



## 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

(24 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, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
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, <a href="http://www.uva.es">www.uva.es</a>
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, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
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, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
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, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>
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, <a href="http://www.sia.ugal.ro">www.sia.ugal.ro</a>
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, <a href="http://www.sciences.ugal.ro">www.sciences.ugal.ro</a>

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 <i>European level (*)</i>	<table border="1"> <thead> <tr> <th colspan="2">Understanding</th> <th colspan="2">Speaking</th> <th rowspan="2">Writing</th> </tr> <tr> <th>Listening</th> <th>Reading</th> <th>Spoken interaction</th> <th>Spoken production</th> </tr> </thead> <tbody> <tr> <td>English</td> <td>C2</td> <td>C2</td> <td>C2</td> <td>C2</td> </tr> <tr> <td>Spanish</td> <td>C2</td> <td>C2</td> <td>C2</td> <td>C2</td> </tr> </tbody> </table>	Understanding		Speaking		Writing	Listening	Reading	Spoken interaction	Spoken production	English	C2	C2	C2	C2	Spanish	C2	C2	C2	C2
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Spanish	C2	C2	C2	C2																
	(*) <a href="http://www.cerl.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
69. Fishes
70. Processes
71. Toxics

**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>
- Associate Editor of Bionics and Biomimetics (specialty section of Frontiers in Bioengineering and Biotechnology and Frontiers in Robotics and AI), <https://www.frontiersin.org/journals/bioengineering-and-biotechnology#editorial-board>
- Academic Editor, Journal of Food Quality, <https://www.hindawi.com/journals/jfq/editors/>

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 of jury of UGAL Invent 2021 <http://www.invent.ugal.ro/ROJury2021.html>

### PhD theses coordinators

1. Mereşescu (Bounegru) Alexandra Virginia – Development of new voltamperometric sensors and biosensors for the determination of hydroxycinnamic acids, 2021.
2. Gunache (Roşca) Ramona Oana - Research on the development of new voltametric sensors for the analysis of pharmacological active substances, 2021.

### 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

### 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 scientific organizations

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

### 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. Rodríguez-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. Rodriguez-Mendez, 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-Varnamkhasi, 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.
36. Aurel Tabacaru, Valentina Colombo, Constantin Apetrei. Development of Sensor based on Copper(II) Thiocyanate Pyridine Polymeric Complex for Detection of Catechol. *IEEE Sensors Journal* 2019, 19, (22) 10198-10206. *Premierea rezultatelor cercetării Articole- UEFISCDI*
37. Elisabeta-Irina Geana, Corina Teodora Ciucure, Constantin Apetrei, Victoria Artem. Application of Spectroscopic UV-Vis and FT-IR Screening Techniques Coupled with Multivariate Statistical Analysis for Red Wine Authentication: Varietal and Vintage Year Discrimination. *Molecules* 2019, 24, 4166; *Premierea rezultatelor cercetării Articole- UEFISCDI*
38. Oana-Maria Dragostin, Rodica Tatia, Sangram Keshari Samal, Anca Oancea, Alexandra Simona Zamfir, Ionut, Dragostin, Elena-Lacramioara Lisa, Constantin Apetrei, Carmen Lacramioara Zamfir. Designing of Chitosan Derivatives Nanoparticles with Antiangiogenic Effect for Cancer Therapy. *Nanomaterials* 2020, 10, 698; *Premierea rezultatelor cercetării Articole- UEFISCDI*

39. Dinu, A.; Apetrei, C. A Review on Electrochemical Sensors and Biosensors Used in Phenylalanine Electroanalysis. *Sensors* 2020, 20, 2496. *Premierea rezultatelor cercetării Articole- UEFISCDI*
40. Bounegru, A. V.; Apetrei, C. Voltammetric Sensors Based on Nanomaterials for Detection of Caffeic Acid in Food Supplements. *Chemosensors* 2020, 8 (2), 41. *Premierea rezultatelor cercetării Articole- UEFISCDI*
41. Bounegru, A. V.; Apetrei, C. Carbonaceous Nanomaterials Employed in the Development of Electrochemical Sensors Based on Screen-Printing Technique—A Review. *Catalysts* 2020, 10 (6), 680. *Premierea rezultatelor cercetării Articole- UEFISCDI*
42. Geană E-I, Ciucure CT, Apetrei C. Electrochemical Sensors Coupled with Multivariate Statistical Analysis as Screening Tools for Wine Authentication Issues: A Review. *Chemosensors*. 2020; 8(3):59. *Premierea rezultatelor cercetării Articole- UEFISCDI*

#### 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 - Teliagnosis 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 Studentești „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 studentesc 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 studentesc 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 studentesc 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-Varamkhasti, 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. *Premierea rezultatelor de excelență în activitatea CDI din UDJG*, 2019.

#### 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-cnacs-mo287.pdf>

Member of **Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare (CNATDCU)**, 2020-2024

<http://www.cnatdcu.ro/paneluri-cnatdcu/>, 4. Chemistry

**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: 84** (List of papers)

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

**Books edited: 2**

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

**H index: 32**

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

**Citation index: 2056**

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-Varnamkhasi, 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. 3.23 - Electronic Noses and Traceability of Foods. *Comprehensive Foodomics* 2021, Pages 290-307. <https://doi.org/10.1016/B978-0-08-100596-5.22852-7>

