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### List of publications

#### Books in national publishing house (ro)

1. **Turdean G. L.**, Stanca S. E., Popescu I. C., “*Biosenzori amperometrici. Teorie și aplicații*”, Presa Universitară Clujeană, **2005**, 242 pag., (ISBN973-610-359-5)

#### Chapter of book in English in publishing house

1. **Turdean G. L.**, “*Acetylcholinesterase or butyrylcholinesterase amperometric biosensors for detection organophosphorus/carbamate pesticides in environmental area*“ in “*Recent trends in Acetylcholinesterase System*” (Editors: Dr. Mahira Parveen and Prof. Santosh Kumar), IOS Press, Netherlands, **2005**, pp. 196-245, (49 pag), (ISSN 0929-6743).

#### Chapter of book in national edition (ro)

1. **Turdean G. L.**, “*Metode electrochimice*” in “*Metode experimentale avansate pentru studiul si analiza bio-nano-sistemelor*”, eds: Aluas M., Simon S., Editura Casa Cartii de Stiinta, Cluj-Napoca, **2012**, pp. 467-508, (41 pag), (ISBN 978-606-17-0115-5).

#### Books for students use

1. Popescu I. C., **Turdean G. L.**, Nicoară A., Mureșan L., Ilea P., *Lucrări practice pentru ciclul de studii aprofundate în “Electrochimie aplicată”*, “Babeș-Bolyai” University Press (lito), **1997**, 76 pag.
2. Popescu I. C., Mureșan L., Nicoară A., **Turdean G. L.**, Ilea P., Gligor D., *Lucrări practice de electrochimie*, “Babeș-Bolyai” University Press (lito), **2006**, 50 pag.

#### List of published scientific papers

IF from <http://www.journal-database.com/journal/electroanalysis.html> (viewed the 11.04.2016)

1. **Turdean G. L.** ✉, Casoni D., Sarbu C., Structure–electrochemical properties correlations of some phenol derivatives investigated by electrochemical techniques, Journal of Iranian Chemical Society, **2016**, 13, 945–956, doi: 10.1007/s13738-016-0810-5; **IF/2014: 1.087**.
2. Forț C. I., Coteț L. C., **Turdean G. L.**, Danciu V., *Meldola Blue Immobilised on Mesoporous Carbon Aerogel - New Electrode Material for NADH Electrocatalytic Oxidation*, Studia Universitatis Babes-Bolyai Chemia, **2015**, 60(3), 215-22; **IF/2014: 0.191**.

3. **Turdean G. L.** ✉, *Characterization of a Modified Graphite Electrode Obtained by Hemin Electropolymerisation*, *Studia Universitatis Babes-Bolyai Chemia*, **2015**, 60(3), 119-128; **IF/2014: 0.191**.
4. **Turdean G. L.** ✉, Fort C. I., Simon V., *In vitro short-time stability of a bioactive glass-chitosan composite coating evaluated by using electrochemical methods*, *Electrochimica Acta*, **2015**, 182, 707-714, doi: [10.1016/j.electacta.2015.09.132](https://doi.org/10.1016/j.electacta.2015.09.132); **IF/2014: 4.504**.
5. Deac A. R., Cotet L. C., **Turdean G. L.**, Muresan L. M., *Carbon paste electrode modified with Bi<sup>3+</sup> - impregnated carbon xerogel for Pb<sup>2+</sup> determination by square wave anodic stripping voltammetry*, *Revue Roumaine de Chimie*, **2015**, 60(7-8), 697-705; **IF/2014: 0.311**.
6. Silai I. E., Fort C. I., Casoni D., **Turdean G. L.** ✉, *Epinephrine detection at Pt-nanoparticles modified graphite electrode by square-wave voltammetry*, *Revue Roumaine de Chimie*, **2015**, 60(7-8), 689-696; **IF/2014: 0.311**.
7. Cotet L. C., Lazar A., **Turdean G. L.**, Danciu V., Baia L., Popescu I. C., Fort C. I., *Bismuth doped carbon xerogel nanocomposite incorporated in chitosan matrix for voltammetric trace detection of Pb(II) and Cd(II)*, *Sensors and Actuators B-Chem.*, **2015**, 220, 712-719; **IF/2014: 4.097**.
8. Deac A. R., Coteț L. C., **Turdean G. L.**, Muresan L. M., *Determination of Cd(II) using square wave anodic stripping voltammetry at a carbon paste electrode containing Bi-impregnated carbon xerogel*, *Studia Universitatis Babes-Bolyai Chemia*, **2015**, 60(10), 203-212; **IF/2014: 0.191**.
9. Januzaj V., Mula V., **Turdean G. L.** ✉, Muresan L. M., *Composite electrodes with carbon supported Ru- nanoparticles for H<sub>2</sub>O<sub>2</sub> detection*, *Acta Chimica Slovenica*, **2015**, 62, 28-34, doi: [10.17344/acsi.2014.672](https://doi.org/10.17344/acsi.2014.672); **IF/2014: 0.686**.
10. **Turdean G. L.** ✉, *Electrochemical behavior of an iron substituted polyoxometalate incorporated in an electropolymerized film*, *Materiale plastice*, **2015**, 52(2), 225-229; **IF/2014: 0.824**.
11. **Turdean G. L.** ✉, Szabo G., *Nitrite detection in meat products samples by square-wave voltammetry at a new single walled carbon nanotubes - myoglobin modified electrode*, *Food Chemistry*, **2015**, 179, 235-330, <http://dx.doi.org/10.1016/j.foodchem.2015.01.106>; **IF/2014: 3.391**.
12. Mares G. M., Nicoara A., **Turdean G. L.**, Popescu I. C., *Electrochemical characterization of Au/l-cysteine/hemin modified electrode*, *Revue Roumaine de Chimie*, **2014**, 59(6-7), 613-621; **IF/2014: 0.311**.
13. Petrehele A.I.G., Rusu D., Ungureanu A., **Turdean G. L.**, Indrea E., David L., Rusu M., *Structural and physical-chemical study of new Keggin polyoxometalates with mixed addenda*, *Revista de Chimie*, **2014**, 65(3), 265-271; **IF/2014: 0.810**.

