



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Constantin / APETREI**  
Address(es) 111 Domneasca Street, 800201, Galati, Romania  
Telephone(s) 0040336107441 | Mobile: | 0040727580914  
Fax(es) 0040236319329  
E-mail [apetreic@ugal.ro](mailto:apetreic@ugal.ro), [capetrei@yahoo.com](mailto:capetrei@yahoo.com)  
Nationality Romanian  
Date of birth 26.01.1975  
Gender Male  
Driver licence B

### Occupational field

development of novel sensors and biosensors, characterization of sensors and biosensors, electrochemistry, electronic sensory systems: e-tongue, e-nose, e-eye; chemometry, food chemistry, food analysis, synthesis and characterization of organic compounds, UV-VIS, IR spectroscopy, HPLC, TLC, GC-MS, deposition of sensitive materials onto substrates using different methods: Langmuir-Blodgett, Layer-by-Layer, electrodeposition, high vacuum sublimation, spin-coating etc.

### Work experience

(20 years in total)

Dates	2015-present
Occupation or position held	Full Professor, <a href="http://www.chem.ugal.ro/membri.html">http://www.chem.ugal.ro/membri.html</a>
Main activities and responsibilities	teaching activities, research activities
Name and address of employer	Faculty of Sciences and Environment, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
Type of business or sector	Academic
Dates	2013-2015
Occupation or position held	Associate Professor, <a href="http://www.chem.ugal.ro/membri.html">http://www.chem.ugal.ro/membri.html</a>
Main activities and responsibilities	teaching activities, research activities
Name and address of employer	Faculty of Sciences and Environment, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
Type of business or sector	Academic
Dates	2008-2013
Occupation or position held	Senior Lecturer
Main activities and responsibilities	teaching activities, research activities
Name and address of employer	Faculty of Sciences, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
Type of business or sector	Academic

Dates 2006-2008  
 Occupation or position held Assistant Professor  
 Main activities and responsibilities teaching activities, research activities  
 Name and address of employer Faculty of Sciences, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sciences.ugal.ro](http://www.sciences.ugal.ro)  
 Type of business or sector Academic

Dates 2002-2006  
 Occupation or position held Researcher  
 Main activities and responsibilities research activities  
 Name and address of employer Faculty of Sciences, Valladolid University, Spain, [www.uva.es](http://www.uva.es)  
 Type of business or sector Academic

Dates 2001-2002  
 Occupation or position held Assistant Professor  
 Main activities and responsibilities teaching activities, research activities  
 Name and address of employer Faculty of Sciences, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sciences.ugal.ro](http://www.sciences.ugal.ro)  
 Type of business or sector Academic

Dates 1999-2001  
 Occupation or position held Associated Assistant Professor  
 Main activities and responsibilities teaching activities, research activities  
 Name and address of employer Faculty of Sciences, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sciences.ugal.ro](http://www.sciences.ugal.ro)  
 Type of business or sector Academic

## Education and training

Dates October 2015  
 Title of qualification awarded Habilitation thesis in Chemistry  
 Principal subjects/occupational skills covered Development of novel sensors and biosensors with applications in food analysis/ PhD supervisor  
 Name and type of organisation providing education and training Sciences and Environment, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sciences.ugal.ro](http://www.sciences.ugal.ro)

Dates 2011 (3.01.2011-31.03.2011)  
 Title of qualification awarded Postdoctoral studies in biotechnologies applied in food industry  
 Principal subjects/occupational skills covered Advanced research management, Entrepreneurial Culture in Biotechnology, Computer techniques Applied in Biotechnology, Bioethical Issues, Patents and Intellectual Property Results, Innovative Biotechnologies: Techniques and Methodologies / Scientific researcher  
 Name and type of organisation providing education and training Faculty of Food Sciences and Engineering, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sia.ugal.ro](http://www.sia.ugal.ro)

Dates 1999-2007  
 Title of qualification awarded PhD in Chemistry  
 Principal subjects/occupational skills covered Sensors, Biosensors, Food Chemistry, Analytical Chemistry, Electrochemistry / Scientific researcher  
 Name and type of organisation providing education and training Faculty of Sciences, Dunarea de Jos University of Galati, Galati, Romania, 111 Domneasca Street, [www.sciences.ugal.ro](http://www.sciences.ugal.ro)

Dates	1997-1999																				
Title of qualification awarded	Master in Physical Organic Chemistry																				
Principal subjects/occupational skills covered	Advanced Organic Chemistry, Organic Electrochemistry, Advanced Quantum Chemistry etc. / chemistry teacher, scientific researcher.																				
Name and type of organisation providing education and training	Faculty of Chemistry, Alexandru Ioan Cuza University, Iasi, Romania, Bd. Copou, <a href="http://www.uaic.ro">www.uaic.ro</a>																				
Dates	1993-1997																				
Title of qualification awarded	Licence in Chemistry and Physics																				
Principal subjects/occupational skills covered	Inorganic Chemistry, Physical Chemistry, Organic Chemistry etc., Physics: mechanics, electricity, atomic etc. / teacher of chemistry and physics, researcher.																				
Name and type of organisation providing education and training	Faculty of Chemistry, Alexandru Ioan Cuza University, Iasi, Romania, Bd. Copou, <a href="http://www.uaic.ro">www.uaic.ro</a>																				
<b>Personal skills and competences</b>																					
Mother tongue(s)	<b>Romanian</b>																				
Other language(s)																					
Self-assessment																					
European level (*)																					
<b>English</b>																					
<b>Spanish</b>																					
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	(*) <a href="http://www.europa.eu">Common European Framework of Reference for Languages</a>																				
Social skills and competences	<ul style="list-style-type: none"> <li>Experienced in communicating with students, researchers and partners</li> <li>Hard working, organized person</li> <li>Good abilities for synthetic and global views over concrete situations</li> <li>Good ability to establish and maintain good working relations with people of different national and cultural backgrounds</li> <li>Good ability to adapt to multicultural environments, gained through my work experience abroad</li> <li>Good ability to live in worldwide locations</li> </ul>																				
Organisational skills and competences	<ul style="list-style-type: none"> <li>Leadership</li> <li>Good experience in project management and team co-ordination</li> <li>Member of the organizing committee and secretary of conferences: I Reunion Cientifica sobre aromas (2002), 9<sup>th</sup> European Conference on Organised Films (ECOF 2004), 9<sup>th</sup> Symposium Chemistry of Colloids and Surfaces (2008), The 10<sup>th</sup> International Conference on Colloids and Surfaces Chemistry (2011), International Conference of Physical Chemistry – ROMPHYSICHEM 16 (2016), Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition</li> </ul>																				
Technical skills and competences	Food analysis, Food security and safety, Food chemistry and analysis, Food Processing and Engineering, Analytical and Physical Chemistry, Waste water treatment, Ambient air quality, Statistical and Pattern Recognition methods, Thin films, Sensors and biosensors, Biotechnology.																				
Computer skills and competences	Microsoft Office, XLStat, CorelDraw, Matlab, The Unscrambler, Statistica etc.																				