#### Papers published in peer review (ISI) journals

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-Mendez, 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., García, 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>
6	<b>Apetrei, C.</b> , Casilli, S., De Luca, M., Valli, L., Jiang, J., Rodríguez-Méndez, M.L., De Saja, J.A., 2006, Spectroelectrochemical characterisation of Langmuir-Schaefer films of heteroleptic phthalocyanine complexes. Potential applications, <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> 284-285, pp. 574-582, <a href="https://doi.org/10.1016/j.colsurfa.2005.10.069">doi:10.1016/j.colsurfa.2005.10.069</a>
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>
14	<b>Apetrei, C.</b> , 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, <i>Analytica Chimica Acta</i> 663, pp. 91-97, <a href="https://doi.org/10.1016/j.aca.2010.01.034">doi:10.1016/j.aca.2010.01.034</a>
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>
17	<b>Apetrei, C.</b> , 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, <i>Biosensors and Bioelectronics</i> 26, pp. 2513-2519, <a href="https://doi.org/10.1016/j.bios.2010.10.047">doi:10.1016/j.bios.2010.10.047</a>
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. Rodriguez-Mendez, 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>
19	<b>Apetrei, C.</b> , 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, <i>Sensors</i> , 11, pp. 1328-1344, <a href="https://doi.org/10.3390/s110201328">doi:10.3390/s110201328</a>
20	<b>Apetrei, C.</b> , 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, <i>Electrochimica Acta</i> , 56, pp. 8919-8925, <a href="https://doi.org/10.1016/j.electacta.2011.07.127">doi:10.1016/j.electacta.2011.07.127</a>
21	<b>Apetrei, C.</b> , Nieto, M., Rodríguez-Méndez, M.L., de Saja, J.A., 2011, Development of lutetium bisphthalocyanine/carbon nanotube Langmuir-Blodgett films. Sensing properties, <i>Journal of Porphyrins &amp; Phthalocyanines</i> , 15, pp. 908-917, <a href="https://doi.org/10.1142/S108842461100377X">DOI No: 10.1142/S108842461100377X</a>
22	Ghasemi-Varnamkhasti, M., Rodríguez-Méndez M.L., Mohtasebi, S.S., <b>Apetrei, C.</b> , Lozano, J., Ahmadi, H., Razavi, S.H., de Saja, J.A., 2012, Monitoring the aging of beers using a bioelectronic tongue, <i>Food Control</i> , 25, pp. 216-224, <a href="https://doi.org/10.1016/j.foodcont.2011.10.020">doi:10.1016/j.foodcont.2011.10.020</a>
23	Ghasemi-Varnamkhasti, M., Mohtasebi, S.S., Rodriguez-Mendez, M.L., Lozano, J., Razavi, S.H., Ahmadi, H., <b>Apetrei, C.</b> , 2012, Classification of non alcoholic beer based on aftertaste sensory evaluation by chemometric tools, <i>Expert Systems With Application</i> , 39, pp. 4315-4327, <a href="https://doi.org/10.1016/j.eswa.2011.09.101">doi:10.1016/j.eswa.2011.09.101</a>
24	Apetrei, I.M., Rodríguez-Méndez M.L., <b>Apetrei, C.</b> , 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, <i>Food Research International</i> , 45 (1) , pp. 244-249, <a href="https://doi.org/10.1016/j.foodres.2011.10.034">doi:10.1016/j.foodres.2011.10.034</a>
25	F. Matemadombo, <b>C. Apetrei</b> , 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, <i>Sensors and Actuators, B: Chemical</i> , 166-167, pp. 457-466, <a href="http://dx.doi.org/10.1016/j.snb.2012.02.088">http://dx.doi.org/10.1016/j.snb.2012.02.088</a>
26	<b>Apetrei, C.</b> , 2012, Novel method based on polypyrrole-modified sensors and emulsions for the evaluation of bitterness in extra virgin olive oils, <i>Food Research International</i> , 48, pp. 673-680, <a href="http://dx.doi.org/10.1016/j.foodres.2012.06.010">http://dx.doi.org/10.1016/j.foodres.2012.06.010</a>
27	<b>Apetrei, C.</b> , De Saja, J.A., Rodriguez-Mendez, M.L., 2012, Nanostructured vs. carbonaceous biosensors: Comparative studies for detection of phenolic compounds, <i>BIODEVICES 2012 - Proceedings of the International Conference on Biomedical Electronics and Devices</i> , pp. 104-109, DOI: 10.5220/0003715701040109
28	<b>Apetrei, C.</b> ; Saja, J.A.; Zurro, J.; Rodríguez-Méndez, M.L., 2012, Advantages of the Biomimetic Nanostructured Films as an Immobilization Method vs. the Carbon Paste Classical Method, <i>Catalysts</i> , 2, 517-531, <a href="https://doi.org/10.3390/catal2040517">doi:10.3390/catal2040517</a>
29	Apetrei, I.M., Rodriguez-Mendez, M.L., <b>Apetrei, C.</b> , De Saja, J.A., 2013, Enzyme sensor based on carbon nanotubes/cobalt(II) phthalocyanine and tyrosinase used in pharmaceutical analysis, <i>Sensors and Actuators, B: Chemical</i> , 177 , pp. 138-144, <a href="http://dx.doi.org/10.1016/j.snb.2012.10.131">http://dx.doi.org/10.1016/j.snb.2012.10.131</a>
30	Apetrei, I.M., <b>Apetrei, C.</b> , 2013, Amperometric biosensor based on polypyrrole and tyrosinase for the detection of tyramine in food samples, <i>Sensors and Actuators B: Chemical</i> , 178, pp. 40-46, <a href="http://dx.doi.org/10.1016/j.snb.2012.12.064">http://dx.doi.org/10.1016/j.snb.2012.12.064</a>
31	N. Prieto, P. Oliveri, R. Leardi, M. Gay, <b>C. Apetrei</b> , M.L. Rodriguez-Méndez, J.A. de Saja, 2013, Application of a GA-PLS strategy for variable reduction of electronic tongue signals, <i>Sensors and Actuators B</i> 183, 52- 57, <a href="http://dx.doi.org/10.1016/j.snb.2013.03.114">http://dx.doi.org/10.1016/j.snb.2013.03.114</a>
32	I. M. Apetrei, M. L. Rodriguez-Mendez, <b>C. Apetrei</b> , J. A. de Saja, Fish Freshness Monitoring Using an E-tongue Based on Polypyrrole Modified Screen-Printed Electrodes, <i>IEEE Sensors Journal</i> 13 (2013) 2548 - 2554; <a href="http://dx.doi.org/10.1109/JSEN.2013.2253317">http://dx.doi.org/10.1109/JSEN.2013.2253317</a>
33	Irina Mirela Apetrei, <b>Constantin Apetrei</b> , Amperometric tyrosinase based biosensors for serotonin detection, <i>Romanian Biotechnological Letters</i> 18(3) (2013) 8253-8262; <a href="http://www.rombio.eu/vol18nr3/Content.html">http://www.rombio.eu/vol18nr3/Content.html</a>
34	<b>C. Apetrei</b> , C. Medina, J.A. de Saja, M.L. Rodriguez-Mendez, <i>Electrochemical characterization of dilithium phthalocyanine carbonaceous electrodes</i> , <i>Journal of Porphyrins and Phthalocyanines</i> 17 (2013) 522-528; DOI: 10.1142/S1088424613500430 <a href="http://www.worldscientific.com/doi/abs/10.1142/S1088424613500430?journalCode=jpp">http://www.worldscientific.com/doi/abs/10.1142/S1088424613500430?journalCode=jpp</a>
35	Irina Mirela Apetrei, <b>Constantin Apetrei</b> , Voltammetric e-tongue for the quantification of total polyphenol content in olive oils, <i>Food Research International</i> 54 (2013) 2075-2082; <a href="http://dx.doi.org/10.1016/j.foodres.2013.04.032">http://dx.doi.org/10.1016/j.foodres.2013.04.032</a>
36	I. M. Apetrei, <b>C. Apetrei</b> , <i>Biosensor based on tyrosinase immobilized in single-walled carbon nanotubes modified glassy carbon electrode for epinephrine detection</i> , <i>International Journal of Nanomedicine</i> 8 (2013) 4391-4398; <a href="http://dx.doi.org/10.2147/IJN.S52760">http://dx.doi.org/10.2147/IJN.S52760</a>
37	X. Cetó, <b>C. Apetrei</b> , 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. <i>Electrochimica Acta</i> , 120 (2014) 180-186. <a href="http://dx.doi.org/10.1016/j.electacta.2013.12.079">http://dx.doi.org/10.1016/j.electacta.2013.12.079</a>
38	M. L. Rodriguez-Mendez, <b>C. Apetrei</b> , 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. <i>Food Chemistry</i> , 155 (2014) 91-97. <a href="http://dx.doi.org/10.1016/j.foodchem.2014.01.021">http://dx.doi.org/10.1016/j.foodchem.2014.01.021</a>
39	P. Alessio, <b>C. Apetrei</b> , R. J. G. Rubira, C. J. L. Constantino, C. Medina-Plaza, J. A. De Saja, M. L. Rodríguez-Méndez, Structural and Electrochemical Properties of Lutetium Bis-Octachloro-Phthalocyaninate Nanostructured Films. Application as Voltammetric Sensors. <i>J. Nanosci. Nanotechnol.</i> 14 (2014) 6754-6763. <a href="http://dx.doi.org/10.1166/jnn.2014.9355">http://dx.doi.org/10.1166/jnn.2014.9355</a>
40	I. M. Apetrei, C. V. Popa (Ungureanu), <b>C. Apetrei</b> , D. Tutunaru, Biosensors based on graphene modified screen-printed electrodes for the detection of catecholamines, <i>Romanian Biotechnological Letters</i> 19(5) (2014) 9801-9809, <a href="http://www.rombio.eu/vol19nr5/19.pdf">http://www.rombio.eu/vol19nr5/19.pdf</a>
41	I. M. Apetrei, <b>C. Apetrei</b> , Study of Different Carbonaceous Materials as Modifiers of Screen-Printed Electrodes for Detection of Catecholamines, <i>IEEE Sensors Journal</i> 15 (2015) 3094 - 3101, <a href="http://dx.doi.org/10.1109/JSEN.2014.2335534">http://dx.doi.org/10.1109/JSEN.2014.2335534</a>
42	I.M. Apetrei, <b>C. Apetrei</b> , Detection of virgin olive oil adulteration using a voltammetric e-tongue, <i>Computers and Electronics in Agriculture</i> 108 (2014) 148–154, <a href="http://dx.doi.org/10.1016/j.compag.2014.08.002">http://dx.doi.org/10.1016/j.compag.2014.08.002</a>
43	I.M. Apetrei, <b>C. Apetrei</b> , The biocomposite screen-printed biosensor based on immobilization of tyrosinase onto the carboxyl functionalised carbon nanotube for assaying tyramine in fish products, <i>Journal of Food Engineering</i> 149 (2015) 1-8, <a href="http://dx.doi.org/10.1016/j.jfoodeng.2014.09.036">http://dx.doi.org/10.1016/j.jfoodeng.2014.09.036</a>
44	I. M. Apetrei, C. Diaconu, <b>C. Apetrei</b> , C. Georgescu, Electrochemical biosensor based on carbon nanofibers and diamine oxidase for detection of norepinephrine, <i>Romanian Biotechnological Letters</i> 21(1) (2016) 11092-11102.
45	I. M. Apetrei, <b>C. Apetrei</b> , Biosensing Application of Hybrid Thin Film Layers Based Biosensors, <i>IEEE Sensors Journal</i> 15 (2015) 6926 - 6932, <a href="http://dx.doi.org/10.1109/JSEN.2015.2473796">http://dx.doi.org/10.1109/JSEN.2015.2473796</a>
46	Irina Mirela Apetrei, <b>Constantin Apetrei</b> , Amperometric Biosensor Based on Diamine Oxidase/Platinum Nanoparticles/Graphene/Chitosan Modified Screen-Printed Carbon Electrode for Histamine Detection, <i>Sensors</i> 2016, 16(4), 422; doi:10.3390/s16040422
47	I. M. Apetrei, <b>C. Apetrei</b> , Voltammetric determination of melatonin at a graphene based sensor from pharmaceutical products, <i>International Journal of Nanomedicine</i> 2016: 11, 1859-1866. <a href="http://dx.doi.org/10.2147/IJN.S104941">http://dx.doi.org/10.2147/IJN.S104941</a>
48	I.M. Apetrei, <b>C. Apetrei</b> , Application of voltammetric e-tongue for the detection of ammonia and putrescine in beef products, <i>Sensors and Actuators B: Chemical</i> , 234 (2016) 371–379. <a href="http://dx.doi.org/10.1016/j.snb.2016.05.005">http://dx.doi.org/10.1016/j.snb.2016.05.005</a>
49	I. M. Apetrei, <b>C. Apetrei</b> , O. Dumitriu Buzia, Ordered mesoporous carbon based sensor for sensitive detection of vitamin B <sub>6</sub> in pharmaceuticals, <i>Farmacia</i> , 2016, Vol. 64, 4, 544-548, <a href="http://www.revistafarmacia.ro/201604/issue42016art11.html">http://www.revistafarmacia.ro/201604/issue42016art11.html</a>
50	I. M. Apetrei, <b>C. Apetrei</b> , Highly sensitive voltamperometric determination of pyritinol using carbon nanofiber/gold nanoparticle composite screen-printed carbon electrode. <i>International Journal of Nanomedicine</i> 2017: 12, 5177-5188. <a href="https://doi.org/10.2147/IJN.S138978">https://doi.org/10.2147/IJN.S138978</a>
51	I. M. Apetrei, A. A. Bejinaru, M. Boev, <b>C. Apetrei</b> , O. Dumitriu Buzia, Determination of ibuprofen based on screen-printed electrodes modified with carbon nanofibers. <i>Farmacia</i> 2017, Vol. 65, 5, 790-795. <a href="http://www.revistafarmacia.ro/201705/issue52017art22.html">http://www.revistafarmacia.ro/201705/issue52017art22.html</a>
52	J. Lozano, <b>C. Apetrei</b> , M. Ghasemi-Varnamkhasti, D. Matatagui, J. P. Santos, Sensors and Systems for Environmental Monitoring and Control, <i>Journal of Sensors</i> , Volume 2017, Article ID 6879748, 2 pages, <a href="https://doi.org/10.1155/2017/6879748">https://doi.org/10.1155/2017/6879748</a>
53	I. M. Apetrei, <b>C. Apetrei</b> , A modified nanostructured graphene-gold nanoparticle carbon screen-printed electrode for the sensitive voltammetric detection of rutin. <i>Measurement</i> 2018: 114, 37–43. <a href="http://dx.doi.org/10.1016/j.measurement.2017.09.020">http://dx.doi.org/10.1016/j.measurement.2017.09.020</a>
54	Mahdi Ghasemi-Varnamkhasti, <b>Constantin Apetrei</b> , Jesus Lozano, Amarachukwu Anyogu, Potential use of electronic noses, electronic tongues and biosensors as multisensor systems for spoilage examination in foods, <i>Trends in Food Science &amp; Technology</i> , 80 (2018) 71-92. <a href="https://doi.org/10.1016/j.tifs.2018.07.018">https://doi.org/10.1016/j.tifs.2018.07.018</a>
55	Irina Mirela Apetrei, <b>Constantin Apetrei</b> . Development of a Novel Biosensor Based on Tyrosinase/Platinum Nanoparticles/Chitosan/Graphene Nanostructured Layer with Applicability in Bioanalysis, <i>Materials</i> 2019, 12(7), 1009; <a href="https://doi.org/10.3390/ma12071009">https://doi.org/10.3390/ma12071009</a>
56	<b>C. Apetrei</b> , C. Iticescu, L.P. Georgescu. Multisensory System Used for the Analysis of the Water in the Lower Area of River Danube, <i>Nanomaterials</i> . 2019; 9(6): 891. <a href="https://doi.org/10.3390/nano9060891">https://doi.org/10.3390/nano9060891</a>
57	Aurel Tabacaru, Valentina Colombo, <b>Constantin Apetrei</b> . Development of Sensor based on Copper(II) Thiocyanate Pyridine Polymeric Complex for Detection of Catechol. <i>IEEE Sensors Journal</i> 2019, 19, (22) 10198-10206, DOI: <a href="https://doi.org/10.1109/JSEN.2019.2927283">https://doi.org/10.1109/JSEN.2019.2927283</a>
58	Elisabeta-Irina Geana, Corina Teodora Ciucure, <b>Constantin Apetrei</b> , Victoria Artem. Application of Spectroscopic UV-Vis and FT-IR Screening Techniques Coupled with Multivariate Statistical Analysis for Red Wine Authentication: Varietal and Vintage Year Discrimination <i>Molecules</i> 2019, 24, 4166; <a href="https://doi.org/10.3390/molecules24224166">https://doi.org/10.3390/molecules24224166</a>
59	Oana-Maria Dragostin, Rodica Tatia, Sangram Keshari Samal, Anca Oancea, Alexandra Simona Zamfir, Ionut, Dragostin, Elena-Lacramioara Lisa, <b>Constantin Apetrei</b> , Carmen Lacramioara Zamfir. Designing of Chitosan Derivatives Nanoparticles with Antiangiogenic Effect for Cancer Therapy. <i>Nanomaterials</i> 2020, 10, 698; <a href="https://doi.org/10.3390/nano10040698">https://doi.org/10.3390/nano10040698</a>
60	Dinu, A.; <b>Apetrei, C.</b> A Review on Electrochemical Sensors and Biosensors Used in Phenylalanine Electroanalysis. <i>Sensors</i> 2020, 20, 2496. <a href="https://doi.org/10.3390/s20092496">https://doi.org/10.3390/s20092496</a>
61	<b>Constantin Apetrei</b> , Maria Luz Rodriguez-Mendez, Mihaela Badea, Cecilia Cristea. Editorial: Electrochemical Sensors and Biosensors in Medical and Pharmaceutical Bioanalysis. <i>Front. Bioeng. Biotechnol</i> 8:533. <a href="https://doi.org/10.3389/fbioe.2020.00533">https://doi.org/10.3389/fbioe.2020.00533</a>
62	Bounegru, A. V.; <b>Apetrei, C.</b> Voltammetric Sensors Based on Nanomaterials for Detection of Caffeic Acid in Food Supplements. <i>Chemosensors</i> 2020, 8 (2), 41. <a href="https://doi.org/10.3390/chemosensors8020041">https://doi.org/10.3390/chemosensors8020041</a> .
63	Bounegru, A. V.; <b>Apetrei, C.</b> Carbonaceous Nanomaterials Employed in the Development of Electrochemical Sensors Based on Screen-Printing Technique—A Review. <i>Catalysts</i> 2020, 10 (6), 680. <a href="https://doi.org/10.3390/catal10060680">https://doi.org/10.3390/catal10060680</a> .
64	Elisabeta-Irina Geană, Corina Teodora Ciucure, Victoria Artem, <b>Constantin Apetrei</b> . Wine varietal discrimination and classification using a voltammetric sensor array based on modified screen-printed electrodes in conjunction with chemometric analysis, <i>Microchemical Journal</i> ,