14. Fort C. I., Silai I. E., Casoni D., **Turdean G. L.** ✉, *Electrochemical study of isoprenaline and epinephrine at platinum-nanoparticles-chitosan modified graphite electrode*, *Studia Universitatis Babes-Bolyai Chemia*, **2013**, 58(4), 193-202; **IF/2014: 0.191**.
15. Silai I. E., **Turdean G. L.** ✉, Casoni D., *Electrochemical behavior of some catecholamines investigated by cyclic and square-wave voltammetry*, *Studia Universitatis Babes-Bolyai Chemia*, **2013**, 58(4), 203-211; **IF/2014: 0.191**.
16. Mares G. M., **Turdean G. L.** ✉, Popescu I.C., *Electrochemical behavior of the hemin modified graphite electrode for H<sub>2</sub>O<sub>2</sub> detection*, *Studia Universitatis Babes-Bolyai Chemia*, **2013**, 58(2), 105-114; **IF/2014: 0.191**.
17. **Turdean G. L.** ✉, *Amperometric detection of glucose by electrocatalytic reduction at a copper – modified electrode*, *Revue Roumaine de Chimie*, **2013**, 58(9-10), 729-735; **IF/2014: 0.311**.
18. Mares G.-M., **Turdean G. L.**, Popescu I. C., *Amperometric Biosensor with Hemin and Horseradish Peroxidase: Preparation, Electrochemical Characterization and Hydrogen Peroxide Detection*, *Műszaki Szemle*, **2013**, 61, 17-28.
19. Rusu D., Tomsa A. R., **Turdean G. L.**, Cojocar I., Bában O., Rusu M., *Synthesis and characterization of the copper (II)-substituted polyoxotungstate based on  $\alpha$ -B-[BiW<sub>9</sub>O<sub>33</sub>]<sup>9-</sup> units*, *Revue Roumaine de Chimie*, **2012**, 57(4-5), 327-336; **IF/2014: 0.311**.
20. Fort C. I., Cotet L. C., Danciu V., **Turdean G. L.**, Popescu I. C., *Fe Doped Carbon Aerogel - New Electrode Material for Electrocatalytic Reduction of H<sub>2</sub>O<sub>2</sub>*, *Materials Chemistry and Physics*, **2013**, 138(2-3), 893-898; **IF/2014: 2.259**.
21. **Turdean G. L.** ✉, Popescu I. C., *Self-assembled architecture based on triiron-substituted polyoxomolybdate anion and positively charged polymer*, *Journal of Solid State Electrochemistry*, **2012**, 16, 681–687, doi: 10.1007/s10008-011-1385-9; **IF/2014: 2.446**.
22. **Turdean G. L.** ✉, *Design and Development of Biosensors for the Detection of Heavy Metal Toxicity* (Review Article), *International Journal of Electrochemistry special issue „Modern Analytical Electrochemistry: Fundamentals, Experimental Techniques, and Applications”*, Guest Editors: Bengi Uslu, Hassan Y. Aboul-Enein, and Sibel A. Ozkan, Ed. SAGE-Hindawi Access to Research), Volume **2011**, Article ID 343125, 15 pages, doi:10.4061/2011/343125 (ISSN- 2090-3529; E-ISSN 2090-3537)
23. Muresan L., Gáspár S., **Turdean G. L.**, Popescu I. C., *A Simple and Fast Method for Detecting Glucose in Wines Using a Redox Polymer-Based Amperometric Biosensor*, *Revista de Chimie*, **2010**, 61, 126-129; **IF/2014: 0.810**.
24. Bogya E.-S., Bâldea I., Barabás R., Csavdári A., **Turdean G. L.**, Dejeu V.-R., *Kinetic studies of sorption of copper(ii) ions onto different calcium-hydroxyapatite materials*, *Studia Universitatis Babes-Bolyai Chemia*, **2010**, 55, 363-373; **IF/2014: 0.191**.
25. **Turdean G. L.** ✉, Fărcaș C., Palcu A. F., Turdean M. S., *Electrochemistry of iron (III) protoporphyrin (IX) solution at graphite electrode*, *Studia Universitatis Babes-Bolyai Chemia*, **2008**, 53(1), 105-111; **IF/2014: 0.191**.

26. **Turdean G. L.**, Patrut A., David L., Popescu I. C., *Electrochemical behaviour of a new triiron-substituted polyoxomolybdate*, Journal of Applied Electrochemistry, **2008**, 38, 751-758; **IF/2014: 2.409**.
27. Mureşan L., **Turdean G. L.**, Popescu I. C., *Rhodium stabilized Prussian Blue–modified graphite electrodes for H<sub>2</sub>O<sub>2</sub> amperometric detection*, Journal of Applied Electrochemistry, **2008**, 38, 349-355; **IF/2014: 2.409**.
28. **Turdean G. L.** ☒, Turdean M. S., *Synergetic effect of organic solvents and paraoxon on the immobilized acetylcholinesterase*, Pesticide Biochemistry and Physiology, **2008**, 90(2), 73-81; **IF/2014: 2.014**.
29. Rotariu I., **Turdean G. L.**, Kormos F., Macarovici D., Tolnai G., Felhösi I., Nagy P., Trif L., Kálmán E., *The corrosion study of ZrO<sub>2</sub> coatings on metals*, Materials Science Forum, **2007**, 537-538, 247-254; **IF/2007: 0.498**.
30. **Turdean G. L.** ☒, Popescu I. C., Curulli A., Palleschi G., *Iron(III) protoporphyrin IX – single-wall carbon nanotubes modified electrodes for hydrogen peroxide and nitrite detection*, Electrochimica Acta, **2006**, 51, 6435-6441; **IF/2014: 4.504**.
31. Spinean S. A., **Turdean G. L.** ☒, Popescu I. C., *Biosensor for amperometric detection of catechol based on mushroom tissue and a Methylene Green - Nafion modified electrode*, Studia Universitatis Babes-Bolyai Chemia, **2005**, 50(1), 67-74.
32. Ciocan C. A., Roşu C., **Turdean G. L.** ☒, Rusu M., *Electrochemical behaviour of a new heteropolytungstates [X<sub>2</sub>W<sub>22</sub>O<sub>74</sub>(OH)<sub>2</sub>]<sub>12</sub> with Rh(III), X = As (III), Bi(III) or Sb(III)*, Revue Roumaine de Chimie, **2004**, 49(3-4), 279-28; **IF/2014: 0.311**.
33. **Turdean G. L.** ☒, Palcu A. F., Fărcaş C., Popescu I. C., *Electroanalytical characterization of a Co(II) - phtalocyanine modified carbon paste electrode*, Studia Universitatis Babes-Bolyai Chemia, **2004**, 49(2), 145-152.
34. Gligor D. M., **Turdean G. L.**, Mureşan L. M., Popescu I. C., *Third generation amperometric biosensor based on mediated electron transfer between alcohol dehydrogenase and 1,1,2,2,3,3,4,6,7,8,9-undecachloro-1,2-dihydro-phenothiazine*, Studia Universitatis Babes-Bolyai Chemia, **2004**, 49(1), 93-97.
35. **Turdean G. L.** ☒, Curulli A., Popescu I. C., Roşu C., Palleschi G., *Electropolymerised architecture entrapping a trilacunary Keggin-type polyoxometalate for assembling a glucose biosensor*, Electroanalysis, **2002**, 14 (22), 1550-1557; **IF/2014: 2.138**.
36. **Turdean G. L.** ☒, Popescu I. C., Oniciu L., Thévenot D. R., *Sensitive detection of organophosphorus pesticides using a needle type amperometric acetylcholinesterase-based bioelectrode. Thiocholine electrochemistry and immobilised enzyme inhibition*, Journal of Enzyme Inhibition and Medicinal Chemistry, **2002**, 17(2), 107-11; **IF/2014: 2.332**.
37. **Turdean G. L.** ☒, Popescu I. C., Oniciu L., *Biocapteurs ampérométriques à cholinestérasés pour la détermination des pesticides organophosphorés*, Canadian Journal of Chemistry, **2002**, 80, 315-331; **IF/2014: 1.061**.

