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## Florentina Gatea

DATE OF BIRTH:  
10/04/1968

## CONTACT

Nationality: Romanian

Gender: Female

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## WORK EXPERIENCE

01/10/1995 – 01/10/2004

### Assistant Professor

The Faculty of Material Science and Engineering, University Politehnica of Bucharest  
1-7, Polizu Gheorghe, 11061

01/10/1991 – CURRENT

### Researcher

National Institute for Biological Sciences  
Bucharest, Romania

## EDUCATION AND TRAINING

2018

**Diploma, Personal training specialized in management of knowledge**  
GEA strategy & consulting

2017

**Diploma, Project management**  
Ministry of National Education

2017

**Diploma, Technology Broker**  
Ministry of National Education

2005

**Diploma, Practical solutions for evaluation of measurement uncertainty**  
RENAR

1986 – 1991

**Diploma**  
Faculty of Biology, Biochemistry, University of Bucharest

2010 – 2014

**PhD, Chemistry**  
University Politehnica of Bucharest

## LANGUAGE SKILLS

MOTHER TONGUE(S): Romanian

OTHER LANGUAGE(S):

French

Listening B1	Reading B1	Spoken production A2	Spoken interaction A2	Writing A2
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### English

Listening B1	Reading B1	Spoken production B1	Spoken interaction B1	Writing B1
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## ORGANISATIONAL SKILLS

### Organisational skills

Experience in the management of research projects and scientific cooperation.

## COMMUNICATION AND INTERPERSONAL SKILLS

### Communication and interpersonal skills

- Good communication skills demonstrated in both the professional and the participation in national and international congresses, conferences, seminars, intentional exchange of experience and interaction with academia.
- Ability to work in team.

## JOB-RELATED SKILLS

### Job-related skills

- Medical Biochemistry: studies of normal and pathological biologically active substances;
- Analytical chemistry: characterization and separation of biologically active compounds (protein, peptides, amino acids, polyphenols, polysaccharides, organic acids, etc.); advanced techniques for analyzing biologically active substances (TLC, HPLC, PAGE, CE, spectrometry).
- Ecological: studies on the influence of heavy metals on aquatic organisms.

15.09.2021



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## Articles ISI

1. Danila A. O., **Gatea F.**, Radu G. L., Polyphenol composition and antioxidant activity of selected medicinal herbs, Chemistry of Natural Compounds, Vol. 47, No.1, March, 2011
2. Penu R., Vasilescu I., Eremia S. A. V., **Gatea F.**, Radu G.-L., Litescu S.-C., Development of a nanocomposite system and its application in biosensors construction, Central European Journal of Chemistry, Volume 11, Issue 6, pp. 968-978, 2013
3. Anghel A. I., Olaru T. O., **Gatea F.**, Dinu M., Ancuceanu V. R., Istudor V., Preliminary research on Portulaca grandiflora hook. Species (Portulacaceae) for therapeutic use, Farmacia 61 (4), pp. 694-702, 2013
4. Voicescu M., Ionescu S., **Gatea F.**, Photophysical Properties of some Flavones Probes in Homogeneous Media, J. of Fluorescence, DOI: 10.1007/s10895-013-1272-0, 24 (1), 75-83, 2014
5. Voicescu M., Ionescu S., **Gatea F.**, Effect of pH on the Fluorescence Characteristics of some Flavones probes, Spectrochim. Acta A, DOI:10.1016/j.saa.2013.12.040, 123, 303-308, 2014
6. **Gatea F.**, Matei A. O., Teodor E. D., Radu G. L., Accurate quantitation of 17 polyphenols from propolis extracts by reversed-phase liquid chromatography with diode array detection, Rev. Roum. Chim., vol. 59, nr. 9, 797-805, 2014
7. **Gatea F.**, Teodor E. D., Paun G., Matei A. O., Radu G. L., Capillary Electrophoresis Method Validation for Organic Acids Assessment in Probiotics, Food Anal. Method., vol. 8 (5), 1335-1340, DOI:10.1007/s12161-014-0018-1, 2015
8. **Gatea F.**, Teodor E. D., Matei A. O., Badea I. G., Radu G. L., Capillary Electrophoresis Method for 20 Polyphenols Separation in Propolis and Plant Extracts, Food Anal. Method. , vol. 8 (5), 1197-1206, DOI: 10.1007/s12161-014-0006-5, 2015
9. **Gatea F.**, Matei A. O., Teodor E. D., Radu G. L., Antioxidant properties and polyphenols composition of some roumanian propolis samples, Rev. Roum. Chim., vol. 60, nr. 1, 65-74, 2015
10. **Gatea F.**, Hanganu A-M, Teodor E. D., Gille E., Radu G. L., Statistical approach of high-performance liquid chromatography with diode array detection data from Romanian propolis, Rev. Chim. , vol. 66, nr. 12, 1938-1942, 2015