	159, 2020, 105451. <a href="https://doi.org/10.1016/j.microc.2020.105451">https://doi.org/10.1016/j.microc.2020.105451</a>
65	Geană E-I, Ciucure CT, <b>Apetrei C.</b> Electrochemical Sensors Coupled with Multivariate Statistical Analysis as Screening Tools for Wine Authentication Issues: A Review. <i>Chemosensors</i> . 2020; 8(3):59. <a href="https://doi.org/10.3390/chemosensors8030059">https://doi.org/10.3390/chemosensors8030059</a>
66	Gunache (Roșca), R.O.; <b>Apetrei, C.</b> Estimation of Active Compounds Quantity from Pharmaceuticals Based on Ginkgo biloba. <i>Chemosensors</i> 2020, 8, 110. <a href="https://doi.org/10.3390/chemosensors8040110">https://doi.org/10.3390/chemosensors8040110</a>
67	Dinu, A.; <b>Apetrei, C.</b> Voltammetric Determination of Phenylalanine Using Chemically Modified Screen-Printed Based Sensors. <i>Chemosensors</i> 2020, 8, 113. <a href="https://doi.org/10.3390/chemosensors8040113">https://doi.org/10.3390/chemosensors8040113</a>
68	Bounegru, A.V.; <b>Apetrei, C.</b> Development of a Novel Electrochemical Biosensor Based on Carbon Nanofibers–Gold Nanoparticles–Tyrosinase for the Detection of Ferulic Acid in Cosmetics. <i>Sensors</i> 2020, 20, 6724. <a href="https://doi.org/10.3390/s20236724">https://doi.org/10.3390/s20236724</a>
69	Bounegru, A.V.; <b>Apetrei, C.</b> Voltamperometric Sensors and Biosensors Based on Carbon Nanomaterials Used for Detecting Caffeic Acid—A Review. <i>Int. J. Mol. Sci.</i> 2020, 21, 9275. <a href="https://doi.org/10.3390/ijms21239275">https://doi.org/10.3390/ijms21239275</a>
70	Geană, E.-I, Artem, V., <b>Apetrei, C.</b> Discrimination and classification of wines based on polypyrrole modified screen-printed carbon electrodes coupled with multivariate data analysis. <i>Journal of Food Composition and Analysis</i> , 96, 2021, 103704, <a href="https://doi.org/10.1016/j.jfca.2020.103704">https://doi.org/10.1016/j.jfca.2020.103704</a>
71	Dăscălescu, D.; <b>Apetrei, C.</b> Nanomaterials Based Electrochemical Sensors for Serotonin Detection: A Review. <i>Chemosensors</i> 2021, 9, 14. <a href="https://doi.org/10.3390/chemosensors9010014">https://doi.org/10.3390/chemosensors9010014</a>
72	Munteanu, I.G.; <b>Apetrei, C.</b> Analytical Methods Used in Determining Antioxidant Activity: A Review. <i>Int. J. Mol. Sci.</i> 2021, 22, 3380. <a href="https://doi.org/10.3390/ijms22073380">https://doi.org/10.3390/ijms22073380</a>
73	Bounegru AV, <b>Apetrei C.</b> Laccase and Tyrosinase Biosensors Used in the Determination of Hydroxycinnamic Acids. <i>International Journal of Molecular Sciences</i> . 2021; 22(9):4811. <a href="https://doi.org/10.3390/ijms22094811">https://doi.org/10.3390/ijms22094811</a>
74	Gunache, R.O.; <b>Apetrei, C.</b> Determination of Diosmin in Pharmaceutical Products with Chemically Modified Voltammetric Sensors. <i>Int. J. Mol. Sci.</i> 2021, 22, 7315. <a href="https://doi.org/10.3390/ijms22147315">https://doi.org/10.3390/ijms22147315</a>
75	Dinu, A.; <b>Apetrei, C.</b> Development of Polypyrrole Modified Screen-Printed Carbon Electrode Based Sensors for Determination of L-Tyrosine in Pharmaceutical Products. <i>Int. J. Mol. Sci.</i> 2021, 22, 7528. <a href="https://doi.org/10.3390/ijms22147528">https://doi.org/10.3390/ijms22147528</a>
76	Dinu, A.; <b>Apetrei, C.</b> Development of a Novel Sensor Based on Polypyrrole Doped with Potassium Hexacyanoferrate (II) for Detection of L-Tryptophan in Pharmaceuticals. <i>Inventions</i> 2021, 6, 56. <a href="https://doi.org/10.3390/inventions6030056">https://doi.org/10.3390/inventions6030056</a>
77	Munteanu, I.-G.; <b>Apetrei, C.</b> Electrochemical Determination of Chlorogenic Acid in Nutraceuticals Using Voltammetric Sensors Based on Screen-Printed Carbon Electrode Modified with Graphene and Gold Nanoparticles. <i>Int. J. Mol. Sci.</i> 2021, 22, 8897. <a href="https://doi.org/10.3390/ijms22168897">https://doi.org/10.3390/ijms22168897</a>
78	Bounegru, A.V.; <b>Apetrei, C.</b> Development of a Novel Electrochemical Biosensor Based on Carbon Nanofibers–Cobalt Phthalocyanine–Laccase for the Detection of p-Coumaric Acid in Phytoproducts. <i>Int. J. Mol. Sci.</i> 2021, 22, 9302. <a href="https://doi.org/10.3390/ijms22179302">https://doi.org/10.3390/ijms22179302</a>
79	Gunache, R.O.; Bounegru, A.V.; <b>Apetrei, C.</b> Determination of Atorvastatin with Voltammetric Sensors Based on Nanomaterials. <i>Inventions</i> 2021, 6, 57. <a href="https://doi.org/10.3390/inventions6030057">https://doi.org/10.3390/inventions6030057</a>
80	Dăscălescu, D.; <b>Apetrei, C.</b> Voltammetric Determination of Levodopa Using Mesoporous Carbon—Modified Screen-Printed Carbon Sensors. <i>Sensors</i> 2021, 21, 6301. <a href="https://doi.org/10.3390/s21186301">https://doi.org/10.3390/s21186301</a>
81	Bounegru, A.V.; <b>Apetrei, C.</b> Evaluation of Olive Oil Quality with Electrochemical Sensors and Biosensors: A Review. <i>Int. J. Mol. Sci.</i> 2021, 22, 12708. <a href="https://doi.org/10.3390/ijms222312708">https://doi.org/10.3390/ijms222312708</a>
82	Munteanu, I.G.; <b>Apetrei, C.</b> A Review on Electrochemical Sensors and Biosensors Used in Chlorogenic Acid Electroanalysis. <i>Int. J. Mol. Sci.</i> 2021, 22, 13138. <a href="https://doi.org/10.3390/ijms222313138">https://doi.org/10.3390/ijms222313138</a>
83	Dinu, A.; Apetrei, C. A Review of Sensors and Biosensors Modified with Conducting Polymers and Molecularly Imprinted Polymers Used in Electrochemical Detection of Amino Acids: Phenylalanine, Tyrosine, and Tryptophan. <i>Int. J. Mol. Sci.</i> 2022, 23, 1218. <a href="https://doi.org/10.3390/ijms23031218">https://doi.org/10.3390/ijms23031218</a>
84	Dinu, A.; Apetrei, C. Quantification of Tyrosine in Pharmaceuticals with the New Biosensor Based on Laccase-Modified Polypyrrole Polymeric Thin Film. <i>Polymers</i> 2022, 14, 441. <a href="https://doi.org/10.3390/polym14030441">https://doi.org/10.3390/polym14030441</a>