Other skills and competences

**Reviewer** of scientific journals:

1. African Journal of Agricultural Research
2. Ain Shams Engineering Journal
3. Annals of University of Dunarea de Jos University of Galati, Phys, Mat, Theor Mec.
4. Analyst
5. Analytical Methods
6. Antioxidants
7. Arabian Journal of Chemistry
8. Artificial Cells, Nanomedicine and Biotechnology
9. Beverages
10. Bioelectrochemistry
11. Biosensors
12. C (ISSN 2311-5629)
13. Carbon
14. Chemistry today (Chimica oggi)
15. Chemosphere
16. Chemosensors
17. Combinatorial Chemistry & High Throughput Screening
18. Computers and Electronics in Agriculture
19. Current Analytical Chemistry
20. Current Drug Delivery Journal
21. Current Medicinal Chemistry
22. Dalton Transactions
23. Electrochimica Acta
24. Engineering in Agriculture, Environment and Food
25. Food Analytical Methods
26. Food Chemistry
27. Food Control
28. Food Research International
29. Foods
30. Food Science & Nutrition
31. Frontiers in Bioengineering and Biotechnology - section Bionics and Biomimetics
32. Frontiers in Chemistry, section Analytical Chemistry
33. IEEE Sensors Journal
34. Innovative Romanian Food Biotechnology
35. International Journal of Environmental Analytical Chemistry
36. International Journal of Food Properties
37. International Journal of Nanomedicine
38. International Journal of Food Engineering
39. Journal of Agricultural and Food Chemistry
40. Journal of Applied Research on Medicinal and Aromatic Plants
41. Journal of Chemometrics
42. Journal of Electroanalytical Chemistry
43. Journal of Food Quality
44. Journal of Molecular Catalysis B: Enzymatic
45. Journal of Sensors Technology
46. Journal of Sensors
47. Journal of the American Oil Chemists' Society
48. Langmuir
49. LWT - Food Science and Technology
50. Materials Science and Engineering B
51. Materials Science and Engineering C
52. Measurement
53. Microbial Pathogenesis
54. Molecules
55. Nanomaterials
56. New Journal of Chemistry
57. Polymers
58. Postharvest Biology and Technology
59. Quality Assurance and Safety of Crops & Foods
60. RSC Advances
61. Scientific Study&Research - Chemistry&Chemical Engineering, Biotechnology, Food Industry
62. Synthetic Metals
63. Sensors and Actuators A, Physical
64. Sensors and Actuators B, Chemical

65. Sensors
66. Sensors-Interscience Journal
67. Talanta
68. Trends in Food Science & Technology

**Expert evaluator of:**

- Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI (Romania)
- National Authority for the Scientific Research (Autoritatea Națională pentru Cercetare Științifică – ANCS) (Romania)
- Ministry of Education Romania: ROSE programme
- ARACIS (The Romanian Agency for Quality Assurance in Higher Education) since 2013
- NEWFELPRO (Croatia)
- FP7-H2020 (expert number: EX2006C106970) from 2007
- MARTEC
- Centre for Quality Assessment in Higher Education, Lithuania
- INCOMERA
- ERA.Net RUS Plus
- EVAL-INCO
- COST
- Operational Programme Research and Innovation, Slovakia
- Managing Authority of the OP R & DI, Czech Republic
- National Centre for Research and Development, Poland
- Agencia Nacional de Evaluación y Prospectiva, Spain
- AAL Programme
- EURAMET
- Fundación Bancaria Caja de Ahorros y Pensiones de Barcelona, "la Caixa"
- The Research Agency, Slovakia
- Technology Agency of the Czech Republic
- CONCERT-Japan
- ResInfra@DR Registry of Research Infrastructure Reviewers in the Danube region countries
- SEMAPHORE (F.R.S.-FNRS)
- M-ERA.NET
- PRIMA
- Higher Education Authority Ireland
- REPRISE (<https://reprise.cineca.it/en>)
- Agència de Gestió d'Ajuts Universitaris i de Recerca
- Technical Centre for Agricultural and Rural Co-operation
- The Bulgarian National Science Fund (BNSF)
- ESF Science Connect
- EUREKA
- StandICT.eu
- FWO
- Eurostars
- Technology agency of the Czech Republic ISTA

### Editorial Board Member

- Food Research International, <http://www.journals.elsevier.com/food-research-international/editorial-board/> (2011-2018)
- Journal of Sensors, <https://www.hindawi.com/15425416/>
- Chemosensors, <http://www.mdpi.com/journal/chemosensors/editors>
- Polymers, Member of reviewer board, [https://www.mdpi.com/journal/polymers/submission\\_reviewers](https://www.mdpi.com/journal/polymers/submission_reviewers)
- Guest Editor of Journal of Sensors, for the special issue "Sensors for Food and Beverage Analysis: E-nose and E-tongue Technology", (papers were included in regular journal)
- Guest Editor of Journal of Sensors, for the special issue Sensors and Systems for Environmental Monitoring and Control, <https://www.hindawi.com/journals/js/si/308345/>
- Review Editor for Bionics and Biomimetics; Frontiers in Bioengineering and Biotechnology, <http://loop.frontiersin.org/people/334762/overview>
- Guest Editor of "Electrochemical Sensors and Biosensors in Medical and Pharmaceutical Bioanalysis", <https://www.frontiersin.org/research-topics/10408/electrochemical-sensors-and-biosensors-in-medical-and-pharmaceutical-bioanalysis>
- Editorial Board Member Electrochem: <https://www.mdpi.com/journal/electrochem/editors>
- Polymers, Member of reviewer board, [https://www.mdpi.com/journal/polymers/submission\\_reviewers](https://www.mdpi.com/journal/polymers/submission_reviewers)

Member of jury of UGAL Invent 2014, <http://invent.ugal.ro/Jury.html>

Member of jury of UGAL Invent 2015, <http://invent.ugal.ro/Jury.html>

Member of jury of UGAL Invent 2017, <http://www.invent.ugal.ro/2017Invent/ROJury2017.html>

Member of jury of UGAL Invent 2019 <http://www.invent.ugal.ro/ROJury2019.html>

### Member in PhD committees

1. Monica Gay Martin, Nuevos avances en sensores voltamétricos nanoestructurados y miniaturizados. Aplicación en una lengua electrónica en el sector alimentario, Universidad de Valladolid, 2012. (member, secretary of commission)
2. Cristina Medina Plaza, Sensor arrays for enology applications: using nanoscience for grape analysis, Universidad de Valladolid, 2016. (external referee)
3. Rodrigo Melgosa Gómez, Fish oil valorization using supercritical carbon dioxide technologies, Universidad de Burgos, 2018 (external referee)
4. Mercedes Santiago Calvo, SYNTHESIS, FOAMING KINETICS AND PHYSICAL PROPERTIES OF CELLULAR NANOCOMPOSITES BASED ON RIGID POLYURETHANE, Universidad de Valladolid, 2019 (external referee)
5. Eduardo López González. Analysis of the composition-structure-properties relationship of open-cell polyolefin-based foams with tailored levels of gas-phase tortuosity, Universidad de Valladolid, 2019 (external referee)
6. Alba Ester Illera Gigante. STUDY OF NON-THERMAL TECHNOLOGIES TO PRESERVE THE QUALITY OF FRESH FOODS, Universidad de Burgos, 2019 (external referee)
4. Celia Garcia Hernandez. SENSORES Y BIOSENSORES NANOESTRUCTURADOS ELECTROQUÍMICOS PARA EL ANÁLISIS DE ALIMENTOS. Universidad de Valladolid, 2019 (member of commission)

### Additional information

Member of scientific organizations

### Reference contacts

Maria Luz Rodriguez Mendez, University of Valladolid, Spain, [mluz@eii.uva.es](mailto:mluz@eii.uva.es)

Paula Castilho, Madeira University, Portugal, [castilho@uma.pt](mailto:castilho@uma.pt)

Robert Sandulescu, Iuliu Hatieganu University, Cluj-Napoca, Romania, [rsandulescu@umfcluj.ro](mailto:rsandulescu@umfcluj.ro)

Member of "EUROPEAN CENTER OF EXCELLENCE FOR THE ENVIRONMENT" from Galați University

