
23. C. M. Topală, S. Anghel, Temperature Effects on the FTIR Spectra of nematic Liquid Crystals, Annals. Food Science and Technology, 2010, vol. II (2), 162-165
24. C. Topala, S. Anghel, Studies on ATR spectra of mesogenic cholesteryl carbamates, Optoelectronics and Advanced Materials – RC, 2009, 3(11), 1213-1216
25. C. Topală, L. Vîjan, The Characterizing of the Interaction of Amphotericin B with Cholesteryl Esters, Journal of Molecular Liquids, 2009, 147(1-2), 135-138
26. L.E. Vijan, C. Topală, C. Drăghici, M. Conci, The Interaction of Amphotericin B with Cholesteryl Trifluoromethylphenyl-carbamate, Rev. Chim. (Bucuresti), 2009, 60(2), 142-146
27. C. Topala, S. Anghel, Studies of ATR Spectra of Phenoxyphenylcholesteryl Carbamates, Annals. Food Science and Technology, 2009, 346-350
28. L. Vîjan, C. Topala, B. Oprescu, S. Anghel, Spectral study of cholesteryl linoleate – amphotericin B interaction and behaviour of cholesteryl esters in electric field, Optoelectronics and Advanced Materials – RC, 2008, 2(9), 582-586
29. C. Topală, S. Anghel, B. Oprescu, G. Iacobescu, Optical method for studying phase transitions of thermotropic mesogenous substances, Optoelectronics and Advanced Materials – RC, 2008, 2(8), 482-487
30. L. E. Vîjan, C. Topală, Spectral Study of the Amphotericin B – cholesteryl Linoleate Interaction, Rev. Chim, 2008, 59(7), 756-758
31. L.E. Vîjan, C. Topală, Characterizing of the interaction of Amphotericin B with Cholesteryl Trifluoromethylphenyl-Carbamate by UV-visible Spectroscopy, Rev. Chim., 2008, 59(3), 297-299
32. C. Topala, G. Iacobescu, B. Oprescu, C. Ducu, Optical and Thermo-electrical Effects in Newly Synthesised Cholesteric Compounds, Material Science and Engineering C, Elsevier 2007, 27, 1171-1173
33. C. Topală, Benedict Oprescu, The Behaviour of the Simple Lipides in an Electrical Field", Rev. Chim. (Bucuresti), 2006, 57(4), 344-346
34. C. Rosu, G. Iacobescu, C. Motoc, C. Topala, Thermally stimulated depolarization currents in a new cholesteric liquid crystal, Modern Physics Letters B , 2006, 20(13), 777-785
35. C. Topala, I. Baviu, C. Paraschivescu, C. Draghici, New derivatives of N-acetyl-L-tyrosine, Rev. Chim. (Bucuresti), 2005, 56(4), 415-417
36. C. Topala, B. Oprescu, E. Oprea, Study of the Salvia officinalis L. vegetable extracts behaviour in electrical field, Rev. Chim. (Bucuresti), 2005, 56(3), 258-261
37. C. Topala, V. Meltzer, C. Draghici, Steryl carbamates mesogens with a trifluoromethylphenyl moiety, Rev. Chim. (Bucuresti), 2005, 56(2), 125-129
38. C. Topala, M.T. Caproiu, C. Draghici, Cholesteryl derivatives with a sulfonyl moiety, Arkivoc, 2005, 10, 63-70
39. B. Oprescu, C. Topala, Instabilities of biological cells induced by generating some ionic substances within them, Rev. Chim. (Bucuresti), 2004, 55(7), 550-554
40. B. Oprescu, C. Topala, Lipides behavior in electric field. II. Mesogeneous sterides and glycerol mixtures, Rev. Chim. (Bucuresti), 2004, 55(5), 341-345
41. B. Oprescu, C. Topala, The lipids behaviour in electrical field. I. Fatty acids, cholesterol and glycerol mixtures, Rev. Chim. (Bucuresti), 2004, 55(2), 112-117
42. B. Oprescu, C. Topala, Liquid crystals. 9. The influence of the electric dipolar moment of the terminal mesogeneous groups on the temperatures corresponding to the phase transitions of some termotrope sterolic esthers, Rev. Chim. (Bucuresti), 2003, 54(9), 739-742
43. C. Topala, C. Baciu, V. Meltzer, C. Ionita, C. Draghici, The characterization of some fluorophenyl-cholesterylcarbamates and their interaction, with cyclodextrines, Rev. Chim. (Bucuresti), 2003, 54(5), 402-405
44. V. Meltzer, C. Topala, E. Pincu, Mesomorphic properties of phenoxiphenyl carbamates, Rev. Roum. Chim., 2002, 47(8-9), 839-841
45. C. Topala, I. Baciu, V. Meltzer, C. Draghici, Substituted fitosterols with 5-nytrobenzo[B]tiophensulphone at C-3, Rev. Chim. (Bucuresti), 2002, 53(7), 519-522
46. G. Ionita, C. Topala, V. Meltzer, E. Pincu, Study concerning the formation of some inclusion complexes of 3,4-dichlorophenil steroid carbamates with cyclodextrines, Rev. Chim. (Bucuresti), 2001, 52(12), 753-757
47. C. Topala, G. Ionita, V. Meltzer, C. Draghici, Inclusion complex of steroidal heterocyclic compounds with cyclodextrins in aqueous solution and in the solid state, Arkivoc, 2002, 2, 87-96

Research contracts (selections)

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1. Optimization of the proces of virus elimination in the Horticulture Crops by in vitro Chemotherapy and Electrotherapy to chive EU requirements on environmental quallity and food products (SANOPLANT), (PCCA)- tip 1, 104/2012 - **Project Director**
2. Advanced technologies and materials for optoelectronics (OPTOMATEH), PN II-Capacities 126cp/I din 14.09.2007 **Project Manager**
3. Implementation and adaptation of environmental technologies in cultural cherry varieties and rootstocks on local values, environmentally sound and sustainable development, PNCDI2-Program 4, 2770/2008
4. Recovery of biomass and agricultural residues superior by new technical solutions and product development of an integrated system for soil fertilization, HIFER-biomass, PN II 21-013/18.09.2007
5. Heteroaromatic compounds stabilized by substitution with azulenes. synthesis, study of physical-chemical and electrochemical properties, used in technique of nonlinear transmission of light (NLO), Cex 05-D11-20/05.10.2005
6. Synthesis and study of the thermodynamic properties of liquid crystal substances with applications in science and technology fields, Grant of the Romanian Academy, GAR 55/2005, **Project manager**
7. Creșterea capacității instituționale de cercetare bioeconomică pentru exploatarea inovatoare a resurselor vegetale autohtone, în vederea obținerii de produse horticole cu valoare adăugată ridicată, PN-III-P1-1.2-PCCDI-**2017**-0332,
8. Proiect integrat de dezvoltare a unor tehnologii dedicate tratamentelor medicale avansate, Cod: Cod PN-III-P1-1.2-PCCDI-2017-0728 Contract 63PCCDI/2018
9. Diagnosticarea motorului de camion prin evaluarea uzurii uleiului de motor și emiterea de recomandări de mentenanță, proiect CIPCS 2021- **Project Manager**
10. PN-III-P4-ID-PCE-2020-0620. Nanoformulări topice ale extractelor vegetale selective cu proprietăţi antiinflamatoare şi analgezice performante 2020-2023
11. Proiect ADER 6.5.2: Evaluarea particularităților agrobiologice și a capacității oenologice a soiurilor cu valoare nutraceutică ridicată în scopul creșterii valorii adăugate a produselor și subproduselor viticole 2023-2026

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