## Papers published in BDI journals

1. **C. Apetrei**; L. P.Georgescu, 2000, "Natural products with antioxidant activity and free radical scavenging activity", *Ovidius University Annals of Chemistry*, 11, pp. 53-55.
2. N. Butu, **C. Apetrei**, Traian Florea, 2000, "Products obtained through sucrose co-crystallization with food additives", *Ovidius University Annals of Chemistry*, 11, pp. 72 -75.
3. Rodríguez-Méndez, M. L., **Apetrei, C.**, Villanueva, S., Apetrei, I.M., Nevares, I., del Alamo, M., Merino, S., Parra, V., Fernández-Escudero, J. A., Iñiguez, M., de Saja, J.A., 2007, Monitoring the ageing of red wines by means of an electronic panel test: discrimination between traditional and alternative ageing methods, *Le Bulletin de L'OIV* 80, pp. 47-59
4. **Apetrei, C.**, Apetrei, I. M., Rodríguez-Mendez, M.L., 2008, *The Annals of the "Dunărea de Jos" University of Galați, Mathematics, Physics, Chemistry, Informatics, Fascicle II, New Series, Year II (XXXI)*, pp. 68-72
5. **C. Apetrei**, 2008, "Novel voltammetric sensors based on conducting polymers and phthalocyanines for the evaluation of tastes", *Al IX-Lea Simpozion de Chimia Coloizilor si Suprafetelor*, pp. 137-140.
6. M.L. Rodríguez-Mendez, **C. Apetrei**, I. Apetrei, S. Villanueva, I. Nevares, M. del Alamo, J.A. de Saja, 2010, "Discrimination entre sistema tradicional de crianza y metodos alternativos (chips). Seguimiento de la crianza por un panel de cata electronico", *La Semana Vitivinicola*, 3295, 118-123.

7. **Apetrei, C.**, Dima, Ș., 2011, Nanostructured biosensors based on tyrosinase- Langmuir-Blodgett films for the detection of catechol, ANNALS OF "DUNAREA DE JOS" UNIVERSITY OF GALATI, MATHEMATICS, PHYSICS, THEORETICAL MECHANICS, FASCICLE II, YEAR III (XXXIV), 10-15.
8. I.M. Apetrei, D. Tutunaru, C.V. Popa (Ungureanu), **C. Apetrei**, 2012, "Development of Amperometric Biosensor Based on Tyrosinase Immobilized in Phosphate-Doped Polypyrrole Film for Detection of Biogenic Amines", IMCS 2012 – The 14th International Meeting on Chemical Sensors, pp. 855-858.
9. I.M. Apetrei, D. Tutunaru, C.V. Popa (Ungureanu), **C. Apetrei**, 2012, "Development of Amperometric Biosensor Based on Tyrosinase Immobilized in Phosphate-Doped Polypyrrole Film for Detection of Biogenic Amines", CISA 2012, pp. 16-20.
10. Elisabeta-Irina Geana, Corina Teodora Ciucure, **Constantin Apetrei**, Victoria Artem, Characterization and Classification of Wines Based on Spectrophotometric Determination of Wine Bioactive Properties. CPQ Nutrition, 2019, 3(6), 01-12. <https://www.cientperiodique.com/article/CPQNN-3-6-71.pdf>

#### Studies presented and/or published in the books of abstracts of scientific conferences, congresses, meetings etc.

1. **C. Apetrei**; L. P. Georgescu, Natural products with antioxidant activity and free radical scavenging activity, Oral, Academic scientific symposium, Constanta, Book of abstracts, pp. 135, Constanta, Romania, 14-15 April 2000, International
2. N. Butu, **C. Apetrei**; T. Florea, Products obtained through sucrose co-crystallization with food additives, Poster, Academic scientific symposium, Constanta, Book of abstracts, pp. 221, Constanta, Romania, 14-15 April 2000, International
3. N. Butu, **C. Apetrei**; T. Florea, Product obtained through sucrose co-crystallization with aspartame, Poster, Academic scientific symposium, Iasi, Book of abstracts, pp. 167, Iasi, Romania, 25-26 September 2000, International
4. **C. Apetrei**, N. Butu, T. Florea, Procesele colaterale la co-cristalizarea zaharozei cu unii aditivi alimentari, Oral, Alimentele și sănătatea la începutul mileniului III, Book of abstracts pp. 37-41, Galati, Romania 1-2 November 2001, International
5. M. Leonte, **C. Apetrei**, V. Grecu, Implicatii ale unor compusi polifenolici asupra aciditatii volatile a vinului rosu, Alimentele și sănătatea la începutul mileniului III, Oral, Alimentele și sănătatea la începutul mileniului III, pg 86-89, Galati, Romania 1-2 November 2001, International
6. M.L. Rodriguez-Mendez, **C. Apetrei**, V. Parra, A. Arrieta, J.A. de Saja, 2<sup>nd</sup> Workshop of the second network on artificial olfactory sensing, Array of sensors formed by novel voltammetric sensors based on conducting polymers and phthalocyanines for the evaluation of tastes, Invited Conference, Sensors and Actuators B 101 (2004) 213-223, Linkoping, Sweden, 18-21 May 2003, International
7. **C. Apetrei**, M.L. Rodriguez-Mendez, V. Parra, F. Gutierrez, J.A. de Saja, Array of voltammetric sensors for the evaluation of bitterness in liquid solutions, Oral, Eurosensors 17<sup>th</sup> European Conference on Solid-State Transducers, Book of Abstracts, pp. 274-275, Guimaraes, Portugal, 22-25 September 2003, International
8. **C. Apetrei**, P. C. Castilho, D. Correia, M. C. Costa, Evaluation of the free radical scavenging activity of Laurus azorica fruit oil extracts, Poster, 51<sup>st</sup> Annual Congress of the Society for Medicinal Plant Research, Kiel, 31 August - 4 September, 2003, International
9. **C. Apetrei**, M.L. Rodriguez-Mendez, F. Gutierrez, J.A. de Saja, Modified carbon paste electrodes for discrimination of vegetable oils, Poster, Eurosensors XVIII, Digest of Technical papers, pp. 382-383, Roma, Italy, 12-15 September, 2004, International
10. S. Casilli, M. De Luca, **C. Apetrei**, V. Parra, A.A. Arrieta, L. Valli, J. Jiang, M. L. Rodriguez-Mendez, J. A. De Saja, Langmuir-Blodgett and Langmuir-Schaefer films of homoleptic and heteroleptic phthalocyanine complexes as voltammetric sensors. Applications to the study of antioxidants, Poster, 9<sup>th</sup> European Conference on thin organised films (ECOF 9), Libro de Abstracts, pp. 91, Valladolid, Spain, 22-25 July 2004, International
11. V. Parra, A. A. Arrieta, J. A. Fernandez-Escudero, H. Garcia, **C. Apetrei**, M. L. Rodriguez-Mendez, J. A. de Saja, 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, Oral, International Symposium on Olfaction and Electronic nose (ISOEN'05), Barcelona, Spain 13-15 April 2005, International
12. M. L. Rodriguez-Mendez, V. Parra, **C. Apetrei**, A. A. Arrieta, J. A. de Saja, Hybrid array of voltammetric sensors based on phthalocyanines, perylene derivatives and conducting polymers. Applications in the analysis of complex liquids, Oral, Physical-chemical foundations of new technologies of XXI century, Book of abstracts 222(C1), Moscow, 30 May- 4 June 2005, International
13. **C. Apetrei**, S. Casilli, M. De Luca, L. Valli, J. Jiang, M.L. Rodriguez-Mendez, J.A. De Saja, Spectroelectrochemical characterization of Langmuir-Blodgett and Langmuir-Schaefer films of homoleptic and heteroleptic phthalocyanine complexes, Oral, Langmuir-Blodgett 11 (LB11), Sapporo, Japan, 26 June-1 July 2005, International
14. J. A. de Saja, M. L. Rodriguez-Mendez, V. Parra, S. Villanueva, **C. Apetrei**, Lengua electronica formada por una red de sensores electroquimicos para la discriminacion de vinos tintos, Poster, Gienol VIII, Libro de abstracts 20 (AC 32), Palencia, Spain, 1-3 June 2005, International
15. I. Apetrei, **C. Apetrei**, I. Nevares, M. del Alamo, V. Parra, J.M. Fernandez-Escudero, M. Iniguez, M.L. Rodriguez-Mendez, J.A. de Saja, Electronic panel test used to monitor the ageing of a red wine carried out in oak barrels and by alternative methods, Poster, V Foro Mundial del Vino Rioja III Milenio, Logrono, Spain 28-30 Mars 2006, International
16. I. Apetrei, **C. Apetrei**, I. Nevares, M. del Alamo, V. Parra, J.M. Fernandez-Escudero, M. Iniguez, M.L. Rodriguez-Mendez, J.A. de Saja, Seguimiento mediante un panel de cata electronico del envejecimiento de un vino tinto realizado en barricas y utilizando tecnicas alternativas, Oral, V Foro Mundial del Vino Rioja III Milenio, Logrono, Spain 28-30 Mars 2006, International
17. M. Nieto, **C. Apetrei**, I. Apetrei, J. A. de Saja, M.L. Rodriguez-Mendez, Langmuir-Blodgett films of a composite nanotube/ double decker lanthanide bisphthalocyanines. Electrochemical properties, Oral, Encuentro Franco Espanol de estado solido, Bilbao, Spain, 4-6 April 2006, International