38. Rus C. O., **Turdean G. L.**, *Biosenzor amperometric pe bază de polipirol pentru detecția ureei*, Analele Universității Oradea, Fascicula Chimie, **2002**, IX, 82-88.
39. **Turdean G. L.** ✉, Rus C. O., Mureșan L., *Filme polimerice obținute prin electropolimerizare. Caracterizare electrochimică*, Analele Universității Oradea, Fascicula Chimie, **2001**, VIII, 65-72.
40. Turdean E., **Turdean G. L.**, Vana M. S., Nistorescu S., Alionescu M., *Metode statistice de verificare a semnificației factorilor de risc în litiaza biliară colesterolică. II. Influența constantelor lipidice*, Analele Universității Oradea, Fascicula Chimie, **2001**, VIII, 89-96.
41. Turdean E., Vana M. S., **Turdean G. L.**, Nistorescu S., Alionescu M., *Metode statistice de verificare a semnificației factorilor de risc în litiaza biliară colesterolică. I. Influența tipului de alimentație*, Analele Universității Oradea, Fascicula Chimie, **2001**, VIII, 81-88.
42. **Turdean G. L.**, Moșneag C. S., Popescu I. C., *Biosensor based on acetylcholinesterase for acetylcholine amperometric detection at low applied potential*, ACH-Models in Chemistry, **2000**, 137(4), 519-531; **IF/2002: 0.571**.
43. **Turdean G. L.**, Oniciu L., *The influence of organic solvents on the biosensor function*, Revista de Chimie, **1998**, 49(9), 604-612; **IF/2014: 0.810**.
44. **Turdean G. L.** ✉, Popescu I. C., Oniciu L., *Biocapteur à base de glucose oxydase-phtalocyanine de Co(II)-pate de carbone pour la détection ampérométrique du glucose*, Revue Roumaine de Chimie, **1998**, 43(3), 203-208; **IF/2014: 0.311**.
45. **Turdean G. L.**, Șerdan O., Curticăpean S., Popescu I. C., *Voltammetric response of free and polymer entrapped bis-(trialcoxi)-hexavanadate*, Studia Universitatis Babeș-Bolyai Chemia, **1998**, 43(1-2), 45-50.
46. **Turdean G. L.** ✉, Oniciu L., Labat-Allietta N., Thévenot D. R., *Amperometric microbiosensor for the determination of choline*, Journal Science Islamic Republic of Iran, **1998**, 9(1), 10-14 (ISSN: 1016-1104).
47. **Turdean G. L.**, Popescu I. C., Oniciu L., *The influence of polar and non-polar solvents on the acetylcholinesterase inhibition with paraoxon*, Analele Universității Oradea, Fascicula Chimie, **1998**, 5, 3-13.
48. **Turdean G. L.**, Péter I., Popescu I. C., Oniciu L., *An acetylcholinesterase amperometric microbiosensor for the detection of dipterex*, Revue Roumaine de Chimie, **1997**, 42(7), 879-883; **IF/2014: 0.311**.
49. Teuca I., Hopârtean E., Pică E. M., **Turdean G. L.**, *Studies for realisation the sterilisation of an oxygen sensor*, Buletinul științific al Institutului Politehnic Cluj-Napoca, Seria Chimie-Metalurgie, **1991**, 34, 49 – 54.

## Papers published in proceedings of international scientific symposium

1. **Turdean G. L.**, Popescu I. C., *Electrochemical Method for Heavy Metals Detection by Inhibition of Acetylcholinesterase Immobilized on Pt-nanoparticles Modified Graphite Electrode*, Proceedings of the 16<sup>th</sup> International Conference on Heavy Metals in the Environment, E3S Web of Conferences, **2013**, Volume 1, art nr. 05007; (3 pag.) DOI <http://dx.doi.org/10.1051/e3sconf/20130105007>.
2. Mureșan L., Gaspar S., **Turdean G. L.**, Popescu I. C., *Os-Redox Polymer as Mediator for Glucose Detection*, Proceedings of the International Conference on Ecological Materials and Technologies Ed. Printech, **2008**, vol. 1, pp. 61-63 (ISBN 978-606-521-079-0).
3. Kovács G., Mureșan L., **Turdean G. L.**, Popescu I. C., Bolla Cs., *Modified electrodes for detection of glucose from wine*, Proceedings of 14<sup>th</sup> International Conference of Chemistry, Ed. Hungarian Technical Society of Transylvania, Cluj-Napoca, **2008**, pp. 70-76 (ISSN 1843-6293).
4. **Turdean G. L.**, Curulli A., Popescu I. C., Paleschi G., *The electrocatalytic H<sub>2</sub>O<sub>2</sub> reduction at a supramolecular architectures containing a Keggin type polyoxometalate*, in *Electrochemistry in Molecular and Microscopic Dimensions*, 53rd Annual ISE Meeting, Dusseldorf, Published in Frankfurt am Main, **2002**, p. 75-79.
5. **Turdean G. L.**, Curulli A., Popescu I. C., Roșu C., Paleschi G., *Electropolymerised architecture entrapping a trilacunary Keggin - type polyoxometalate for assembling a glucose biosensor*, in *Chemical Biological Sensors and Analytical Methods II*, Ed. M. B. Butler, P. Vanysek and N. Yamazoe, Proceedings Volume **2001-18**, The Electrochemical Society, Inc. pp. 245-250 (*oral communication at 52<sup>th</sup> Meeting of ISE*, San Francisco (USA), 2-7 Sept. 2001, abstract n. 911).
6. **Turdean G. L.**, Popescu I. C., Oniciu L., Thévenot D. R., *Optimisation of an amperometric acetylcholinesterase based micro-biosensor for the detection of organophosphorus pesticides*, The Electrochemical Society Inc. Proceedings, Pennington, New York, **1997**, 19, pp. 966-968 (*oral communication at ISE-ECS Joint International Meeting*, Paris (France), 31 Aug.-5 Sept. 1997).