Member of Gospel (General Olfaction and Sensing Projects on a European Level) (2004-2006)

Member of "CENTRU DE NANOSTRUCTURI ȘI MATERIALE FUNCTIONALE" from Galați University (2006-2008)

Member of Romanian Society of Chemistry

**Awards of scientific results - UEFISCDI**

1. Rodríguez-Méndez, M.L., Apetrei, C., de Saja, J.A., 2008, Evaluation of the polyphenolic content of extra virgin olive oils using an array of voltammetric sensors, *Electrochimica Acta* 53 (20), 5867-5872.
2. Rodríguez-Méndez, M.L., Apetrei, C., Nieto, M., Hernandez, V., Navarrete, J.T.L., Effenberger, F., de Saja, J.A., 2009, Sensing properties of organised films based on a bithiophene derivative, *Sensors and Actuators, B: Chemical* 141 (2), pp. 625-633.
3. Rodríguez-Méndez, M.L., Gay, M., Apetrei, C., De Saja, J.A., 2009, Biogenic amines and fish freshness assessment using a multisensor system based on voltammetric electrodes. Comparison between CPE and screen-printed electrodes, *Electrochimica Acta* 54 (27), pp. 7033-7041.
4. Apetrei, C., Apetrei, I.M., Villanueva, S., de Saja, J.A., Gutierrez-Rosales, F., Rodriguez-Mendez, M.L., 2010, Combination of an e-nose, an e-tongue and an e-eye for the characterisation of olive oils with different degree of bitterness, *Analytica Chimica Acta* 663, pp. 91-97.
5. Gay, M., Apetrei, C., Nevares, I., del Alamo, M., Zurro, J., Prieto, N., De Saja, J. A., Rodríguez-Méndez, M.L., 2010, Application of an electronic tongue to study the effect of the use of pieces of wood and micro-oxygenation in the aging of red wine, *Electrochimica Acta* 55, pp. 6782-6788.
6. Apetrei, C., Alessio, P., Constantino, C.J.L., de Saja, J.A., Rodriguez-Mendez, M.L., Pavinatto, F.J., Fernandes, E.G. , Zucolotto, V., Oliveira, O.N., 2011, Biomimetic biosensor based on lipidic layers containing tyrosinase and lutetium bisphthalocyanine for the detection of antioxidants, *Biosensors and Bioelectronics* 26, pp. 2513-2519.
7. Pavinatto, F.J., Fernandes E.G.R., Alessio P., Constantino C.J.L., de Saja J.A., Zucolotto V., Apetrei C., Oliveira O.N. Jr., M.L. Rodriguez-Mendez, 2011, Optimized architecture for Tyrosinase-containing Langmuir-Blodgett films to detect pyrogallol, *Journal of Materials Chemistry*, 21: 4995-5003.
8. Apetrei, C., Apetrei, I.M., De Saja, J.A., Rodriguez-Mendez M.L., 2011, Carbon paste electrodes made from different carbonaceous materials: application in the study of antioxidants, *Sensors*, 11, pp. 328-1344.
9. Apetrei, C., Rodríguez-Méndez, M.L., de Saja, J.A., 2011, Amperometric tyrosinase based biosensor using an electropolymerized phosphate-doped polypyrrole film as an immobilization support. Application for detection of phenolic compounds, *Electrochimica Acta*, 56, pp. 8919-8925.
10. Ghasemi-Varnamkhasti, M., Rodríguez-Méndez M.L., Mohtasebi, S.S., Apetrei, C., Lozano, J., Ahmadi, H., Razavi, S.H., de Saja, J.A., 2012, Monitoring the aging of beers using a bioelectronic tongue, *Food Control*, 25, pp. 216-224.
11. Ghasemi-Varnamkhasti, M., Mohtasebi, S.S., Rodriguez-Mendez, M.L., Lozano, J., Razavi, S.H., Ahmadi, H., Apetrei, C., 2012, Classification of non alcoholic beer based on aftertaste sensory evaluation by chemometric tools, *Expert Systems With Application*, 39, pp. 4315-4327.
12. Apetrei, I.M., Rodríguez-Méndez M.L., Apetrei, C., Nevares, I., del Alamo, M., de Saja, J.A., 2012, Monitoring of evolution during red wine aging in oak barrels and alternative method by means of an electronic panel test, *Food Research International*, 45 (1) , pp. 244-249.
13. F. Matemadombo, C. Apetrei, T. Nyokong, M.L. Rodríguez-Méndez, J.A. de Saja, 2012, Comparison of carbon screen printed and disk electrodes in the detection of antioxidants using CoPc derivatives, *Sensors and Actuators, B: Chemical*, 166-167, pp. 457-466.
14. Apetrei, C., 2012, Novel method based on polypyrrole-modified sensors and emulsions for the evaluation of bitterness in extra virgin olive oils, *Food Research International*, 48, pp. 673-680.
15. Apetrei, I.M., Rodriguez-Mendez, M.L., Apetrei, C., De Saja, J.A., 2013, Enzyme sensor based on carbon nanotubes/cobalt(II) phthalocyanine and tyrosinase used in pharmaceutical analysis, *Sensors and Actuators, B: Chemical*, 177 , pp. 138-144
16. Apetrei, I.M., Apetrei, C., 2013, Amperometric biosensor based on polypyrrole and tyrosinase for the detection of tyramine in food samples, *Sensors and Actuators B: Chemical*, 178, pp. 40-46
17. N. Prieto, P. Oliveri, R. Leardi, M. Gay, C. Apetrei, M.L. Rodriguez-Méndez, J.A. de Saja, 2013, Application of a GA-PLS strategy for variable reduction of electronic tongue signals, *Sensors and Actuators B* 183, 52- 57
18. I. M. Apetrei, M. L. Rodriguez-Mendez, C. Apetrei, J. A. de Saja, Fish Freshness Monitoring Using an E-tongue Based on Polypyrrole Modified Screen-Printed Electrodes, *IEEE Sensors Journal* 13 (2013) 2548 – 2554
19. C. Apetrei, C. Medina, J.A. de Saja, M.L. Rodriguez-Mendez, Electrochemical characterization of dilithium phthalocyanine carbonaceous electrodes, *Journal of Porphyrins and Phthalocyanines* 17 (2013) 522-528; DOI: 10.1142/S1088424613500430
20. Irina Mirela Apetrei, Constantin Apetrei, Voltammetric e-tongue for the quantification of total polyphenol content in olive oils, *Food Research International* 54 (2013) 2075-2082;