11. Teodor E. D., **Gatea F\***., Albu C., Radulescu C., Chira A., Radu G. L., Polyphenols, Radical Scavenger Activity, Short-Chain Organic Acids and Heavy Metals of Several Plants Extracts from 'Bucharest Delta', Chemical Papers, vol. 69, 1582-1590, DOI: 10.1515/chempap-2015-0177, 2015
12. Matei A. O., **Gatea F.**, Radu G. L., Analysis of Phenolic Compounds in Some Medicinal Herbs by LC-MS, J. Chromatogr Sci., 53 (7), 1147-1154, 2015
13. **Gatea F.**, Teodor E. D. , Seciu A-M, Covaci O. I., Mănoiu S., Lazăr V., Radu G. L., Antitumour, antimicrobial and catalytic activity of gold nanoparticles synthesized by different pH propolis extracts, Journal of Nanoparticle Research, vol. 17, 7, art. Nr. 320, DOI: 10.1007/s11051-015-3127-x, 2015
14. Matei A. O., **Gatea F.**, Teodor E. G., Radu G. L. , Tannins analysis from different medicinal plants extracts using MALDI-TOF and MEKC, Chemical Papers, vol 70 (4), 515-522, DOI: 10.1515/chempap-2015-0222, 2016
15. Matei, A.O., **Gatea, F.**, Teodor, E.D., Radu, G.L., Polyphenols analysis from different medicinal plants extracts using capillary zone electrophoresis (CZE), Revista de Chimie, 67(6), pp. 1051-1055, 2016
16. **Gatea, F.**, Dumitra Teodor, E., Maria Seciu, A., Nagodă, E., Lucian Radu, G., Chemical constituents and bioactive potential of Portulaca pilosa L vs. Portulaca oleracea L, Medicinal Chemistry Research, 26(7), pp. 1516-1527, 2017
17. Teodora Stan, Eugenia D. Teodor, **F. Gatea\***, Mariana C. Chifiriuc, Veronica Lazar, Antioxidant and antifungal activity of Romanian propolis, Romanian Biotechnological Letters, 22(6), 2017
18. **F. Gatea**, E. D. Teodor, A. M. Seciu L. E. Radu, Monosaccharides composition and cytostatic activity of polysaccharide fraction of *Phemeranthus confertiflorus* L., Farmacia, 65,5, 796-801, 2017
19. **F. Gatea**, E. D. Teodor, E. Nagoda, G. L. Radu, Polyphenols, organic acids and antioxidant activity in unexplored *Phemeranthus confertiflorus* L. , Rev. Chimie, vol 68, 12, 2739-2743, 2017
20. Teodor E. D., **Gatea F.**, Ficai A., Radu G.L., Functionalized magnetic nanostructures for anticancer therapy, Current Drug Targets, 17(16), 2018