## List of international communications

1. Deac A. R., Cotet C. L., **Turdean G. L.**, Muresan L. M., *Simultaneous determination of Cd(II) and Pb(II) by square wave voltammetry based on carbon paste electrode modified with Bi doped carbon xerogel*, The 5<sup>th</sup> Regional Symposium on Electrochemistry of South-East Europe, Pravets (Bulgaria), 7-11 June **2015** (poster).
2. Silai I., **Turdean G. L.**, *Structure- electrochemical properties - antioxidant capacity correlation of some catecholamines investigated by cyclic and square-wave voltammetry*, The 32<sup>nd</sup> OTDK Chemistry, Veszprem (Hungary), 9-11 Apr. **2015** (oral communication).
3. Cotet C. L., Deac A. R., Fort I. C., Magyari K., Baia L., **Turdean G. L.**, Danciu V., Muresan L., *Synthesis and characterization of monolithic carbon xerogels/aerogel impregnated with bismuth nanoparticles for electrochemical sensing application*, The 11<sup>th</sup> International Conference on Nanosciences & Nanotechnologies (NN14), Thessaloniki (Greece), 8-11 July **2014** (poster).

4. Deac A. R., Cotet C. L., **Turdean G. L.**, Muresan L. M., *Bi-based carbon xerogels -carbon paste electrode for Cd<sup>2+</sup> detection*, The 2<sup>nd</sup> International Conference on chemical Engineering. Inovative Materials and Processes (ICCE2014), Technical University “Gheorghe Asachi”, Iasi (Romania), 5-8 Nov. **2014** (poster).
5. Deac A. R., Cotet C. L., **Turdean G. L.**, Muresan L. M., *Bi-based carbon xerogel carbon paste electrode for Pb<sup>2+</sup> detection*, The 10<sup>th</sup> Environmental Legislation, Safety Engineering and Disaster Management (ELSEDIM), University “Babeş-Bolyai”, Cluj-Napoca (Romania), 18–19 Sept. **2014** (poster).
6. Silai I. E., **Turdean G. L.**, *The study of epinephrine by electrochemical methods*, The 20<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, University “Babeş-Bolyai”, Cluj-Napoca (Romania), 6-9 Nov. **2014** (poster).
7. Mares G. M., **Turdean G. L.**, Popescu I. C., *Modified graphite-hemin-chitosan: electrochemical characterization and k<sub>s</sub> determination using cyclic voltammetry and square wave voltammetry*, The 20<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, University “Babeş-Bolyai”, Cluj-Napoca (Romania), 6-9 Nov. **2014**.
8. Silai I. E., **Turdean G. L.**, *pH influence on the electrochemical behaviour of some catecholamines*, The 17<sup>th</sup> Conference of students from Transylvania (ETDK), University “Babeş-Bolyai”, Cluj-Napoca (Romania), 15-18 May **2014** (oral communication).
9. Silai I. E., **Turdean G. L.**, *Structure- electrochemical properties - antioxidant capacity correlation of some catecholamines investigated by cyclic and square-wave voltammetry*, The 16<sup>th</sup> Conference of students from Transylvania (ETDK), University “Babeş-Bolyai”, Cluj-Napoca (Romania), 20-21 May **2013** (oral communication).
10. Mares G. – M., Popescu I. C., **Turdean G. L.**, *Au/Hemin modified electrode – investigation by cyclic and square wave voltametry*, The 19<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, Baia Mare (Romania), 21-24 Nov. **2013** (poster).
11. Silai I. E., **Turdean G. L.**, *The influence of the pH on the electrochemical behavior of some catecholamine*, The 19<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, Baia Mare (Romania), 21-24 Nov. **2013** (poster).
12. **Turdean G. L.**, Popescu I. C., *Hemin modified graphite electrode for H<sub>2</sub>O<sub>2</sub> electrocatalytic reduction: a comparison of different immobilization techniques*, The 4<sup>th</sup> Regional Symposium on Electrochemistry of South-East Europe, Ljubljana (Slovenia), 26-31 May **2013** (poster).
13. Silai I. E., **Turdean G. L.**, *Correlation between electrochemical properties and antioxidant capacity of some catecholamines investigated by electrochemical techniques*, The 18<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, Baile Felix (Romania), 22-24 Nov. **2012**, (poster).