18. I. Apetrei, **C. Apetrei**, I. Nevares, M. del Alamo, V. Parra, J. A. Fernandez-Escudero, M. Iniguez, M.L. Rodriguez-Mendez, J. A. de Saja, Monitoring the ageing of red wines by means of an electronic panel test. Discrimination between traditional and alternative ageing methods, Oral, XXIX Congreso Mundial de la Vina y el Vino, Logrono, Spain, 25-30 June 2006, International
19. I. M. Apetrei, **C. Apetrei**, I. Nevares, M. del Alamo, V. Parra, J. A. Fernandez-Escudero, M. Iniguez, M. L. Rodriguez-Mendez, J. A. de Saja, El panel de cata electronico en la deteccion de adulteraciones en vinos, Poster, XXIX Congreso Mundial de la Vina y el Vino, Logrono, Spain, 25-30 June 2006, International
20. M.L. Rodriguez-Mendez, **C. Apetrei**, M. Nieto, I. Apetrei, V. Parra, J.A. de Saja, Voltammetric sensors based on double decker lanthanide bisphthalocyanines as the sensing units of an electronic tongue, Oral, ICPP - 4 International Conference on Porphyrins and Phthalocyanines, Book of abstracts, 379, Roma, Italia, 2-7 July 2006, International
21. M. L. Rodriguez-Mendez; **C. Apetrei**; M. Nieto, V. Hernandez, J.T. Lopez Navarrete, F. Effenberger, J.A. De Saja, Langmuir-Blodgett films and selfassembled films of push-pull 5-(dimethylamino)-5'-nitro-2,2'-bithiophene. Spectroscopy, electrochromism and gas sensing properties, Oral, The European Conference on Organised Films (ECOF 10), Riga, Latvia, 21-24 August 2006, International
22. M. L. Rodriguez-Mendez; **C. Apetrei**; I. Apetrei; S. Villanueva; J.A. de Saja, I. Nevares; M. del Alamo, Combination of an electronic nose, an electronic tongue and an electronic eye for the analysis of red wines aged with alternative methods, Poster, IEEE International Symposium on Industrial Electronics (ISIE 2007), May 2007, Vigo, Spain, International
23. **C. Apetrei**, M. L. Rodriguez-Mendez, J.A. de Saja, Response of a hybrid array of voltammetric sensors towards the polyphenolic fraction of extra virgin olive oils. Evaluation of the Capability of Discrimination and Prediction, 4<sup>th</sup> World Congress on Biomimetics, Artificial Muscles and Nano-Bio, Poster, Universidad de Cartagena. Torre Pacheco, Murcia 6-9 November 2007, International
24. **C. Apetrei**, I.M. Apetrei, G. Carac, M.L. Rodriguez-Mendez, J. A. de Saja, Artificial sensory system for the analysis of the quality of red wines, Zilele Universitatii De Medicina Si Farmacie "Iuliu Hatieganu" Cluj-Napoca, Poster, Universitatea de Medicina si Farmacie "Iuliu Hatieganu" Cluj-Napoca, Romania, 5-6 December 2007, National
25. M. Decarli, A. Adami, L. Lorenzelli, M. Malfatti, **C. Apetrei**, M.L. Rodriguez-Mendez, J.A. de Saja, Microcantilever-based sensor array for amine detection in agro-food applications, Smart Systems Integration 2008, Poster, Barcelona April, 9-10, 2008, International
26. M. L. Rodriguez-Mendez; **C. Apetrei**; I. Apetrei; S. Villanueva; I. Nevares; M. del Alamo; J.A. de Saja, Seguimiento de la crianza de un vino por medio de un panel de cata (nariz+lengua+ojo) electronico. Discrimination entre sistema tradicional de crianza y metodos alternativos (chips), Poster + Oral, VI Foro Mundial del Vino, Logrono, Spain 23-25 April, 2008, International
27. **C. Apetrei**, Sensors based on conducting polymers films for the quality control of the aroma of virgin olive oils, Poster, Al IX-Lea Simpozion de Chimia Coloizilor si Suprafetelor, Carte de rezumate, pp. 40, Galati, Romania 29-30 May 2008, National
28. **C. Apetrei**, I. Apetrei, M.L. Rodriguez-Mendez, J.A. de Saja, Bis-phthalocyanine langmuir-blodgett films. Applications as sensors for gases, Poster, Al IX-Lea Simpozion de Chimia Coloizilor si Suprafetelor, Carte de rezumate, pp. 18, Galati, Romania, 29-30 May, 2008, National
29. **C. Apetrei**, M.L. Rodriguez-Mendez, Novel voltammetric sensors based on conducting polymers and phthalocyanines for the evaluation of tastes, Oral, AL IX-LEA SIMPOZION DE CHIMIA COLOIZILOR SI SUPRAFETELOR, Carte de rezumate, pp. 60, Galati, Romania 29-30 May, 2008, National
30. **C. Apetrei**, J.A. de Saja, Gas sensors devices based on functionalised micro-cantilevers, Poster, Al IX-Lea Simpozion de Chimia Coloizilor si Suprafetelor, Carte de rezumate, pp. 40, Romania 29-30 May, 2008, National
31. **C. Apetrei**, I. Apetrei, G. Carac, M. Nieto, M.L. Rodriguez-Mendez, J.A. de Saja, Voltammetric sensors based on composite nanotubes and double decker lanthanide bisphthalocyanines, Oral, First Regional Symposium of South-East Europe (RSE-SEE), Rovinj, Istria, Croatia, May 4-8, 2008, International
32. **C. Apetrei**, I. Apetrei, M.L. Rodriguez-Mendez, J.A. de Saja, Combination of an e-nose, an e-tongue and an e-eye for the characterization of olive oils with different degree of bitterness, Oral, EUROSENSORS 2008, Dresden, Germany, September 7-10, 2008, International
33. P. Cojocaru, L. Magagnin, **C. Apetrei**, G. Carac, Electrochemical preparation and properties of nickel nanowires by template technique, Poster, JE09 (Journées d'Electrochimie 2009), Resumes, p. 132, Sinaia, Romania, July 6-10, 2009, International
34. P. Cojocaru, G. Carac, **C. Apetrei**, F. Muscolino, Luca Magagnin, Electrochemical preparation and surface properties of nickel nanowires formed by the template technique, Poster, 60<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Beijing, China, August 16 - 21, 2009, International
35. M. Stoica, G. Carac, A.M. Cantaragiu, **C. Apetrei**, Electrochemical study of stainless steel surfaces in biodegradable biocides, Poster, 10<sup>th</sup> International Balkan Workshop on Applied Physics (10th IBWAP), S4 P26, p. 156, Constanta, Romania, July 06-08, 2009, International
36. **C. Apetrei**, D. Cosor, P. Popa, P. Cojocaru, G. Carac, The electrodeposition of Ni from a sulphamate bath by different techniques, Poster, International Conference on Functional Nanocoatings, P6-22 (page 99), Dresden, Germany, March 28 - 31, 2010, International
37. **C. Apetrei**, P. Alessio, C.J. Constantino, J.A. de Saja, M.L. Rodriguez-Mendez, Nanostructured films based on lutetium bisphthalocyanines and tyrosinase as biosensors for the detection of antioxidants, Oral (invited), 217<sup>th</sup> ECS (The Electrochemical Society) Meeting, Vancouver, Canada, April 25-30, 2010, International
38. D. E. Rusu (Cosor), **C. Apetrei**, P. Cojocaru, G. Carac, A study on Ni electrodeposited from sulphamate bath, Poster, Second Regional Symposium on Electrochemistry: South-East Europe, SDE-P-03, Belgrade, Serbia, June 6-10, 2010, International
39. M.L. Rodriguez-Mendez, F. Pavinatto, E. Fernandes, **C. Apetrei**, P. Alessio, J. C. Constantino, V. Zucolotto, O. Oliveira, J.A. de Saja, Development of nanostructured Langmuir-Blodgett films containing tyrosinase and lutetium bisphthalocyanine. Application as biosensors, Oral (invited), Sixth International Conference on Porphyrins and Phthalocyanines (ICPP-6), pp. 200, New Mexico, USA, July 4-9, 2010, International
40. **C. Apetrei**, S. Dima, Development of an amperometric biosensor by entrapment of tyrosinase within polypyrrole film, Oral, International Conference of Applied Sciences, Chemistry and Chemical Engineering (CISA) Fifth Edition, Bacau, Romania, April 28-30, 2011, International
41. **C. Apetrei**, Nanostructured biosensors based on tyrosinase- Langmuir-Blodgett films for the detection of catechol, Oral, The 10<sup>th</sup> International Conference on Colloids and Surfaces Chemistry, pp. 63-64, Galati, Romania, June 9-11, 2011, International
42. I.M. Apetrei, C.V. Popa (Ungureanu), D. Tutunaru, **C. Apetrei**, Biosensors based on different carbonaceous materials for the analysis of biogenic amines, The Frontiers of Microscopy Virtual Conference, Elsevier, March 21, 2012, Poster.