21. Ungureanu,O., **Gatea, F\***,Seciu, A.M. ,Teodor, E.D.,Nicorescu, I.M., Radu, G.L., A bioanalytical approach of chemical composition, bioactivity and cytotoxicity of Berteroia incana L. Herb, Natural Product Research, 32(23), pp. 2791-2796, 2018
22. Vamanu, E., **Gatea, F.**, Sârbu, I., In vitro ecological response of the human gut microbiome to bioactive extracts from edible wild mushrooms, Molecules, 23(9),2128, 2018
23. Vamanu, E., **Gatea, F.**, Sârbu, I., Pelinescu, D., An in vitro study of the influence of curcuma longa extracts on the microbiota modulation process, in patients with hypertension, Pharmaceutics, 11(4),194, 2019
24. Vamanu, E., Pelinescu, D., **Gatea, F.**, Sârbu, I., Altered in vitro metabolomic response of the human microbiota to sweeteners, Genes, 10(7),535, 2019
25. Vamanu, E., **Gatea, F.**, Correlations between Microbiota Bioactivity and Bioavailability of Functional Compounds: A Mini-Review, Biomedicines, 8, 39, 2020
26. Vamanu, E., **Gatea, F.**, Pelinescu, D.R., Bioavailability and bioactivities of polyphenols eco extracts from coffee grounds after in vitro digestion, Foods, 2020, 9(9), 1281
27. Teodor, E.D., Ungureanu, O., **Gatea, F.**, Radu, G.L., The potential of flavonoids and Tannins from medicinal plants as anticancer agents, Anti-Cancer Agents in Medicinal Chemistry, 2020, 20(18), pp. 2216–2227
28. **Gatea, F.**, Sârbu, I., Vamanu, E., In vitro modulatory effect of stevioside, as a partial sugar replacer in sweeteners, on human child microbiota, Microorganisms, 2021, 9(3), pp. 1–14, 590
29. Vamanu, E., Dinu, L.D., Pelinescu, D.R., **Gatea, F.**, Therapeutic properties of edible mushrooms and herbal teas in gut microbiota modulation, Microorganisms, 2021, 9(6), 1262
30. Alexandru Petre, A.. Ene, M., Negut D.C., **Gatea, F.**, Vamanu, E., The use of gamma irradiation to stimulate bioactive compound synthesis in Inonotus obliquus submerged cultures, NUKLEONIKA 2021;66(3):83–90

#### Articles BDI

31. Diaconu M., Tache A., Eremia, S.A.V., **Gatea F.**, Litescu S., Radu G.L., Structural characterization of chitosan coated silicon nanoparticles –a FTIR approach,UPB Scientific Bulletin, Series B: Chemistry and Materials Science. 01, 72:115-122, 2010

32. **Gatea F.**, Petrareanu,C., Lupeanu E., Radu G.L., Plasma thiols concentration levels and their correlation with health patients condition, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 76 (1), pp. 167-174, 2014
33. Matei, A.O., **Gatea, F.**, Alecu, A., Radu, G.L., Total polyphenolic content and antioxidant activity from anthocyanin extracts, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 77(2), pp. 53-62, 2015

#### Articles in other specialized journals

34. **Cutas F.**, Radu G.L., Moldovean L., Gille E., Analytical study of some polyphenols from vegetal sources”, Oroceedings of the 8<sup>th</sup> National Symposium “Medicinal plants – present and perspectives”, Piatra Neamt, 83-84, ISBN 973-8392-49-7, 2003
35. Buzgariu W., Teodor E., **Cutas F.**, Ghila L., Caloianu M., Effects of hyaluronat from swine eyes on fibroblastic embryonic cells, Rom. Biol. Sci., Vol I, No 1-2, pag. 11-22, ISSN 1584-0158, 2003
36. Teodor E., **Cutas F.**, Moldovean L., Tcacenco L., Caloianu M., Characterization of hyaluronic acid extracted from swine humour, Rom. Biol. Sci., Vol I, No 1-2, pag. 35-46, ISSN 1584-0158, 2003
37. Petre M., Radu G.L., Litescu S., **Cutas F.**, Concentrarea ionilor de metale grele (Cu, Pb, Zn) cu ajutorul microorganismelor imobilizate in hidrogeluri radiopolimerizate, Progrese in bioanaliza, pag. 216-235, ISBN 973-652-882-0, Ed Printech, 2003
38. **Cutas F.**, Radu G.L., Moldovean L., Gille E., Analytical study of some polyphenols from vegetal sources, Oroceedings of the 8<sup>th</sup> National Symposium “Medicinal plants – present and perspectives”, Piatra Neamt, 83-84, ISBN 973-8392-49-7, 2003
39. Teodor E., Neagu E., Radu G.L., Tcacenco L., **Gatea F.**, Rugina A., Invertase immobilized on chitosan-hyaluronic acid films, Rom.Biol.Sciences, 1(3-4), 11-20, 2004
40. Teodor E., Dumitrescu C., **Gatea F.**, Radu G.L., Tcacenco L., Laccase immobilized on chemical modified chitosan films, Rom.Biol.Sciences, 2(1-2), 123-32, 2004
41. **Gatea F.**, Danila A. O., Radu G. L., Quantification of some phytoestrogens from vegetables extracts by HPLC, Rom. Biol. Sci., Vol V, No 1-2, pag. 47-48, ISSN 1584-0158, 2007