14. Mares G. – M., Popescu I. C., **Turdean G. L.**, *Electrochemical characterization of the hemin modified graphite electrode by using cyclic voltammetry and square wave voltammetry*, The 18<sup>th</sup> International Conference on Chemistry of the Hungarian Technical Scientific Society of Transylvania, Baile Felix (Romania), 22-24 Nov. **2012**, (poster).
15. **Turdean G. L.**, Popescu I. C., *Electrochemical method for heavy metals detection by inhibition of acetylcholinesterase immobilized on pt-nanoparticles modified graphite electrode*, The 16<sup>th</sup> International Conference on Heavy Metals in the Environment (ICHMET), Rome (Italy), 23-27 Sept. **2012**, (poster).
16. **Turdean G. L.**, Popescu I. C., *Square-wave voltammetric detection of nitrite at myoglobin-single wall carbon nanotubes modified electrode*, The 3<sup>rd</sup> Regional Symposium on Electrochemistry of South-East Europe, Bucharest (Romania), 13–17 May **2012**, (poster).
17. Killyéni A., Nicoara A., **Turdean G. L.**, Popescu I. C., *Electrochemical studie of a calixarene on gold electrode*, The 17<sup>th</sup> International Conference of Chemistry of the Hungarian Technical Scientific Society of Transylvania, University “Babeş-Bolyai”, Cluj-Napoca (Romania), 4-6 Nov. **2011**, (poster).
18. Fort C. I., Cotet C. L., **Turdean G. L.**, Danciu V., Popescu I. C., *H<sub>2</sub>O<sub>2</sub> electrocatalytic reduction at carbon paste electrodes modified with Fe doped carbon aerogel*, The 8<sup>th</sup> Processes in Isotopes and Molecules (PIM), INCDTIM Cluj-Napoca (Romania), 29 Sept.–1 Oct. **2011**, (poster).
19. Killyeni A., Campan V., Nicoara A., **Turdean G. L.**, Popescu I. C., *Electrochemical investigation of self-assembled S-acetyl-calix[8]arene on gold for molecular recognition*, The 4<sup>th</sup> Conference on Advanced Spectroscopies on Biomedical and Nanostructured Systems, University “Babeş-Bolyai”, Cluj-Napoca (Romania), 4-7 Sept. **2011**, (oral communication).
20. **Turdean G. L.**, Popescu I. C., *Catechol Amperometric Detection at Graphite Electrode Modified with Platinum Nanoparticles*, The 9<sup>th</sup> Spring Meeting of the International Society of Electrochemistry, Turku (Finland), 8–11 May **2011**, (poster).
21. **Turdean G. L.**, Popescu I. C., *Nano-composite electrode material for catechol amperometric detection*, The 2<sup>nd</sup> Regional Symposium on Electrochemistry of South-East Europe, Belgrade (Serbia), 6–10 June **2010**, (poster).
22. Kovács G., Mureşan L., Bolla Cs., **Turdean G. L.**, Popescu I. C., *Biosensors for detection of glucose*, The 15<sup>th</sup> International Conference of Chemistry of the Hungarian Technical Scientific Society of Transylvania, Targu Mures (Romania), 12-15 Nov. **2009**, (oral communication).
23. **Turdean G. L.**, Popescu I. C., *Composite Bielectrode for Wine Phenol Assesment*, The 60<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Beijing (China), 16-21 Aug. **2009**, (poster).



24. Muresan L., Kovacs G., **Turdean G. L.**, Popescu I. C., *Detection du Glucose dans le vin à l'aide d'un biocapteur à glucose oxydase*, The 14<sup>th</sup> Journées d'Electrochimie, Sinaia (Romania), 6-10 July **2009**, (poster).
25. Kovács G., Mureşan L., **Turdean G. L.**, Popescu I. C., Bolla Cs., *Modified electrodes for detection glucose from wine*, The 14<sup>th</sup> International Conference of Chemistry of the Hungarian Technical Scientific Society of Transylvania, University "Babeş-Bolyai", Cluj-Napoca (Romania), 13-15 Nov. **2008**, (oral communication).
26. Mureşan L., Kovacs Gabor, **Turdean G. L.**, Popescu I. C., *Biocapteur amperometrique bienzymatique pour la detection du glucose dans les vins*, 2<sup>eme</sup> Congres des Sciences Analytiques CSA, Casablanca (Maroc), 29-31 Oct. **2008**, (poster).
27. Mureşan L., **Turdean G. L.**, Popescu I. C., *Os-Redox Polymer as mediator for glucose detection*, International Conference on Ecological Materials and Technologies, Bucarest (Romania), 25-26 sept. **2008**, (poster).
28. **Turdean G. L.**, Muresan L., Popescu I. C., *Nanostructured assemblies for glucose and phenol detection*, The 59<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Seville (Spain), 7-12 sept. **2008** (poster).
29. **Turdean G. L.**, Popescu I. C., *Supramolecular nanostructured assemblies of hemin into a polymer matrix for H<sub>2</sub>O<sub>2</sub> electrocatalysis*, The First Regional Symposium on Electrochemistry of South-East Europe, Crveni Otok, Rovinj, Istria (Croatia), 4-8 May **2008**, (poster).
30. Stoica-Hopirtean I., Stoica-Hopirtean D., **Turdean G. L.**, *Voltammetric determination of some sweeteners and toxic dye in wines*, The 1<sup>st</sup> International conference environment–natural sciences–food industry in European context, Baia Mare (Romania), 16-17 Nov. **2007**, (poster).
31. **Turdean G. L.**, Popescu I. C., *Optimization of a copper-modified electrode for amperometric detection of glucose*, The 3<sup>rd</sup> International Symposium on Recent Advances in Food Analysis, Prague (Czech Republic), 7-9 Nov. **2007**, (poster).
32. **Turdean G. L.**, Popescu I. C., *Evaluation of pesticide-induced acetylcholinesterase inhibition using a needle type amperometric biosensor*, The 15<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, "Politehnica" University Bucharest, Sinaia (Romania), 19-22 Sept. **2007**, (poster).
33. **Turdean G. L.**, Popescu I. C., *Influence of organic solvents on the inhibition by paraoxon of the immobilised Acetylcholinesterase*, The 5<sup>th</sup> Spring Meeting of the International Society of Electrochemistry, Dublin (Ireland), 1-4 May **2007**, (poster).
34. **Turdean G. L.**, I. C. Popescu, A. Curulli, G. Palleschi, *An innovative nanocomposite material for nitrite amperometric detection: an electrochemical comparative study*, The 57<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Edinburgh (Scotland), 27 Aug.-1 Sept. **2006**, (poster).