43. I.M. Apetrei, D. Tutunaru, C.V. Popa (Ungureanu), **C. Apetrei**, Electrochemical study of biogenic amines with conducting polymer sensors, International Conference of Applied Sciences, Chemistry and Chemical Engineering (CISA), Sixth Edition, Bacau, April 24-27, 2012, Poster,
44. I.M. Apetrei, D. Tutunaru, C.V. Popa (Ungureanu), **C. Apetrei**, Development of amperometric biosensor based on tyrosinase immobilized in phosphate-doped polypyrrole film for detection of biogenic amines, 14<sup>th</sup> International Meeting on Chemical Sensors - IMCS 2012, May 20-23, 2012, Nuremberg, Germany, Poster, pp. 146.
45. C.V. Popa (Ungureanu), I.M. Apetrei, D. Tutunaru, **C. Apetrei**, Biosensing properties of novel biosensors towards biogenic amines, 1<sup>st</sup> International Conference on Analytical Chemistry RO - ICAC'2012, September 18-21, 2012, Targoviste, Romania, Poster, pp. 193.
46. I.M. Apetrei, D. Tutunaru, C.V. Popa (Ungureanu), **C. Apetrei**, Fish freshness monitoring using chemical modified voltammetric electrodes, Centenary Of Education in Chemical Engineering, November 28-30, 2012, Iasi, Romania, Oral presentation, pp. 49.
47. **C. Apetrei**, Biosensors based on nanotechnologies, Materials Today Virtual Conference: Nanotechnology, Elsevier, December 11-13, 2012, Poster, <http://www.materialstoday.com/virtualconference/materials-today-virtual-conference-nanotechnology>
48. D. Tutunaru, I.M. Apetrei, C.V. Popa (Ungureanu), **C. Apetrei**, Biosensors based in tyrosinase and electron mediators for determination of adrenaline, Priorichem, Bucharest, October 25-26, 2012, Oral presentation, pp. 51.
49. C.V. Popa (Ungureanu), I.M. Apetrei, D. Tutunaru, **C. Apetrei**, Disposable biosensors for determination of dopamine, Priorichem, Bucharest, October 25-26, 2012, Poster, pp. 72.
50. I.M. Apetrei, C.V. Popa (Ungureanu), **C. Apetrei**, Amperometric biosensor for the detection of histamine in food products, International Conference of Applied Sciences, Chemistry and Chemical Engineering (CISA), Seventh Edition, Bacau, May 15-18, 2013, Oral.
51. I.M. Apetrei, C.V. Popa (Ungureanu), **C. Apetrei**, Disposable Biosensors Based on Carbonaceous Screen-Printed Electrodes and Diamine Oxidase, European Biotechnology Congress, Bratislava, Slovakia, May 16-18, 2013, Poster.
52. I.M. Apetrei, **C. Apetrei**, Biosensors based on nanostructured layers for the detection of histamine, EuroNanoForum 2013, Dublin, Ireland, June 18-20, 2013, Poster.
53. C.V. Popa (Ungureanu), **C. Apetrei**, Biosensors based on carbonaceous screen-printed electrodes and diamine oxidase, Conferinta Stiintifica a Scolilor Doctorale din Universitatea „Dunarea de Jos” din Galati (CSSD-UDJG), May 16-17, 2013, Poster.
54. M.L. Rodriguez-Méndez, C. Medina-Plaza, **C. Apetrei**, J.A. Fernandez-Escudero, E. Barajas, J.A. de Saja, Bioelectronic tongue based on voltammetric sensors and biosensors the analysis of antioxidants and phenolic composition of grapes, 223<sup>rd</sup> ECS Meeting, Toronto, Ontario, Canada, May 12 - 16, 2013
55. I.M. Apetrei, **C. Apetrei**, Biosensor based on tyrosinase immobilized in single-walled carbon nanotubes screen-printed electrode for tyramine detection, 18<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, September 4-7, 2013, Oral presentation. <http://www.riccce18.upb.ro/>. Abstract published in: RICCCCE18, Papers and Abstracts, page S2-21, Politehnica Press, Bucuresti, ISSN 2344-1895.
56. I. M. Apetrei, D. Tutunaru, C. V. Popa (Ungureanu), **C. Apetrei**, Electrochemical Biosensors for Catecholamines, International Conference of Physical Chemistry - ROMPHYSHEM 15, Bucharest, September 11-13, 2013, Keynote presentation. <http://gw-chimie.math.unibuc.ro/romphyschem/index.php/organizers15>. Abstract published in: Abstracts, ROMPHYSHEM 15, page 78, ISSN 2286-1327.
57. I. M. Apetrei, D. Tutunaru, C. V. Popa (Ungureanu), **C. Apetrei**, Biosensor array for the determination of biogenic amines in food samples, The 6<sup>th</sup> International Symposium Euroalimment - around food, Galati, 3-5 Octombrie, 2013, Poster. [http://www.euroalimment.ugal.ro/euroalimment\\_2013.htm](http://www.euroalimment.ugal.ro/euroalimment_2013.htm). Abstract published in: Papers of the International Symposium EuroAliment, page 28, Galati University Press, ISSN 1843-5114.
58. **C. Apetrei**, Expert sensory system with applicability in food industry, The 6<sup>th</sup> International Symposium Euroalimment - around food, Galati, 3-5 Octombrie, 2013, Oral presentation. [http://www.euroalimment.ugal.ro/euro-alimment\\_2013.htm](http://www.euroalimment.ugal.ro/euro-alimment_2013.htm). Abstract published in: Papers of the International Symposium EuroAliment, page 29, Galati University Press, ISSN 1843-5114.
59. I.M. Apetrei, **C. Apetrei**, Disposable biosensor for the detection of catecholamines in biological samples, Chemistry and Chemical Engineering (CISA 2014), Bacau, May 7-9, 2014, Oral presentation, <http://www.ub.ro/33-romanian/universitate>
60. **C. Apetrei**, I. M. Apetrei, Sensors based on carbonaceous materials for detection of biogenic amines, Chimia 2014, Constanta, May 23-24, 2014, Oral presentation, [http://chimia2014.univ-ovidius.ro/images/Book\\_of\\_Abstacts\\_2014.pdf](http://chimia2014.univ-ovidius.ro/images/Book_of_Abstacts_2014.pdf)
61. I.M. Apetrei, **C. Apetrei**, Expert sensory system for the determination of catecholamines in biological samples, Industrial Technologies 2014, Athens, April 9-11, 2014, Poster, <http://www.b2match.eu/industrialtechnologies2014/participants/210>
62. I.M. Apetrei, C.V. Popa (Ungureanu), **C. Apetrei**, Determination of ammonia and putrescine in beef extract powder using voltammetric sensors, New Trends on Sensing- Monitoring - Telediagnosis for Life Sciences, Brasov, Romania - July 24-26, 2014, Oral presentation, [http://maternologie.ro/envirpubhealth/index.php?option=com\\_content&view=article&id=13&Itemid=8](http://maternologie.ro/envirpubhealth/index.php?option=com_content&view=article&id=13&Itemid=8), Abstract published in: Book of Abstracts, page 26, Lux Libris Publishing House, 2014, ISBN 978-973-131-280-4.
63. I.M. Apetrei, **C. Apetrei**, D. Tutunaru, 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, Poster, [http://maternologie.ro/envirpubhealth/index.php?option=com\\_content&view=article&id=13&Itemid=8](http://maternologie.ro/envirpubhealth/index.php?option=com_content&view=article&id=13&Itemid=8), Abstract published in: Book of Abstracts, page 101, Lux Libris Publishing House, 2014, ISBN 978-973-131-280-4
64. **C. Apetrei**, AAL Forum 2014, Bucharest, September 9-12, 2014, invited attendee.
65. **C. Apetrei**, I. M. Apetrei, Development of voltammetric sensors based on screen-printing technology for detection of creatinine, Euronanoforum 2015, Riga, Latvia June 10-12, 2015, poster, [http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract\\_Apetrei.pdf](http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract_Apetrei.pdf)
66. **C. Apetrei**, I. M. Apetrei, Biosensor based on hybrid Langmuir-Blodgett thin films for detection of tyramine in foods, New Trends on Sensing-Monitoring- Telediagnosis for Life Sciences, Brasov, Romania - September 3-5, 2015, Invited Oral Presentation, <http://healthfoodenviron.unitbv.ro/2015/>
67. **C. Apetrei**, Biosensor based on Prussian Blue and diamine oxidase for detection of biogenic amines in chesses, The 7<sup>th</sup> International Symposium Euroalimment - around food, September 24-26, 2015, Galati, Romania, Oral Presentation.
68. **C. Apetrei**, Bioelectronic tongue for meat products quality analysis, The 7<sup>th</sup> International Symposium Euroalimment - around food, September 24-26, 2015, Galati, Romania, Poster.
69. **C. Apetrei**, C.V. Ungureanu, I.M. Apetrei, Biosensors for dopamine determination in foods of plant origin, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference, October 29 – 31, 2015, Iasi, Plenary Conference.