21. I. M. Apetrei, C. Apetrei, Biosensor based on tyrosinase immobilized in single-walled carbon nanotubes modified glassy carbon electrode for epinephrine detection, *International Journal of Nanomedicine* 8 (2013) 4391-4398
22. X. Cetó, C. Apetrei, M. del Valle, M. L. Rodríguez-Méndez. Evaluation of red wines antioxidant capacity by means of a voltammetric e-tongue with an optimized sensor array. *Electrochimica Acta*, 120 (2014) 180-186
23. M. L. Rodríguez-Méndez, C. Apetrei, M. Gay, C. Medina-Plaza, J. A. de Saja, S. Vidal, O. Aagaard, M. Ugliano, J. Wirth, V. Cheynier. Evaluation of oxygen exposure levels and polyphenolic content of red wines using an electronic panel formed by an electronic nose and an electronic tongue. *Food Chemistry*, 155 (2014) 91-97.
24. I. M. Apetrei, C. Apetrei, Study of Different Carbonaceous Materials as Modifiers of Screen-Printed Electrodes for Detection of Catecholamines, *IEEE Sensors Journal* 15 (2015) 3094 - 3101,
25. I.M. Apetrei, C. Apetrei, Detection of virgin olive oil adulteration using a voltammetric e-tongue, *Computers and Electronics in Agriculture* 108 (2014) 148–154
26. I.M. Apetrei, C. Apetrei, The biocomposite screen-printed biosensor based on immobilization of tyrosinase onto the carboxyl functionalised carbon nanotube for assaying tyramine in fish products, *Journal of Food Engineering* 149 (2015) 1-8
27. I. M. Apetrei, C. Apetrei, Biosensing Application of Hybrid Thin Film Layers Based Biosensors, *IEEE Sensors Journal* 15 (2015) 6926 - 6932
28. Irina Mirela Apetrei, Constantin Apetrei, Amperometric Biosensor Based on Diamine Oxidase/Platinum Nanoparticles/Graphene/Chitosan Modified Screen-Printed Carbon Electrode for Histamine Detection, *Sensors* 2016, 16(4), 422; doi:10.3390/s16040422
29. I. M. Apetrei, C. Apetrei, Voltammetric determination of melatonin at a graphene based sensor from pharmaceutical products, *International Journal of Nanomedicine* 2016: 11, 1859-1866. <http://dx.doi.org/10.2147/IJN.S104941>
30. I.M. Apetrei, C. Apetrei, Application of voltammetric e-tongue for the detection of ammonia and putrescine in beef products, *Sensors and Actuators B: Chemical*, 234 (2016) 371–379. <http://dx.doi.org/10.1016/j.snb.2016.05.005>
31. I. M. Apetrei, C. Apetrei, Highly sensitive voltamperometric determination of pyritinol using carbon nanofiber/gold nanoparticle composite screen-printed carbon electrode. *International Journal of Nanomedicine* 2017: 12, 5177-5188.
32. I. M. Apetrei, C. Apetrei, A modified nanostructured graphene-gold nanoparticle carbon screen-printed electrode for the sensitive voltammetric detection of rutin. *Measurement* 2018: 114, 37–43.
33. Mahdi Ghasemi-Varnamkhasti, Constantin Apetrei, Jesus Lozano, Amarachukwu Anyogu, Potential use of electronic noses, electronic tongues and biosensors as multisensor systems for spoilage examination in foods, *Trends in Food Science & Technology*, 80 (2018) 71-92.
34. Irina Mirela Apetrei, Constantin Apetrei. Development of a Novel Biosensor Based on Tyrosinase/Platinum Nanoparticles/Chitosan/Graphene Nanostructured Layer with Applicability in Bioanalysis, *Materials* 2019, 12(7), 1009.
35. C. Apetrei, C. Iticescu, L.P. Georgescu. Multisensory System Used for the Analysis of the Water in the Lower Area of River Danube, *Nanomaterials*. 2019; 9(6): 891.



### Awards of scientific papers

1. C.V. Popa (Ungureanu), I.M. Apetrei, D. Tutunaru, C. Apetrei, *Biosensing properties of novel biosensors towards biogenic amines*, 1st International Conference on Analytical Chemistry RO - ICAC'2012, 18-21 Septembrie, 2012, Târgoviște, Romania, poster, page. 193, Best Poster Award.
2. Claudia Popa (Ungureanu), Constantin Apetrei, *Biosensors based on carbonaceous screen-printed electrodes and diamine oxidase*, Conferința Științifică a Școlilor Doctorale din Universitatea „Dunărea de Jos” din Galați (CSSD-UDJG), 16-17 Mai, 2013, Poster, 2<sup>nd</sup> Award.
3. C. Apetrei. *Biosensor based on nanostructured sensitive material for the detection of epinephrine and norepinephrine*, New Trends on Sensing- Monitoring - Telediagnosis for Life Sciences, Brasov, Romania - July 24-26, 2014, Young Scientist Paper Award
4. Sensors Best Paper Award 2015, 5<sup>th</sup> Prize for the paper:  
Constantin Apetrei, Irina Mirela Apetrei, Jose Antonio De Saja, Maria Luz Rodriguez-Mendez. *Carbon Paste Electrodes Made from Different Carbonaceous Materials: Application in the Study of Antioxidants*, Sensors 2011, 11(2), 1328-1344; doi:10.3390/s110201328
5. Brinca Alina, Maghinici Ana-Raluca, Patruta Cristina-Andreea, Constantin Apetrei, *Determinarea falsificării uleiului de ricin*. Sesiunea Națională de Comunicări Științifice Studențești „INGINERIA – PROFESIA VIITORULUI”, ediția I SNCSS BACĂU- 2017, Ed. "ALMA MATER" BACĂU, 2017, Poster, 2<sup>nd</sup> Award.
6. Brinca Alina, Maghinici Ana-Raluca, Pătruță Cristina-Andreea Constantin Apetrei. *Determinarea compușilor benefici din ape vitaminizate comerciale*. Simpozionul științific studențesc cu participare internațională "Chimia în slujba umanității", Galați, 18 May 2018, 2<sup>nd</sup> Award.
7. Dinu Ancuta, Constantin Apetrei. *Dezvoltarea unor senzori pe bază de polianilină pentru determinarea acidului ascorbic din produse farmaceutice*. Simpozionul științific studențesc cu participare internațională "Chimia în slujba umanității", Galați, 18 May 2018, 1<sup>st</sup> Award.
8. Rosca (Gunache) Ramona, Constantin Apetrei. *Determinarea capacității antioxidante a unor compuși farmaceutici prin metode voltametrice*. Simpozionul științific studențesc cu participare internațională "Chimia în slujba umanității", Galați, 18 May 2018, 2<sup>nd</sup> Award.
9. Ancuța Dinu, Constantin Apetrei. *Voltammetric Study of Phenylalanine by Means of Sensors Based on Polypyrrole Doped with Different Anions*. Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, 2<sup>nd</sup> Award.
10. Ramona Oana Gunache (Roșca), Constantin Apetrei. *Development of Sensors Based on Screen-Printed Electrodes Modified with Carbon Nanofibers for the Electrochemical Detection of L-Dopamine*. Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, Honourable Mention.
11. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. *Development of Screen-Printed Sensors Based on Carbonaceous Nanomaterials*, Poster. Book of abstracts, <http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019>, page 252. SCDS-UDJG 2019, The Seventh Edition, Galați, 13th-14th of June 2019, 1<sup>st</sup> Award.
12. Irina Elisabeta Geană, Constantin Apetrei. *Voltammetric Sensors in the Analysis of Wine Redox-Active Compounds*. Oral presentation. Book of abstracts, <http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019>, page 107. SCDS-UDJG 2019, The Seventh Edition, Galați, 13th-14th of June 2019, 1<sup>st</sup> Award.
13. Mereșescu (Bounegru) Alexandra Virginia, Apetrei Constantin. *Realizarea unor noi senzori pe bază de nanomateriale pentru determinarea acidului cafeic*. Salonul Cercetari si Inovarii UGALINVENT, Ediția a IV-a, 16-18 October 2019, Page 114, bronze medal
14. Mahdi Ghasemi-Varnamkhasti, Constantin Apetrei, Jesus Lozano, Amarachukwu Anyogu, *Potential use of electronic noses, electronic tongues and biosensors as multisensor systems for spoilage examination in foods*, Trends in Food Science & Technology, 80 (2018) 71-92. Premiера rezultatelor de excelență în activitatea CDI din UDJG