35. **Turdean G. L.**, Cucui M., Popescu I. C., *Amperometric detection of glucose at a copper-modified biosensor*, The 12<sup>th</sup> International Conference of Physical Chemistry - ROMPHYSICHEM, University "Politehnica", București (Romania), 6-8 Sept. **2006**, (poster).
36. Rotariu I., **Turdean G. L.**, Kormos F., Macarovici D., Tolnai G., Felhösi I., Nagy P., Trif L., Kálmán E., *Nanostructured zirconia coatings for corrosion protection of copper and steel*, The 5<sup>th</sup> Hungarian Conference and Exhibition on Materials Science, Testing and Informatics, Balatonfüred (Hungary), 9-11 Oct. **2005**, (poster).
37. **Turdean G. L.**, Curulli A., Palleschi G., *Electrochemical study of hemin immobilised on graphite electrode via single-wall carbon nanotubes*, The 18<sup>th</sup> International Symposium on Bioelectrochemistry and Bioenergetics, Coimbra (Portugal), 18-24 June **2005**, (poster).
38. Mureșan L., **Turdean G. L.**, Popescu I. C., *Rh<sup>3+</sup> as stabilising effect on the Prussian Blue graphite modified electrode*, The 14<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, "Politehnica" University, București (Romania), 22-24 Sept. **2005**, (poster).
39. Spinean S., **Turdean G. L.**, Popescu I. C., *Platine dispersed nanoparticles on graphite powder as electrocatalyst for H<sub>2</sub>O<sub>2</sub> detection*, The 14<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, University "Politehnica", București (Romania), 22-24 Sept. **2005**, (poster).
40. Spinean S., **Turdean G. L.**, Popescu I. C., Cosnier S., *Electrode enzymatique à base de nanoparticules métalliques et de carbone piégées dans un film polymère pour la détection des composés phénoliques*, 12<sup>ème</sup> Journées d'Electrochimie, Saint Malo (France), 5-8 July **2005**, (poster).
41. **Turdean G. L.**, Curulli A., Palleschi G., *Étude électrocinétique de l'interaction entre l'hemin et les nanotubes de carbone*, 12<sup>ème</sup> Journées d'Electrochimie, Saint Malo (France), 5-8 July **2005**, (poster).
42. Mureșan L., **Turdean G. L.**, Mureșan L. M., Popescu I. C., Palleschi G., *Prussian Blue-modified graphite electrodes for H<sub>2</sub>O<sub>2</sub> amperometric detection. A kinetic study on the Rh<sup>3+</sup> stabilizing effect*, 12<sup>ème</sup> Journées d'Electrochimie, Saint Malo (France), 5-8 July **2005**, (poster).
43. **Turdean G. L.**, *Sensitive detection of organophosphorus pesticides using a needle type amperometric acetylcholinesterase based bioelectrode*, IAEAC: The 6<sup>th</sup> Workshop on Biosensors and BioAnalytical  $\mu$ -Techniques in Environmental and Clinical Analysis, ENEA-University of Rome "La Sapienza", Rome (Italy), 8-12 Oct. **2004**, (poster).
44. Mureșan L., **Turdean G. L.**, Goia D. V., Popescu I. C., *Metal particles modified-carbon paste electrodes for H<sub>2</sub>O<sub>2</sub> and phenol amperometric detection*, The 55<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Thessaloniki (Greece), 18-24 Sept. **2004**, (poster).

45. **Turdean G. L.**, Popescu I. C., *Kinetic study of inhibitor – acetylcholinesterase interaction using an amperometric biosensor*, The 8<sup>th</sup> International Symposium on Kinetic in Analytical Chemistry, Rome (Italy), 8-12 July **2004**, (poster).
46. **Turdean G. L.**, Coppe A., Valentini F., Curulli A., Palleschi G., *Homogenous and heterogeneous kinetic studies of the hemin-carbon nanotubes interactions*, The 8<sup>th</sup> International Symposium on Kinetic in Analytical Chemistry, Rome (Italy), 8-12 July **2004**, (poster).
47. Mureșan L., Isvoranu C., **Turdean G. L.**, Mureșan L. M., Popescu I. C., Ricci F., Palleschi G., *Screen printed carbon electrodes modified with Prussian Blue for H<sub>2</sub>O<sub>2</sub> amperometric detection*, The 10<sup>th</sup> International Conference on Electroanalysis, European Society of Electroanalytical Chemistry, National University of Ireland, Galway (Ireland), 6-10 June **2004**, (poster).
48. Peter I., Gligor D., **Turdean G. L.**, Mureșan L. M., Turcu R., Popescu I. C., *Zeolite modified electrodes for electroanalytical applications*, The 13<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, “Politehnica” University, București (Romania), 16-20 Sept. **2003**, (poster).
49. Mureșan L., **Turdean G. L.**, Mureșan L. M., Popescu I. C., *Rhodium(III) stabilized Prussian Blue-modified screen printed carbon electrode*, The 11<sup>th</sup> Physical Chemistry Conference with International Participation, “Politehnica” University, Timișoara (Romania), 2-5 Sept. **2003**, (poster).
50. Gligor D., **Turdean G. L.**, Mureșan L. M., Popescu I. C., *New carbon paste composite electrode incorporating zeolites*, The 11<sup>th</sup> International Conference of Physical Chemistry - ROMPHYSICHEM, “Politehnica” University, Timișoara (Romania), 2-5 Sept. **2003**, (poster).
51. **Turdean G. L.**, Curulli A., Popescu I. C., Palleschi G., *Hemin modified graphite electrode – a new strategy to promote the electrocatalytic reduction of nitrite and H<sub>2</sub>O<sub>2</sub>*, The 17<sup>th</sup> International Symposium on Bioelectrochemistry and Bioenergetics, Florence (Italy), 19-24 June **2003**, (poster).
52. **Turdean G. L.**, Curulli A., Popescu I. C., Palleschi G., *Electrochimie de la protoporphyrine IX du Fe (III) incluse dans une matrice polymérique déposée sur graphite spectrale*, 11<sup>eme</sup> Journées d'Electrochimie, Poitiers (France), 3-6 June **2003**, (poster).
53. **Turdean G. L.**, Curulli A., Popescu I. C., Palleschi G., *The electrocatalytic H<sub>2</sub>O<sub>2</sub> reduction at a supramolecular architectures containing a Keggin type polyoxometalate*, The 53<sup>rd</sup> Annual Meeting of the International Society of Electrochemistry, Düsseldorf (Germany), 15-20 Sept. **2002**, (poster no. 2.41).
54. **Turdean G. L.**, Popescu I. C., Curulli A., Palleschi G., *Electrochemical investigations of the direct electron transfer between a supramolecular architecture design containing heme based proteins and the spectral graphite*, The 3<sup>rd</sup> International Conference of Chemical