70. I.M. Apetrei, **C. Apetrei**, Development of a multibiosensor system for detection of biogenic amines, Biosensors, 25-27 May 2016, Gothenburg, Sweden, Poster.
71. **C. Apetrei**, Development of a novel biosensor for detection of dopamine in fruits, International Conference of Applied Sciences, Chemistry and Chemical Engineering (CISA 2016), Bacau, June 2-4, 2016, poster.
72. I.M. Apetrei, **C. Apetrei**, Development of voltammetric sensors for bitterness detection, International Conference of Applied Sciences, Chemistry and Chemical Engineering (CISA 2016), Bacau, June 2-4, 2016, oral presentation. Oral presentation. Abstract published in: Conference Proceedings Abstracts, page 96, Editura Alma Mater, Bacau, 2016, ISSN 2457-3388. <http://cisaconf.ub.ro/>
73. Irina Mirela APETREI, **Constantin APETREI**, Sensors based on carbonaceous nanomaterials for detection of aminoacids in pharmaceutical products, Industrial Technologies 2016, Amsterdam, June 21-24, Amsterdam, poster, Overview Posters, page 55, <https://www.industrialtechnologies2016.eu/binaries/industrial-technologies-2016/documents/publications/2016/august/8/overview-posters/overview-posters.pdf>
74. **C. Apetrei**, M. Boev, A. Dumitrache, I.M. Apetrei. Novel biosensor based on L-amino-acid oxidase and polypyrrole for detection of L-Tyrosine in pharmaceuticals. International Conference of Physical Chemistry – ROMPHYSICHEM 2016, Galati, September 21-23, poster, Book of abstracts, ISSN 2286-1327, ISSN-L 2286-1327, page 60, <http://gw-chimie.math.unibuc.ro/romphyschem16/ROMPHYSICHEM16-AbstractBook.pdf>
75. **C. Apetrei**, I.M. Apetrei. Chemical sensors applied in the analysis of pharmaceutical products. International Conference of Physical Chemistry – ROMPHYSICHEM 2016, Galati, September 21-23, poster, Book of abstracts, ISSN 2286-1327, ISSN-L 2286-1327, page 61, <http://gw-chimie.math.unibuc.ro/romphyschem16/ROMPHYSICHEM16-AbstractBook.pdf>
76. **C. Apetrei**, I.M. Apetrei, Multisensor systems with applications in the quality control. 21st National Conference with international participation "Progress in Cryogenics and Isotopes Separation", Romania, Călimanesti-Căciulata Resort, Valcea County, October 19-21, 2016, invited plenary conference, <http://www.icsi.ro/conference/>
77. **C. Apetrei**, I.M. Apetrei, Nanostructured biosensor based on L-amino acid oxidase immobilized onto carboxylated multiwalled carbon nanotubes/Prussian Blue hybrid film with applications in pharmaceuticals, EuroNanoForum 2017, 21 - 23 June 2017, Valletta, Malta, poster. <http://www.b2fair.com/Catalogue/ENF2017/Catalogue/Catalogue> <http://euronanoforum2017.eu/poster-abstracts/> (055)
78. **C. Apetrei**, I.M. Apetrei, Amperometric biosensor based on graphene/ferrocene carboxylic acid/L-amino acid oxidase nanocomposite for the detection of L-alanine, The 3rd International Conference New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences 2017, Bucharest, Romania - September 7-9, 2017, oral presentation. <http://www.healthfoodenviron.unitbv.ro/2017/>  
Abstract published in: Journal of Medicine and Life, Vol. 10, Special Issue second edition, 2017, page 17, ISSN 1844-122x
79. Brinca Alina, Maghinici Ana-Raluca, Patruta Cristina-Andreea, **Constantin Apetrei**, Determinarea falsificării uleiului de ricin. Sesiunea Națională de Comunicări Științifice Studentești „INGINERIA – PROFESIA VIITORULUI”, ediția I SNCSS BACĂU- 2017, EDITURA "ALMA MATER" BACĂU, 2017, page 72.
80. Costache Mădălina, Nedelcu Valentina, Polodeanu Luminița, Melinte Gabriela, **Constantin Apetrei**, Studiul spectrofotometric al unor coloranți din produse alimentare. Sesiunea Națională de Comunicări Științifice Studentești „INGINERIA – PROFESIA VIITORULUI”, ediția I SNCSS BACĂU- 2017, EDITURA "ALMA MATER" BACĂU, 2017, page 73.
81. Mirela Cătălina Stan, Silvia Noaptes, **Constantin Apetrei**, Aurel Tăbăcaru, Synthesis and characterization of a pyridyl-based copper(II) thiocyanate coordination polymer. XIVth International Conference Students for Students, 25th-30th April 2017, Cluj Napoca
82. Anuța N. Dinu, **Constantin Apetrei**, Development of the electrochemical sensors for the detection of neurotransmitters. European Conference of Psychiatry and Mental Health „Galatia 2018”, Galati May 9-13, poster. Abstract will be published in American Journal of Psychiatry and Neuroscience 2018.
83. **Constantin Apetrei**. Detection of Castor Oil Falsification by Green Analytical Methods. BOOK of ABSTRACTS Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, page 82. Plenary lecture, page 37.
84. Anuța Dinu, **Constantin Apetrei**. Voltammetric Study of Phenylalanine by Means of Sensors Based on Polypyrrole Doped with Different Anions. BOOK of ABSTRACTS Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, page 83.
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.
86. Cătălina Anton, **Constantin Apetrei**. Determination of Carotenoids from Cosmetic and Pharmaceutical Products by FTIR and UV-Vis Spectrometry. BOOK of ABSTRACTS Scientific Conference of Doctoral Schools SCDS-UDJG 2018 The Sixth Edition GALAȚI, 7th-8th of June 2018, page 198.
87. **Constantin Apetrei**. Development of voltammetric sensors for the analysis of natural waters. 4<sup>th</sup> International Conference on Analytical Chemistry, Bucharest, Romania 1 -3 September 2018, oral presentation. <https://roicac2018.wordpress.com/>, Book of abstracts, Editura Politehnica Press, Bucuresti, 2018, ISSN: 2061 – 9248, page 43.
88. Elisabeta-Irina Geană, **Constantin Apetrei**. UV-Vis spectroscopy used for classification of roumanian wines. 4<sup>th</sup> International Conference on Analytical Chemistry, Bucharest, Romania 1 -3 September 2018, poster. <https://roicac2018.wordpress.com/>, Book of abstracts, Editura Politehnica Press, Bucuresti, 2018, ISSN: 2061 – 9248, page 75.
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.

91. **Constantin Apetrei**, Determination of catechol in natural waters with a biosensor based on tyrosinase immobilized within poly-3,4-ethylenedioxythiophene film, UGAL INTERNATIONAL CONFERENCE, MULTIDISCIPLINARY HUB FOR THE HIGHER EDUCATION INTERNATIONALIZATION BY MEANS OF INNOVATIVE INTERACTION WITH THE LABOUR MARKET AND SOCIETY, <http://www.fdi.ugal.ro/index.php/ro/conference-home>, October 26-27, 2018, Galati, Romania. Book of abstracts, page 25.
92. Anuța Dinu, **Constantin Apetrei**, Development of voltammetric sensors based on conducting polymers for the detection of amino acids. 22nd Conference "New Cryogenic and Isotope Technologies for Energy and Environment" - EnergEn 2018, Băile Govora, Romania, October 24 – 26, 2018, poster MSEE 26-P. Book of abstracts, <http://www.icsi.ro/conference/files/bookofabstracts.pdf>, page 179.
93. R. O. Gunache (Roșca), **C. Apetrei**, Voltammetric sensor for the analysis of electroactive compounds from ginkgo biloba based pharmaceutical products. 22nd Conference "New Cryogenic and Isotope Technologies for Energy and Environment" - EnergEn 2018, Băile Govora, Romania, October 24 – 26, 2018, poster LQET 14-P. Book of abstracts, <http://www.icsi.ro/conference/files/bookofabstracts.pdf>, page 220.
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.
96. **C. Apetrei**, Innovative Enterprise Week 2019, 19 – 21 of June 2019, Bucharest, attendee.
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.
98. **Constantin Apetrei**. Novel Developments on Biomimetic Electrochemical Sensors. Invited Lecture. Book of abstracts, <http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019>, page 46. SCDS-UDJG 2019, The Seventh Edition, Galați, 13th-14th of June 2019
99. 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
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 18th 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. RICCE 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. RICCE 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 Anuța, **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.
110. **Constantin Apetrei**. Development of FTIR-chemometric method for the control of ibuprofen in pharmaceuticals. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Invited Lecture, page 50.
111. Elisabeta-Irina Geană, **Constantin Apetrei**, Corina Teodora Ciucure, Victoria Artem. Discrimination of white wines using UV-Vis and FT-IR fingerprinting technologies combined with chemometrics. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Oral, page 112.
112. Ancuta Dinu, **Constantin Apetrei**. Electrochemical Sensor Modified with Cobalt Phthalocyanine for Voltammetric Determination of Phenylalanine. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Oral, page 116.
113. Ancuta Dinu, Dorin Dascalescu, Irina Georgiana Munteanu, Alexandra Virginia Bounegru, Ramona-Oana Rosca, **Constantin Apetrei**. Electrochemical sensors based on nanomaterials employed in water analysis. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 258.