### Appreciations

1. Certificate of Appreciation, ACS Publications, 2011
2. Certificate of Appreciation, ACS Publications, 2012
3. Recognized reviewer - Journal of Applied Research on Medicinal and Aromatic Plants, Achieved: April 2016
4. Recognized reviewer - LWT - Food Science and Technology, Achieved: May 2016
5. Outstanding reviewer - LWT - Food Science and Technology, Achieved: June 2016
6. Recognized reviewer - Sensors & Actuators: B. Chemical, Achieved: June 2016
7. Recognized reviewer - Food Control, Achieved: June 2016
8. Recognized reviewer - Sensors & Actuators: B. Chemical, Achieved: July 2016
9. Outstanding reviewer - Food Control, Achieved: November 2016
10. Recognized reviewer, Computers and Electronics in Agriculture, Achieved: December 2017

11. Recognized reviewer, Bioelectrochemistry, Achieved: October 2017
12. Outstanding reviewer, Food Chemistry, Achieved: March 2017
13. Recognized reviewer, Food Chemistry, Achieved: November 2016
14. Recognized reviewer – Measurement, Achieved: December 2017
15. Recognized reviewer - Food Research International, Achieved: November 2017
16. Outstanding reviewer - Food Research International, Achieved: July 2017
17. Outstanding reviewer - Electrochimica Acta, Achieved: July 2017
18. Recognized reviewer – Talanta, Achieved: June 2017
19. Recognized reviewer - Electrochimica Acta, Achieved: April 2017
20. Outstanding reviewer - Journal of Food Engineering, Achieved: March 2017
21. Recognized reviewer - Journal of Food Engineering, Achieved: February 2017
22. Outstanding reviewer - Measurement, Achieved: February 2018
23. Outstanding reviewer - Sensors & Actuators: B. Chemical, Achieved: February 2018
24. Outstanding reviewer – Talanta, Achieved: February 2018
25. Certificate Of Excellence in Reviewing, Food Research International 2016
26. Certificate Of Excellence in Reviewing, Chemosphere 2016
27. Recognized reviewer - LWT - Food Science and Technology, Achieved: May 2018
28. Recognized reviewer - Journal of Electroanalytical Chemistry, Achieved: June 2018
29. Recognized reviewer - Food Control, Achieved: July 2018
30. Recognized reviewer - Synthetic Metals, Achieved: July 2018

Member of the **Romanian National Council for the Scientific Research** from 2017 to 2020, consultative council of the Ministry of Research and Innovation, <http://www.research.gov.ro/uploads/sistemul-de-cercetare/organisme-consultative/om-nr213-19-04-2017-cnccs-mo287.pdf>

**Chair of the Panels- UEFISCDI:**

**Postdoctoral projects (PD 2016) PN-III-P1-1.1-PD-2016**

- Applied life science and biotechnologies
- Biology and Ecology

**Research projects to stimulate young independent teams (TE 2016)**

- Engineering Sciences

**Complex border research projects (PN-III-P4-IDPCCF-2016)**

- Biology and Health
- Engineering Sciences

**EEA-RO-NO-2018**

- Biotechnologies

**Scientific results achieved**

<http://orcid.org/0000-0002-3823-4174>

**Number of publications in peer review journals: 59** (List of papers)

[www.scopus.com](http://www.scopus.com)

**Books edited: 2**

**Chapters in international books: 12** (List of papers)

**H index: 27**

[www.scopus.com](http://www.scopus.com)

**Citation index: 1349**

Self citations of all authors are excluded.

[www.scopus.com](http://www.scopus.com)

**Annexes**

1. List of papers
2. List of projects

## List of papers

### Books edited

1. **C. Apetrei, Corn and Coconut Oil: Antioxidant Properties, Uses and Health Benefits**, ISBN: 978-1-63483-420-9, Nova Publishers, 2015.
2. **Constantin Apetrei, Bioactive compounds: natural sources, physicochemical characterization, applications**, Bentham Science Publishers, 2016, eISBN: 978-1-68108-341-4, ISBN: 978-1-68108-342-1, ISSN: 2468-6395.

### Volumes edited

1. International Conference on Colloids and Surfaces Chemistry (10; 2011; Galati). The 10<sup>th</sup> International Conference on Colloids and Surfaces Chemistry: June 9th - 10th 2011, Galați, Romania: [book of abstracts]. Eds. Monica Murărescu, Romică Crețu, Paula Popa, **Constantin Apetrei**, Cătălina Iticescu. Galati: Galați University Press (GUP), 2011. 154 p.; 30 cm. ISBN 978-606-8348-05-6.

### Chapters in books

1. M.L. Rodríguez-Méndez, **C. Apetrei**, J.A. De Saja, *Electronic Tongues Purposely Designed for the Organoleptic Characterization of Olive Oils*. In: Victor R. Preedy and Ronald Ross Watson, editors, **Olives and Olive Oil in Health and Disease Prevention**. Oxford: Academic Press, 2010, pp. 525-532. ISBN: 978-0-12-374420-3  
<http://www.sciencedirect.com/science/article/pii/B9780123744203000577>
2. M.L. Rodríguez-Méndez, **C. Apetrei**, C. Medina, R. Muñoz, J.A. de Saja, *Sensor arrays based on phthalocyanines: New developments on nanostructured and biomimetic electrochemical sensors*. Chapter 4, pages 139-180, In L. Lvova, D. Kirsanov, A. Legin, C. Di Natale, **Multisensor Systems for Chemical Analysis - Materials and Sensors**, Pan Stanford Publishing, 2013. ISBN hardcover: 9789814411158; ISBN ebook version: 9789814411165.
3. **C. Apetrei**, M. Ghasemi-Varnamkhasti, Biosensors in food PDO authentication, Chapter 11, in **Comprehensive Analytical Chemistry**, Volume 60 , 2013, Pages 279-297, **Food Protected Designation of Origin - Methodologies and Applications**, Ed. A. Gonzalez and M. de la Guardia, Elsevier, ISBN: 9780444595621, <http://dx.doi.org/10.1016/B978-0-444-59562-1.00011-6>  
<http://store.elsevier.com/Food-Protected-Designation-of-Origin/isbn-9780444595621/>
4. I. M. Apetrei, **C. Apetrei**, Y. El Rayess, Characterization of Red Wines Polyphenolics Employing Sensors and Biosensors (Chapter 2), pp. 41-70. in *Wine: Phenolic Composition, Classification and Health Benefits*, Editor Youssef El Rayess, 2014, ISBN: 978-1-63321-059-2, Nova Publishers, [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=50003&osCsid=647a25d9d412d07c8690696cea0ed681](https://www.novapublishers.com/catalog/product_info.php?products_id=50003&osCsid=647a25d9d412d07c8690696cea0ed681)
5. I. M. Apetrei, **C. Apetrei**, Biosensor Based on Nanostructured Sensitive Material for the Detection of Epinephrine (Chapter 5), pp. 55-74. in **SENSING - MONITORING - TELEDIAGNOSIS FOR LIFE SCIENCES, Vol. II, FOOD AND ENVIRONMENT**, Editors L. Floroian, M. Badea, M. Moga, 2014, Editura Universității Transilvania din Brașov, ISBN: 978-606-19-0388-7 gen, ISBN: 978-606-19-0390-0 Vol. II
6. **C. Apetrei**, M. Ghasemi-Varnamkhasti, I. M. Apetrei, Olive oil and combined electronic nose and tongue (Chapter 27), In *Electronic Nose and Tongue in Food Science*, Editor M.L. Rodriguez-Mendez, Oxford: Academic Press; ISBN:978-0-12-800243-8, 2016, pp. 277-289.
7. **C. Apetrei**, I. M. Apetrei, Chemical composition of corn oil, *chapter 1*, In **Corn and Coconut Oil: Antioxidant Properties, Uses and Health Benefits**, Editor: Constantin Apetrei, ISBN: 978-1-63483-420-9, Nova Publishers, 2015, pp. 1-28.
8. I. M. Apetrei, **C. Apetrei**, Quality analyses and authentication of coconut oil, *chapter 7*, In **Corn and Coconut Oil: Antioxidant Properties, Uses and Health Benefits**, Editor: Constantin Apetrei, ISBN: 978-1-63483-420-9, Nova Publishers, 2015, pp. 131-158.
9. **Constantin Apetrei**, Wine: Biologic Active Compounds and Health Benefits (Chapter 2), in **Bioactive compounds: natural sources, physicochemical characterization, applications**, Editor C. Apetrei (Ed.) Bentham Science Publishers, 2016, pp. 32-68.
10. Maria Lisa Clodoveo, Tiziana Dipalmo, Pasquale Crupi, Bernardo C. de Gennaro, Carlo Franchini, Filomena Corbo, **Constantin Apetrei**, Extra Virgin Olive Oils: Bioactive Compounds and Health Benefits (Chapter 1), in **Bioactive compounds: natural sources, physicochemical characterization, applications**, Editor C. Apetrei (Ed.) Bentham Science Publishers, 2016, pp. 3-31.
11. **Apetrei, Constantin**, Mateus D. Maximino, Cibely S. Martin, Priscilla Alessio, Sensors Based on Conducting Polymers for the Analysis of Food Products (Chapter 27) in **Polymers for Food Applications**, Editors: Gutiérrez, Tomy (Ed.), eBook ISBN 978-3-319-94625-2, DOI 10.1007/978-3-319-94625-2, Hardcover ISBN 978-3-319-94624-5, Springer, 2018 pp. 757-792.
12. **Constantin Apetrei**, Alexandra Virginia Bounegru. Electronic Noses and Traceability of Foods. In Reference Module in Food Science 2020. <https://doi.org/10.1016/B978-0-08-100596-5.22852-7>