- Societies of the South Eastern European Countries on Chemistry in the New Millenium and Endless frontier, București (Romania), 22-25 Sept. **2002**, (poster).
55. **Turdean G. L.**, Curulli A., Popescu I. C., Roșu C., Paleschi G., *Electropolymerised architecture entrapping a trilacunary Keggin - type polyoxometalate for assembling a glucose biosensor*, The 52<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, 2-7 Sept. **2001**, (oral communication).
  56. **Turdean G. L.**, Popescu I. C., *Sensitive detection of organophosphorus pesticides using an amperometric acetylcholinesterase based bioelectrode. Thiocholine electrochemistry and enzyme inhibition*, The 41<sup>st</sup> Week of Science, Conference of Biotechnology, Damascus University (Syria), 3-5 Nov. **2001**, (poster).
  57. Gligor D., **Turdean G. L.**, Mureșan L. M., Popescu I. C., *Third generation amperometric biosensor based on direct electron transfer between alcohol dehydrogenase and 1,1,2,2,3,3,4,6,7,8,9,-undecachloro-1,2-dihydro-phenothiazine*, The 2<sup>nd</sup> Electrochemistry a frontier field of theoretical and practical interest joint with 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, University "Politehnica", București (Romania), 13-15 Sept. **2001**, (poster).
  58. **Turdean G. L.**, Curulli A., Popescu I. C., Roșu C., Paleschi G., *Systèmes supramoléculaires pour assembler des biocapteurs de troisième génération*, 10<sup>eme</sup> Journées d'Electrochimie, Marrakech (Maroc), 3-8 June **2001**, (poster).
  59. **Turdean G. L.**, Popescu I. C., Roșu C., Dominguez E., *Architecture multi-couche a  $Fe_4(PMo_9)_2$  pour la détection ampérométrique du glucose*, 10<sup>eme</sup> Journées d'Electrochimie, Marrakech (Maroc), 3-8 June **2001**, (poster).
  60. Șerdan O., **Turdean G. L.**, Popescu I. C., *Electrochemical study of some polyoxometalates with Keggin modified structure*, The 10<sup>th</sup> International Conference of Physical Chemistry - ROMPHYSICHEM, Iași (Romania), 25-29 Sept. **2000**, (poster).
  61. Curulli A., **Turdean G. L.**, Paolesse R., Paleschi G., *Electron transfer from oxidase and dehydrogenases enzymes via chemical relays to the electrode surface: assembling of novel third generation amperometric biosensors*, The 6<sup>th</sup> World Congress on Biosensors, Biosensors 2000, San Diego (SUA), 24-26 May **2000**, (poster).
  62. **Turdean G. L.**, Popescu I. C., Roșu C., Narváez A., Dominguez E., *Reagentless biosensors based on self-deposited  $Fe_4(PMo_9)_2$  for glucose amperometric detection*, The 8<sup>th</sup> European Conference on Electroanalysis, Bonn (Germany), 11-15 June **2000**, (poster).
  63. Ciocan C.-A., Roșu C., **Turdean G. L.**, Rusu M., *New developments in the chemistry of heteropolytunstates of Rhodium (III)*, The 5<sup>th</sup> FIGIPS Meeting in Inorganic Chemistry, Toulouse (France), 25-30 Oct. **1999**, (poster).
  64. **Turdean G. L.**, Popescu I. C., Roșu C., *Electrochemical behaviour of free and immobilised  $Fe_4PMo_9O_{34}$* , The 50<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Pavia (Italy), 5-10 Sept. **1999**, (poster).

65. **Turdean G. L.**, Şerdan O., Popescu I. C., *Étude voltammétrique d'un complex contenant V en solution et immobilisée*, 9<sup>ème</sup> Journées d'Electrochimie, Toulouse (France), 1-4 June **1999**, (poster).
66. **Turdean G. L.**, Popescu I. C., Oniciu L., *Influence of polar and non-polar solvents on the determination of organophosphorus pesticides (paraoxon) with acetylcholinesterase bioelectrode*, Mátrafüred '98, Mátrafüred (Hungary), 18-24 Oct. **1998**, (poster).
67. **Turdean G. L.**, Popescu I. C., Oniciu L., Thévenot D. R., *Détection de pesticide organophosphoré par un biocapteur ampérométrique miniature à acétylcholinestérase*, 6<sup>ème</sup> Colloque National du Groupe Français de Bioélectrochimie, Université de Perpignan, Céret, (France), 1-3 Apr. **1997**, (poster).
68. **Turdean G. L.**, Popescu I. C., Oniciu L., Thévenot D. R., *Optimisation of an amperometric acetylcholinesterase based micro-biosensor for the detection of organophosphorus pesticides*, The 48<sup>th</sup> Annual Meeting of the International Society of Electrochemistry and 192<sup>nd</sup> Meeting of the Electrochemical Society, Paris (France), 31 Aug.-5 Sept. **1997**, (oral communication).
69. **Turdean G. L.**, Péter I., Popescu I. C., Oniciu L., *An acetylcholinesterase amperometric microbiosensor for the detection of organophosphorus pesticides*, the 1<sup>st</sup> Symposium Electrochemistry a frontier field of theoretical and practical interest, University "Babeş-Bolyai", Cluj-Napoca (Romania), 31 Oct.-3 Nov. **1996**, (oral communication).

### List of national communications

1. **Turdean G. L.**, Electrochemical studies of some biologically active analytes, *Al X-lea Forum Anual al Asociatiei EURACHEM-Romania*, Faculty of Chemistry and Chemical Engineering, "Babeş-Bolyai" University, Cluj-Napoca, 27-28 May **2011**, (oral).
2. **Turdean G. L.**, *Biosenzor pentru detecția glucozei - 45 de ani de evoluție*, Zilele academice clujene, Cluj-Napoca, 3-14 July **2006**, (oral).
3. Spinean S. A., **Turdean G. L.**, Popescu I. C., *Electrozi de grafit modificați cu polipirol amfifilic pentru detecția fenolului*, The 2<sup>nd</sup> "Students for students", Faculty of Chemistry and Chemical Engineering, "Babeş-Bolyai" University, Cluj-Napoca, 8-10 Apr. **2005**, (oral).
4. Rus C. O., **Turdean G. L.**, *Biosenzor amperometric pentru uree bazat pe înglobarea ureazei într-un film de polipirol*, Sesiunea anuală de comunicări științifice, University of Oradea, 29-30 May **2002**.
5. **Turdean G. L.**, *Amperometric biosensors. Past, present and future*, Simpozionul "30 ani de învățământ de inginerie chimică", Faculty of Chemistry and Chemical Engineering, "Babeş-Bolyai" University, Cluj-Napoca, 6-8 Sept. **2001**, (oral).