114. Elisabeta-Irina Geană, Victoria Artem, **Constantin Apetrei**. Discrimination and classification of red wines based on FTIR data coupled with multivariate data analysis. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 258.
115. I.G. Bulgaru (Munteanu), D. Dascalescu, **C. Apetrei**. Nanocomposite sensor for sensitive detection of catechol. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 259.
116. I.G. Bulgaru (Munteanu), **C. Apetrei**. Detection of p-coumaric acid with electrochemical sensors. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 259.
117. Ancuta Dinu, **Constantin Apetrei**. Indirect voltammetric detection of acetylsalicylic acid with carbon paste electrodes. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, oral, page 50.
118. Gunache (Roșca) Ramona-Oana, **Constantin Apetrei**. Rapid determination of Rosuvastatin at screen printed electrodes in pharmaceuticals. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, oral, page 260.
119. Alexandra Virginia Mereșescu (Bounegru), **Constantin Apetrei**. Enzyme Sensor Based on Carbon Nanofibers Modified with Gold Nanoparticle and Tyrosinase Used for Ferulic Acid Detection in Cosmetics. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 261.
120. Dorin Dascalescu, **Constantin Apetrei**. Advances in detection of serotonin with biosensors. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 261.
121. Dorin Dascalescu, **Constantin Apetrei**. Electrochemical detection of serotonin with sensors based on mesoporous carbon screen-printed electrodes. SCDS-UDJG 2020; The Eighth Edition, GALAȚI, 18th-19th of June 2020, Book of abstracts, Poster, page 262.
122. Ancuta Dinu, **Constantin Apetrei**. Voltamperometric Sensors for Detection of the Amino Acid Phenylalanine. National Online Conference of Biophysics CNB 2020, 14-16 June, Brasov, Romania, poster T3P3.
123. Alexandra Virginia Mereșescu (Bounegru), **Constantin Apetrei**. Development of Screen-Printed Sensors and Biosensors for the Detection of Ferulic Acid. National Online Conference of Biophysics CNB 2020, 14-16 June, Brasov, Romania, poster T3P14.
124. **Constantin APETREI**. Sensors and biosensors based on nanostructured materials applied in bioanalysis. Food Safety and Healthy Living – FSHL 2020 – Book of Abstracts, Invited lecture, page 89-91.
125. Dorin Dăscălescu, **Constantin Apetrei**. Voltammetric detection of serotonin at screen-printed carbon electrodes modified with mesoporous carbon. The 5th International Conference New Trends on Sensing - Monitoring – Telediagnosis for Life Sciences NT-SMT-LS 2020 ONLINE July 3-4, 2020, Book of Abstracts, poster, page 91.
126. Ancuta Dinu, **Constantin Apetrei**. Sensitive properties of screen printed carbon electrode modified with Leldola's blue for voltammetric detection of phenylalanine. The 5th International Conference New Trends on Sensing - Monitoring – Telediagnosis for Life Sciences NT-SMT-LS 2020 ONLINE July 3-4, 2020, Book of Abstracts, Oral presentation, page 103.
127. Ramona Oana Gunache (Rosca), **Constantin Apetrei**. Voltammetric sensor for the analysis of atorvastatin in pharmaceuticals. The 5th International Conference New Trends on Sensing - Monitoring – Telediagnosis for Life Sciences NT-SMT-LS 2020 ONLINE July 3-4, 2020, Book of Abstracts, Oral presentation, page 104.
128. Irina-Georgiana Bulgaru (Munteanu), **Constantin Apetrei**. Electrochemical determination of catechol based on carbon electrode modified with graphene and gold nanoparticles. International Conference New Trends on Sensing - Monitoring – Telediagnosis for Life Sciences NT-SMT-LS 2020 ONLINE July 3-4, 2020, Book of Abstracts, Poster, page 106.
129. Alexandra Virginia Meresescu (Bounegru), **Constantin Apetrei**. Electrochemical determination of ferulic acid in cosmetics using screen-printed carbon nanofiber electrodes modified with gold nanoparticles. International Conference New Trends on Sensing - Monitoring – Telediagnosis for Life Sciences NT-SMT-LS 2020 ONLINE July 3-4, 2020, Book of Abstracts, Poster, page 116.
130. Ancuta Dinu, **Constantin Apetrei**. Sensitive properties of screen printed carbon electrode modified with polypyrrole and various doping agents for the voltammetric detection of different amino acids. International Conference on Materials Science & Engineering, December 8-9, 2020, Galati, Romania.
131. **C. Apetrei**, I.M. Apetrei. Detection of Olive Oil Adulteration Using Electrochemical Sensors and Biosensors. XXVIth International Symposium on Bioelectrochemistry and Bioenergetics, Online, 9-13 May, 2021, Cluj-Napoca, Romania. Abstract published in Abstract Book, S2-O-15, page 97, Oral presentation.
132. Ancuta Dinu (Iacob), **Constantin Apetrei**. Comparative Study of Two Sensors Performances Regarding the Detection of LPhenylalanine and L-Tyrosine. 16th Edition of International Conference European Integration – Realities and Perspectives, Galati, May 14-15, 2021, <http://www.conferences.univ-danubius.ro/index.php/EIRP/EIRP2021/schedConf/presentations>, poster. <http://www.conferences.univ-danubius.ro/index.php/EIRP/EIRP2021/paper/view/2474>
133. Ancuta Dinu (Iacob), **Constantin Apetrei**. Versatile Electrochemical Devices for L-Tyrosine Amino Acid Detection. 16th Edition of International Conference European Integration – Realities and Perspectives, Galati, May 14-15, 2021, <http://www.conferences.univ-danubius.ro/index.php/EIRP/EIRP2021/schedConf/presentations>, poster. <http://www.conferences.univ-danubius.ro/index.php/EIRP/EIRP2021/paper/view/2475>
134. Ancuța Dinu (Iacob), **Constantin Apetrei**. Electrochemical sensors and biosensors based on polypyrrole for the detection of the amino acids LPhenylalanine and L-Tyrosine CDS-UDJG 2021, Galați, 10th and 11th of June 2021, Oral, Abstract published in Abstract Book p. 111.
135. **Constantin Apetrei**, Alexandra Virginia Bounegru, Irina Georgiana Munteanu, Irina Mirela Apetrei. Electrochemical sensors and biosensors based on polypyrrole for detection of phenolic compounds in olive oils CDS-UDJG 2021, Galați, 10th and 11th of June 2021, Oral, Abstract published in Abstract Book p. 117.
136. Madalina Călmuc, Valentina Andreea Calmuc, Maxim Arseni, **Constantin Apetrei**, Lucian P. Georgescu, Catalina Iticescu. Application of ATR-FTIR spectroscopy for plastic debris identification in the Lower Danube water. CDS-UDJG 2021, Galați, 10th and 11th of June 2021, Oral, Abstract published in Abstract Book p. 232
137. Alexandra Virginia Mereșescu (Bounegru), **Constantin Apetrei**. Enzyme sensors based on carbonaceous nanomaterials modified with cobalt phtalocyanine and lacasse used for p-coumaric acid detection in pharmaceuticals products. CDS-UDJG 2021, Galați, 10th and 11th of June 2021, poster, Abstract published in Abstract Book p. 268

138. Irina Georgiana Bulgaru (Munteanu), **Constantin Apetrei**. Detection of chlorogenic acid with electrochemical sensors. *CDS-UDJG 2021*, Galați, 10th and 11th of June 2021, poster, Abstract published in Abstract Book p. 270
139. Dorin Dăscălescu, **Constantin Apetrei**. Determination of serotonin by electrochemical methods. *CDS-UDJG 2021*, Galați, 10th and 11th of June 2021, poster, Abstract published in Abstract Book p. 272.
140. Ancuta Dinu (Iacob), **Constantin Apetrei**. Development of a novel biosensor based on Laccase/Polypyrrole/ Screen-Printed Electrode for Detection of L-Tyrosine in pharmaceuticals. *CDS-UDJG 2021*, Galați, 10th and 11th of June 2021, poster, Abstract published in Abstract Book p. 278
141. Ramona Oana Gunache (Roșca), **Constantin Apetrei**. Detection of atorvastatin with a voltammetric sensor based on carbon nanotubes and gold nanoparticles. *CDS-UDJG 2021*, Galați, 10th and 11th of June 2021, poster, Abstract published in Abstract Book p. 278
142. Alexandra Virginia Meresescu (Bounegru), **Constantin Apetrei**. Development of novel biosensor for the detection of p-coumaric acid in phenolic extracts from virgin olive oils. *Biosensors 2021*, The 31st Anniversary World Congress on Biosensors, 26-29 July 2021, P1.008,
143. Dinu Ancuta, **Apetrei Constantin**. Electrochemical Biosensors Based on Polypyrrole and Laccase for the Detection of L- Tyrosine in Pharmaceutical Products. *CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry session Electrochemical Devices and Sensors*, 10.3390/CSAC2021-10626
144. **C. Apetrei**, A. V. Bounegru, I.G. Munteanu, I.M. Apetrei. Development of a sensitive method for the voltammetric detection of phenolic compounds in extra virgin olive oils. *CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry session Electrochemical Devices and Sensors*, sciforum-046141
145. Alexandra Virginia Bounegru, **Constantin Apetrei**. Development of a novel voltamperometric sensor based on carbon nanofibers and cobalt phthalocyanine for the detection of p-coumaric acid. *CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry session General: Poster* 10.3390/CSAC2021-10428
146. Irina Georgiana Bulgaru (Munteanu), **Constantin Apetrei**. Electrochemical determination of chlorogenic acid in pharmaceutical products. *CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry session Electrochemical Devices and Sensors*, sciforum-046439.
147. **Constantin APETREI**. Voltamperometric sensors based on conducting polymers used in food analysis. *Food Safety and Healthy Living – FSHL 2021 – Book of Abstracts*, Invited lecture, page 114.
148. Alexandra Virginia MEREȘESCU (BOUNEGRU), **Constantin APETREI**. Electrochemical sensor based on carbon nanofibers for detection of p-coumaric acid in phytoproducts. *INTERNATIONAL CONFERENCE "CHIMIA", BOOK OF ABSTRACTS Volume 4, 2020, 27 – 29 May 2021*, Constanta, Romania, poster, page 61.
149. Alexandra Virginia Bounegru (Meresescu), **Constantin Apetrei**, Irina-Georgiana (Bulgaru) Munteanu, Ramona-Oana (Gunache) Roșca. Development of biosensors for the hydroxycinnamic acids analysis. *Exploratory workshop NeXT Chem INNOVATIVE CROSS SECTORAL TECHNOLOGIES III<sup>rd</sup> EDITION*, Bucharest, MAY 27-28, 2021, *BOOK OF ABSTRACTS*, oral presentation, p. 10.
150. Ancuța Dinu (Iacob), **Constantin Apetrei**, Dorin Dăscălescu, Irina-Georgiana Munteanu (Bulgaru), Ramona-Oana Roșca (Gunache). Detection of amino acids l-phenylalanine, l-tyrosine and l-tryptophan with biosensors based on polypyrrole. *Exploratory workshop NeXT Chem INNOVATIVE CROSS SECTORAL TECHNOLOGIES III<sup>rd</sup> EDITION*, Bucharest, MAY 27-28, 2021, *BOOK OF ABSTRACTS*, oral presentation, p. 11.
151. **Constantin Apetrei**. Multisensory systems based on electrochemical sensors and biosensors used in the analysis and monitoring of natural waters quality. *The International Conference "XXIII<sup>rd</sup> New Cryogenic and Isotope Technologies for Energy and Environment"*. Ramnicu Valcea, Romania, Keynote Invited Presentation, October 26-29, 2021.

## 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

6. MANAGER OF RESEARCH PROJECT

TITLE: „Novel biosensors and smart tools for ultrasensitive detection of olive oils adulteration"

FUNDING ORGANIZATION: UEFISCDI

PROJECT TYPE: PN-III-P4-ID-PCE-2020--0923

DURATION: 4.01.2021-31.12.2023

## **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 – 31 August 2020.

7. TITLE: „ Sistem integrat pentru cercetarea și monitorizarea complexă a mediului în aria fluviului Dunărea, REXDAN”, cod SMIS 127065  
FUNDING ORGANIZATION: Programul Operațional Competitivitate (POC), Contract: 309/10.07.2020  
4.08.2020-31.12.2023

#### **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

2. TITLE: „ Elaborarea unui algoritm de transformare a datelor de turbiditate , determinate cu difractometrul laser, în date care reprezintă masa sedimentelor în suspensie, exprimată în concentrație masică ( $\mu\text{g/L}$ )”, Contract CT 779/08.10.2021  
FUNDING ORGANIZATION: AFDJ Galați  
25.10.2021-13.04.2022

3.02.2022