42. Gille E., Tebrencu C., **Gatea F.**, Ionescu E., Danila D., HPLC characterization of some standardized extracts to be used in phytotherapeutic formulae, Rom. Biol. Sci., Vol V, No 1-2, pag. 49-51, ISSN 1584-0158, 2007

#### Books

1. Angela Popescu, **Florentina Cutas**, Izolarea produsilor naturali. Lucrari practice, Ed. Printech, 150 pag., ISBN 973-652-550-3, 2002

#### Books chapters

1. **Cutas F.**, Radu G.L., Proteine plasmatiche implicate in legarea substantelor chimico-farmaceutice, Tendinte actuale in biotehnologie, 77-107, ISBN 973-99015-5-7, Ed. ILEX, Bucuresti, 2001
2. **Cutas F.**, Radu G.L., Fuerea M., Studiul interactiei proteinelor plasmatiche cu substante chimico-farmaceutice prin tehnici analitice, Progrese in bioanaliza, 109-152, ISBN 973-558-015-2, Ed Ars Docendi, 2002
2. **Cutas F.**, Radu G.L., Balasu M., Metode si tehnici de separare ale proteinelor plasmatiche, Progrese in bioanaliza, 153-199, ISBN 973-558-015-2, Ed Ars Docendi, 2002
4. Moldovan L., **Gatea F.**, Alexandru V., Craciunescu O., Buiculescu R., Gille E., Metode de analiza calitativa si cantitativa a metabolitilor secundari polifenolici, Tehnici Experimentale in Bioanaliza, Ed. Printed, 120-151, 2004
5. **Gatea F.**, Teodor E., Radu G.L., Metode si tehnici de caracterizarea a interactiei polifenoli-proteine, Tehnici experimentale in bioanaliza, Vol IV, pag. 181-215, ISBN 978-973-718-666-9, 2007
6. Teodor E. G., **Gatea F.**, Badea G. I., Matei A. O., Radu G. L., Application of Capillary Zone Electrophoresis Methods for Polyphenols and Organic Acids Separation in Different Extracts , Capillary Electrophoresis (CE): Principles, Challenges and Applications, (Editors: Christian Reed) Nova Science Publishers, NY, ISBN: 978-1-63483-122-2, capitolul 11, pp. 283-308, 2015

#### Communications/Posters

1. Popa C., **Cutas F.**, Radu G.L., "Studiul interactiei albuminei serice cu derivati ai

sulfonilureei utilizati in tratamentul diabetului de tip II”, Acta Diabetologica Romana, Vol. XXVII, 12-18, Oradea, 2001