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1	<b>Apetrei, C.</b> , Rodríguez-Méndez, M.L., Parra, V., Gutierrez, F., De Saja, J.A., 2004, Array of voltammetric sensors for the discrimination of bitter solutions, <i>Sensors and Actuators B: Chemical</i> 103, pp. 145-152, <a href="https://doi.org/10.1016/j.snb.2004.04.047">doi:10.1016/j.snb.2004.04.047</a>
2	Arrieta, A.A., <b>Apetrei, C.</b> , Rodríguez-Méndez, M.L., De Saja, J.A., 2004, Voltammetric sensor array based on conducting polymer-modified electrodes for the discrimination of liquids, <i>Electrochimica Acta</i> 49, pp. 4543-4551, <a href="https://doi.org/10.1016/j.electacta.2004.05.010">doi:10.1016/j.electacta.2004.05.010</a>
3	Casilli, S., De Luca, M., <b>Apetrei, C.</b> , Parra, V., Arrieta, A.A., Valli, L., Jiang, J., Rodríguez-Méndez, M.L., De Saja, J.A., 2005, Langmuir-Blodgett and Langmuir-Schaefer films of homoleptic and heteroleptic phthalocyanine complexes as voltammetric sensors: Applications to the study of antioxidants, <i>Applied Surface Science</i> 246 (4), pp. 304-312, <a href="https://doi.org/10.1016/j.apsusc.2004.11.002">doi:10.1016/j.apsusc.2004.11.002</a>
4	<b>Apetrei, C.</b> , Rodríguez-Méndez, M.L., De Saja, J.A., 2005, Modified carbon paste electrodes for discrimination of vegetable oils, <i>Sensors and Actuators, B: Chemical</i> 111-112, pp. 403-409, <a href="https://doi.org/10.1016/j.snb.2005.03.041">doi:10.1016/j.snb.2005.03.041</a>
5	Parra, V., Arrieta, A.A., Fernandez-Escudero, J.A., Garcia, H., <b>Apetrei, C.</b> , Rodríguez-Méndez, M.L., Saja, J.A., 2006, E-tongue based on a hybrid array of voltammetric sensors based on phthalocyanines, perylene derivatives and conducting polymers: Discrimination capability towards red wines elaborated with different varieties of grapes, <i>Sensors and Actuators, B: Chemical</i> 115 (1), pp. 54-61, <a href="https://doi.org/10.1016/j.snb.2005.08.040">doi:10.1016/j.snb.2005.08.040</a>
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7	<b>Apetrei, C.</b> , Apetrei, I.M., Nevares, I., del Alamo, M., Parra, V., Rodríguez-Méndez, M.L., De Saja, J.A., 2007, Using an e-tongue based on voltammetric electrodes to discriminate among red wines aged in oak barrels or aged using alternative methods. Correlation between electrochemical signals and analytical parameters, <i>Electrochimica Acta</i> 52 (7), pp. 2588-2594, <a href="https://doi.org/10.1016/j.electacta.2006.09.014">doi:10.1016/j.electacta.2006.09.014</a>
8	Apetrei, C., Gutierrez, F., Rodríguez-Méndez, M.L., de Saja, J.A., 2007, Novel method based on carbon paste electrodes for the evaluation of bitterness in extra virgin olive oils, <i>Sensors and Actuators, B: Chemical</i> 121 (2), pp. 567-575, <a href="https://doi.org/10.1016/j.snb.2006.04.091">doi:10.1016/j.snb.2006.04.091</a>
9	Rodríguez-Méndez, M.L., <b>Apetrei, C.</b> , Apetrei, I., Villanueva, S., De Saja, J.A., Nevares, I., Del Alamo, M., 2007, Combination of an electronic nose, an electronic tongue and an electronic eye for the Analysis of Red Wines aged with alternative methods, <i>IEEE International Symposium on Industrial Electronics</i> , art. no. 4375050, pp. 2782-2787, <a href="https://doi.org/10.1109/ISIE.2007.4375050">doi: 10.1109/ISIE.2007.4375050</a>
10	Rodríguez-Méndez, M.L., <b>Apetrei, C.</b> , de Saja, J.A., 2008, Evaluation of the polyphenolic content of extra virgin olive oils using an array of voltammetric sensors, <i>Electrochimica Acta</i> 53 (20), pp. 5867-5872, <a href="https://doi.org/10.1016/j.electacta.2008.04.006">doi:10.1016/j.electacta.2008.04.006</a>
11	Rodríguez-Méndez, M.L., Parra, V., <b>Apetrei, C.</b> , Villanueva, S., Gay, M., Prieto, N., Martínez, J., De Saja, J.A., 2008, Electronic tongue based on voltammetric electrodes modified with materials showing complementary electroactive properties. Applications, <i>Microchimica Acta</i> 163 (1-2), pp. 23-31, <a href="https://doi.org/10.1007/s00604-007-0907-8">DOI: 10.1007/s00604-007-0907-8</a>
12	Rodríguez-Méndez, M.L., <b>Apetrei, C.</b> , Nieto, M., Hernandez, V., Navarrete, J.T.L., Effenberger, F., de Saja, J.A., 2009, Sensing properties of organised films based on a bithiophene derivative, <i>Sensors and Actuators, B: Chemical</i> 141 (2), pp. 625-633, <a href="https://doi.org/10.1016/j.snb.2009.06.018">doi:10.1016/j.snb.2009.06.018</a>
13	Rodríguez-Méndez, M.L., Gay, M., <b>Apetrei, C.</b> , De Saja, J.A., 2009, Biogenic amines and fish freshness assessment using a multisensor system based on voltammetric electrodes. Comparison between CPE and screen-printed electrodes, <i>Electrochimica Acta</i> 54 (27), pp. 7033-7041, <a href="https://doi.org/10.1016/j.electacta.2009.07.024">doi:10.1016/j.electacta.2009.07.024</a>
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15	Stoica, M., Cârâc, G., <b>Apetrei, C.</b> , Cantaragiu, A.-M., 2010, Electrochemical study of stainless steel surfaces in biodegradable biocides, <i>Journal of Optoelectronics and Advanced Materials</i> 12, pp. 919-922, <a href="http://joam.inoe.ro/index.php?option=magazine&amp;op=view&amp;idu=2435&amp;catid=49">http://joam.inoe.ro/index.php?option=magazine&amp;op=view&amp;idu=2435&amp;catid=49</a>
16	Gay, M., <b>Apetrei, C.</b> , Nevares, I., del Alamo, M., Zurro, J., Prieto, N., De Saja, J. A., Rodríguez-Méndez, M.L., 2010, Application of an electronic tongue to study the effect of the use of pieces of wood and micro-oxygenation in the aging of red wine, <i>Electrochimica Acta</i> 55, pp. 6782-6788, <a href="https://doi.org/10.1016/j.electacta.2010.05.090">doi:10.1016/j.electacta.2010.05.090</a>
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18	Pavinatto, F.J., Fernandes E.G.R., Alessio P., Constantino C.J.L., de Saja J.A., Zucolotto V., <b>Apetrei C.</b> , Oliveira O.N. Jr., M.L. Rodríguez-Méndez, 2011, Optimized architecture for Tyrosinase-containing Langmuir-Blodgett films to detect pyrogallol, <i>Journal of Materials Chemistry</i> , 21: 4995-5003, <a href="http://dx.doi.org/10.1039/c0jm03864d">http://dx.doi.org/10.1039/c0jm03864d</a>
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Abstract published in: Journal of Medicine and Life, Vol. 10, Special Issue second edition, 2017, page 17, ISSN 1844-122x
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85. Ramona Oana Gunache (Roșca), **Constantin Apetrei**. Development of Sensors Based on Screen-Printed Electrodes Modified with Carbon Nanofibers for the Electrochemical Detection of L-Dopamine. BOOK of ABSTRACTS Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, page 197.
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89. A. Dinu, **C. Apetrei**, Development of polyaniline based sensors for the determination of ascorbic acid in pharmaceutical products. The 4th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS 2018, August 30 - September 1, 2018, Brașov, România, <http://www.healthfoodenviron.unitbv.ro/2018/>, poster. Book of abstracts, <http://www.healthfoodenviron.unitbv.ro/2018/NT-SMT-LS-2018-book-of-abstracts.pdf>, page 39.
90. R. O. Gunache (Roșca), **C. Apetrei**, Graphene based sensor for the analysis of catechol derivatives. The 4th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS 2018, August 30 - September 1, 2018, Brașov, România, <http://www.healthfoodenviron.unitbv.ro/2018/>, poster. Book of abstracts, <http://www.healthfoodenviron.unitbv.ro/2018/NT-SMT-LS-2018-book-of-abstracts.pdf>, page 95.
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94. Elisabeta-Irina Geană, Corina Teodora Ciucure, Raluca Popescu, **Constantin Apetrei**, Victoria Artem. Application of spectroscopic techniques coupled with multivariate statistical analysis for wines authenticity assessment. 22nd Conference "New Cryogenic and Isotope Technologies for