3. **Cutas F.**, Fuerea M., Radu G.L., “Spectrometric study of human serum albumin-sulphonilurea derivates” 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Bucharest/ ELFI 2<sup>nd</sup>, 13-15 September, 2001
4. Petre M., **Cutas F.**, Gheordunescu V., “ Biotechnology to concentrate heavy metals from polluted waters”, 3<sup>rd</sup> International Conference of the Chemical Societies of the South-Eastern European Countries, 22-25 September, 2002
5. **Cutas F.**, Radu G.L., Fuerea M., “Evaluation of binding parameters sulfonilurea’s derivatives with albumin using analytical techniques”, 3<sup>rd</sup> International Conference of the Chemical Societies of the South-Eastern European Countries, 22-25 September, 2002
6. **Gatea F.**, Eremia A.V. Sandra, Buzgariu W., Penu R., Radu G.L., Polyphenols contents of some vegetal extracts and their radioprotective effect, Proceedings of the 4th Conference on Medicinal and Aromatic Plants of South-East European Countries; 05/2006
7. Danila A.O., **Gatea F.**, Radu G.L., Bioactive constituents and antioxidant activity of some traditional medicinal herbs extracts, 7th Joint Meeting of AFERP, ASP, GA, PSE &SIF, Athens, 2008
8. **Gatea F.**, Paun G., Danila A. O., Ichim M., Characterization of Echinacea fractions obtained by an ultrafiltration process, 7th Joint Meeting of AFERP, ASP, GA, PSE &SIF, Athens, 2008
9. **Gatea F.**, Danila D., Gille E., Chromatographic profile and antioxidant activity of *Thymus Vulgaris* and *Satureja Hortensis* extracts, 6th International Symposium on Chromatography of Natural Products , Lublin , 2008
10. Mateescu C., **Gatea F.**, Danila A. O., Radu G.L., Antioxidant activity and constituents of ethanolic propolis extracts from Romanian market, 41<sup>st</sup> Apimondia Congress, Montpellier- 2009
11. **Gatea F.**, Gille E., G. L. Radu, Antioxidant activity and constituents of propolis collected in various areas of Romania, 7th CMAPSEEC, Subotica, Serbia, 2012
12. Voicescu M., **Gatea F.**, Meghea A., Antioxidant Activity of some Flavones Evidenced by Chemiluminescence Method, 8th International Conference of the Chemical Societies of the South-East European Countries, Belgrade, Serbia, June 27-29, 2013.

13. Voicescu M., Ionescu S., **Gatea F.**, Photophysical and Photochemical Studies of some Flavones Probes, International Conference of Physical Chemistry - ROMPHYSCHM 15th, September 11-13, Bucharest, Romania, 2013.
14. Voicescu M., Ionescu S., **Gatea F.**, Bandula R., Steady-State and Time-Resolved Fluorescence Analysis of 3,6-diHydroxyflavone, International Conference of Physical Chemistry- ROMPHYSCHM 15th, September 11-13, Bucharest, Romania, 2013.
15. **Gatea F.**, Bakhy K., AL Faiz C., Benlhabib O., Tomi F., Phenolic content and antioxidant activity of methanolic extract from wild Moroccan *Coridothymus Capitatus*, 13th International Conference on Antioxydants, Marrakech 2013.
16. Voicescu M., **Gatea F.**, Meghea A., Glucidic type macromolecules on the antioxidant activity of isoflavone genistein, The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology, Baile Felix, Oradea, Romania, 5-7 June, 2014.
17. Bakhy K., Benlhabib O., AL Faiz C., Bighelli A., Casanova J., **Gatea F.**, Tomi F., Wild *Thymbra capitata* from Western Rif (Morocco): Essential Oil Composition, Polyphenol Contents and Antioxidant Activities of its Methanolic Extract, Phytochemicals in Medicine and Pharmacognosy, Piatra Neamț, Romania, 2014.
18. **Gatea F.**, Manoiu S., Radu G. L., Green synthesis of gold nanoparticles using propolis aqueous extracts and its characterization, Phytochemicals in Medicine and Pharmacognosy, Piatra Neamț, Romania, 2014
19. Teodor E. D., Lițescu S.- C., Albu C., Rădulescu C. M., Chira A., **Gatea F.** , Radu G.-L , Polyphenols, radical scavenger activity, short-chain organic acids and heavy metals of several plants extracts, Inaugurarea Centrului Internațional de Studii Avansate pentru Sisteme Fluvii-Mări „DANUBIUS-RI” , Murighiol, Tulcea, 23-24 septembrie, 2015
20. **Gatea F.**, Eugenia Dumitra Teodor E.D., Radu G.L., Elvira Gille E., Total polyphenols, flavonoids and antioxidant activity of Romanian propolis samples, 12th edition of the national symposium with international participation "MEDICINAL PLANTS – PRESENT AND PERSPECTIVES", September 06-09, Piatra Neamt, Romania, 2016
21. **Gatea F.**, Eugenia Dumitra Teodor E.D., Radu G.L., Capillary electrophoresis as analithycal tool for carbohydrates assessments in natural extracts 4th International Conference on Analytical Chemistry, ROICAC, 1-3 Sept., Bucuresti, Romania, 2018