Energy and Environment” - EnergEn 2018, Băile Govora, Romania, October 24 – 26, 2018, poster LQET 23-P. Book of abstracts, <http://www.icsi.ro/conference/files/bookofabstracts.pdf> , page 236.

95. **C. Apetrei**, DANUBE COOPERATION FORUM, 11th - 12th of April 2019 “Dunarea de Jos” University of Galati, attendee.

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97. Aurel Tăbăcaru, Valentina Colombo, **Constantin Apetrei**. Synthesis, characterization and electrochemical behavior of a copper(II) thiocyanate pyridine polymeric complex, Poster. 47th IUPAC World Chemistry Congress, 7-12 July 2019, Paris, France.

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100. Ramona-Oana Gunache (Roșca), **Constantin Apetrei**. Voltammetric Sensor for the Analysis of Diosmin in Pharmaceuticals, Oral presentation. Book of abstracts, <http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019>, page 115. SCDS-UDJG 2019, The Seventh Edition, Galați, 13th-14th of June 2019.

101. Alexandra Virginia Mereșescu (Bounegru), **Constantin Apetrei**. Development of Screen-Printed Sensors Based on Carbonaceous Nanomaterials, Poster. Book of abstracts, <http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019>, page 252. SCDS-UDJG 2019, The Seventh Edition, Galați, 13th-14th of June 2019

102. Elisabeta-Irina GEANĂ, Corina Teodora CIUCURE, **Constantin APETREI**, Victoria ARTEM. ADDRESSING WINE AUTHENTICITY USING BIOCHEMICAL PROPERTIES AND CHEMOMETRICS. The 18h International Conference “LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT” 26<sup>th</sup> – 28<sup>th</sup> September, 2019, Cluj-Napoca, Romania.

103. Alexandra Virginia Mereșescu (Bounegru), **Constantin Apetrei**. Voltammetric Determination of Caffeic Acid in Pharmaceutical Products, S3-221. RICCCE 21, 21st Romanian International Conference on Chemistry and Chemical Engineering, September 4-7 2019, Constanta – Mamaia, ROMANIA.

103. Ramona Oana Gunache (Rosca), **Constantin Apetrei**. S6 – 345. Voltammetric sensors for the analysis of three types of statins in pharmaceuticals. RICCCE 21, 21st Romanian International Conference on Chemistry and Chemical Engineering, September 4-7 2019, Constanta – Mamaia, ROMANIA.

104. Mereșescu (Bounegru) Alexandra Virginia, **Apetrei Constantin**. Realizarea unor noi senzori pe bază de nanomateriale pentru determinarea acidului cafeic. Salonul Cercetari si Inovarii UGALINVENT, Ediția a IV-a, 16-18 October 2019, Page 114

105. Dinu Ancuța, **Apetrei Constantin**. Determinarea L-fenilalaninei cu senzori pe bază de polipirol dopat cu diferiți anioni. Salonul Cercetari si Inovarii UGALINVENT, Ediția a IV-a, 16-18 October 2019, page 116.

106. Elisabeta-Irina Geană, Corina Teodora Ciucure, Victoria Artem, **Constantin Apetrei**. Exploring the capabilities of polypyrrole modified electrochemical sensors in combination with multivariate statistical analysis for wine authentication purpose. 9th International Symposium EuroAliment “Inovative minds for future food”, 05-06 September 2019, Galati.

107. E.-I. Geana, V. Artem, **C. Apetrei**. UHPLC-MS/MS fingerprinting of wine characteristic compounds profiles combined with multivariate analysis for wine authentication approaches. 2nd Food Chemistry Conference: Shaping the Future of Food Quality, Safety, Nutrition and Health, 17-19 September, Seville, Spain. poster P3.2.5.

108. **C. Apetrei**, The International Conference “Conservation of Danube Sturgeons – a challenge or a burden?”, October 28 – October 30, 2019, Galati, Romania, attendee.

109. Alexandra Virginia MEREȘESCU (BOUNEGRU), **Constantin APETREI**. Development of nanomaterials-based electrochemical sensors for the determination of caffeic acid from food supplements, IasiCHEM Conference 3th Edition, “Alexandru Ioan Cuza” University of Iasi, 31.oct - 1.nov 2019.

## List of projects

### MANAGER OF SCIENTIFIC PROJECTS

#### 1. MANAGER OF INDIVIDUAL RESEARCH PROJECT

TITLE: „Study of food freshness by means of multisensor systems”

FUNDING ORGANIZATION: Universidad de Valladolid, Scholarship for researchers from other Universities in Valladolid University, Spain

DURATION: 3.07.2008-3.09.2008

#### 2. MANAGER OF INDIVIDUAL RESEARCH PROJECT

TITLE: „ Biosensors based on nanostructured hybrid materials with applications in food industry and for environment quality monitoring”

FUNDING ORGANIZATION: European Union (POSDRU)

Contract POSDRU/89/1.5/S/52432, “ORGANIZAREA ȘCOLII POSTDOCTORALE DE INTERES NAȚIONAL “BIOTEHNOLOGII APLICATE” CU IMPACT ÎN BIOECONOMIA ROMÂNEASCĂ” (SPD-BIOTECH)

DURATION: 1.04.2011-31.12.2011

#### 3. MANAGER OF RESEARCH PROJECT

TITLE: „ Development of an electronic system based on electrochemical sensors and biosensors for the control of biogenic amines”

FUNDING ORGANIZATION: Grant CNCISIS, IDEI, ID\_0255, <http://www.esscba.ugal.ro/>, Contract 39/2011

DURATION: 1.01.2012-1.07.2016

#### 4. Mentor of PD project of Geana Elisabeta-Irina

TITLE: „Innovative strategies based on screening techniques coupled with multivariate statistical analysis used for wines authenticity assessment”, <http://www.icsi.ro/screen-wine/>

FUNDING ORGANIZATION: Grant CNCIS-UEFISCDI, PN-III-P1-1.1-PD-2016-0518

DURATION: 2.05.2018-1.05.2020

5. Mentor of PD project of Dragostin Oana-Maria

TITLE: „The obtaining and involvement evaluation in pathological angiogenesis of some polymeric matrices type of nanoparticles with antioxidant potential"

FUNDING ORGANIZATION: Grant CNCS-UEFISCDI, PN-III-P1-1.1-PD-2016-0233

DURATION: 18.10.2018-17.10.2020

## **PARTICIPATIONS IN EUROPEAN PROJECTS**

1. TITLE: "Integrated sensor system for the organoleptic characterisation of wine (Wine Panel Test)".

FUNDING ORGANIZATION: Project CRAFT-1999-70722. Programme de "Quality of Life and Management of living resources"

2. TITLE: "Food Safety and Quality monitoring with Microsystems (GOODFOOD)"

FUNDING ORGANIZATION: European Commission. Information Society Technologies (1ST)

Contract N°: IST-1-508774-1 P. VI Marco Program.

3. MPNS COST Action MP1407, Electrochemical processing methodologies and corrosion protection for device and systems miniaturization (e-MINDS), MC Substitute, <http://www.e-minds.ch/the-project/cost-mp1407/>, 2015-2018

## **PARTICIPATIONS IN SPANISH PROJECTS**

1. TITLE: "Diseno y construction de un sistema de sensores de olor, sabor y color para el analisis sensorial del aceite de oliva virgen"

FUNDING ORGANIZATION: CICYT (AGL2001-2104-C02-01)

2. TITLE: "Influencia de las levaduras autoctonas en la vinificacion y crianza de vinos de D.O. Ribera del Duero: desarrollo de una metodologia analitica electronica para su evaluacion sensorial"

FUNDING ORGANIZATION: INIA VIN02/006/C2/1

3. TITLE: "Aplicacion de un panel de cata electronico en la caracterizacion de vinos tintos tratados con sistemas alternativos a las barricas de roble"

FUNDING ORGANIZATION: Junta de Castilla y Leon. ITA CyL (VA-16/2005-02-08).

4. TITLE: "Analisis sensorial y fisico-quimico de la presencia de piojillo y acaros en jamones"

FUNDING ORGANIZATION: Centra Tecnologico CARTIF

5. TITLE: "Diseno de un metodo analitico para la evaluacion de la frescura de peces (Tencas)"

FUNDING ORGANIZATION: Junta de Castilla y Leon. ITA CyL (VA-052A06)

6. TITLE: "Estudio de sistemas amortiguadores basadas en espumas metalicas"

FUNDING ORGANIZATION: ADE/J.C y L./ FEDER, Mecanizados Gines. Miranda de Ebro (Burgos), Spain

7. TITLE: "Componentes estructurales aeronauticos basados en espumas metalicas (diseno, fabricacion y ensayo)"

FUNDING ORGANIZATION: ADE/JC y U PROFIT FIT-100100-2003-11, Mecanizados Gines.

Miranda de Ebro (Burgos)

8. TITLE: "Evaluacion de vinos tratados con sistemas alternativos a la barrica de roble. Estudio de su evolucion organoleptica, mediante un panel de cata electronico"

FUNDING ORGANIZATION: MEC AGL2006-05501/ALI

9. TITLE: "„Desarrollo de una lengua bioelectrónica específica para el análisis de la maduración de uvas"

FUNDING ORGANIZATION: MEC AGL2012-33535

10. TITLE: "OPTIMIZACION DE NUEVOS PROCESOS EN LA INDUSTRIA ALIMENTARIA, BASADOS EN LA TECNOLOGIA HPCD (HIGH PRESSURE CARBON DIOXIDE), PARA PRESERVAR LA CALIDAD DE ALIMENTOS FRESCOS", CTQ2015-64396-R

FUNDING ORGANIZATION: MEC: Programa Estatal de I+D+i Orientada a los Retos de la Sociedad

## **PARTICIPATIONS IN NATIONAL PROJECTS**

1. TITLE: „Development of a novel class of light nanostructured polymeric composites with electrical and magnetic properties with applications in aero-spatial industry"

FUNDING ORGANIZATION: Grant CNCSIS tip A COD 514 / theme 1/ 2006

2. TITLE: „Obtaining of nickel nanowires electrodeposited on anodized nano-size cells structure of alumina"

FUNDING ORGANIZATION: Grant CNCSIS, IDEI, ID\_2290/2008

3. TITLE: „Development of a versatile fingerprinting system with applications in bitterness analysis of pharmaceuticals"

FUNDING ORGANIZATION: PN-II-RU-TE-2014-4-1093, Contract: 40 / 01.10.2015

4. TITLE: „Cercetari în sprijinul modernizării sistemului național de monitorizare a ecosistemelor silvice prin utilizarea tehnicilor de teledetectie și a sistemelor de tip UAV"

FUNDING ORGANIZATION: MCI 6PS/2.11.2017 - Proiecte sectoriale, 6.11.2017 – 12.12.2018

5. TITLE: „Strategie și acțiuni pentru pregătirea participării naționale la Proiectul DANUBIUS –RI, DANS"

FUNDING ORGANIZATION: Programul de cercetare, dezvoltare și inovare pentru sistemele fluvii, delte, mări – Danubius

Project code: 4/07.05.2018, 20.06.2018 - 30.06.2019.

6. TITLE: „ Program eficient de pregătire practică a studenților în domeniul protecției și monitorizării mediului - ProMediu”,  
<http://www.promediu.ugal.ro/>  
FUNDING ORGANIZATION: Fondul Social European prin Programul Operațional Capital Uman 2014-2020, Contract:  
POCU/90/6.13/6.14/107814, September 2018 – 2 July 2020.

**PARTICIPATIONS IN PROJECTS WITH INDUSTRY**

1. TITLE: „ Activitatea antioxidantă și beneficiile pentru sănătate ale resveratrolului”  
FUNDING ORGANIZATION: SC ESCULAP SRL, contract nr. 669/16.12.2015

16. 04.2020