6. Turdean E., **Turdean G. L.**, Vana M. S., Nistorescu S., Alionescu M., *Verificarea statistică a influenței constantelor lipidice în litiaza biliară colesterolică*, Sesiunea anuală de comunicări științifice, University of Oradea, 24-25 May **2001**.
7. Turdean E., Vana M. S., **Turdean G. L.**, Nistorescu S., Alionescu M., *Verificarea statistică a influenței tipului de alimentație în litiaza biliară colesterolică*, Sesiunea anuală de comunicări științifice, University of Oradea, 24-25 May **2001**.
8. **Turdean G. L.**, Rus C. O., Mureșan L., *Caracterizarea electrochimică a unor interfețe polimerice electroconductoare*, Sesiunea anuală de comunicări științifice, University of Oradea, 24-25 May **2001**.
9. **Turdean G. L.**, Popescu I. C., Oniciu L., *The influence of polar and non-polar solvents on the acetylcholinesterase inhibition with paraoxon*, Sesiunea anuală de comunicări științifice, University of Oradea, 28-29 May **1998**.
10. **Turdean G. L.**, Péter I., Popescu I. C., *Amperometric biosensor based on acetylcholinesterase for detection organophosphorous pesticides*, Sesiunea anuală de comunicări științifice, University of Oradea, 31 May -1 June **1996**.
11. **Turdean G. L.**, Oniciu L., Thévenot D. R., Marty J-L., *Influence of some additives on the characteristics of acetylcholinesterase biosensor*, Simpozionul “Senzori electrochimici și biosenzori”, Institutul de Chimie “Raluca Ripan”, Cluj-Napoca, 28-29 Sept. **1995**.
12. Teuca I., Hopârtean E., **Turdean G. L.**, Rodica Moraru, Dorina Reghini, *Studies for the construction of the sterilisable oxygen transducer with stainless steel body*, Simpozionul “75 ani de învățământ chimic românesc la Alma Mater Napocensis”, Universitatea “Babeș-Bolyai” Cluj-Napoca, 20-21 May **1994**.
13. Oniciu L., **Turdean G. L.**, Thévenot D., Labat-Allietta N., *Microbiosensor for choline detection*, Simpozionul “75 ani de învățământ chimic românesc la Alma Mater Napocensis”, Universitatea “Babeș- Bolyai” Cluj-Napoca, 20-21 May **1994**, (oral).
14. Teuca I., **Turdean G. L.**, Hopârtean E., *Study of the temperature function of the amperometric transducer for oxygen detection TO-OO3*, Conferința națională de chimie analitică a Societății de chimie analitică din România, Cluj-Napoca, 24-26 Sept. **1992**.
15. Oniciu L., Popescu I. C., Ilea P., Urdă M., **Turdean G. L.**, *Electrodeposition of metallic manganese. Research by voltammetry*, Seminarul național științific studentesc “Chimia - fundament al științei materialelor”, Institutul Politehnic București, 2-4 Nov. **1989**, (oral).
16. **Turdean G. L.**, *Voltammetry in solution which contain  $Mn^{2+}$  ions*, Sesiunea cercurilor științifice studentești, Universitatea “Babeș- Bolyai” Cluj-Napoca, 19-20 May **1989**, (oral).
17. Oniciu L., Popescu I. C., Ilea P., Urdă M., **Turdean G. L.**, *Effect of some additives on the efficiency of manganese electrodeposition*, Simpozionul “Știința modernă și energia”, Institutul Politehnic Cluj-Napoca, 11-12 May, **1989**.
18. **Turdean G. L.**, *Electrode kinetic study using voltametric method*, Cercul de Electrochimie, Universitatea “Babeș- Bolyai” Cluj-Napoca, 3-5 May **1989**, (oral).

19. **Turdean G. L.**, *Raluca Ripan - personality of Romanian chemistry*, Colocviul “Istoria și știința filozofiei”, Universitatea “Al. I. Cuza” Iași, 19-21 May **1988**, (oral).

## List of grants

### National grants as director

1. *Arhitecturi multistrat pe bază de sisteme supramoleculare pentru asamblarea unor biosenzori de generația a treia*, CNCSIS, tip A<sub>T</sub>, tema nr. 5, cod CNCSIS 188, **2001-2002**, (28000000 lei/2001, 26000000 lei/2002).
2. *Biosenzori amperometrici de generația a III-a pentru detecția pesticidelor organofosforice*, ANSTI, **2001-2002**, (16000000 lei/2001, 19000000 lei/2002).
3. *Materiale electrodeice “inteligente” cu structuri supramoleculare pentru detecția nitriților*, CNCSIS, tip A, tema nr. 55, cod CNCSIS 375, **2004-2006**, (100000000 lei/2004; 180000000 lei/2005, 120000000 lei/2006).
4. *Materiale de electrod nanocomposite bazate pe nanotuburi de carbon pentru detecția nitritilor*, CNCSIS, tip A, tema nr. 34, cod CNCSIS 1529, **2007-2008**, 60.000 lei/2007, 70.000 lei/2008.

### International grants as director

1. *Direct interaction of oxydase and dehydrogenase enzymes modified with chemical relays with the surface of electrochemical transducers to assemble novel third generation amperometric enzyme electrodes*, partner Università di Roma “Tor Vergata”, Roma (Italy), prof. G. Palleschi, funding source MEN-Romania, **2000**, (6 months), no. 73/28.02.2000.
2. *Electroactive supramolecular systems for assembling third generation biosensors*, partner Centro di Studio CNR per l’Elettrochimica e la Chimica Fisica delle Interfasi, l’Università di Roma “La Sapienza”, Roma (Italy), dr. A. Curulli, funding source NATO-CNR, **2002**, (6 months), no. 220.438/5.11.2001.
3. *“Smart” electrode materials including supramolecular architecture for detecting species with practical importance*, partner Università di Roma “Tor Vergata”, Roma (Italy), prof. G. Palleschi, funding source NATO-CNR-Italy, **2004**, (6 months), no. 216.2095/24.03.2004.

### National grants - as member in research team

- | No. | Title/period/director/ funding source/ identification/ value   |
|-----|--|
| 1   | <i>Imbunatirea interactiunii universitatii cu mediul de afaceri/ 2015/ conf. dr. ing. M. Venter/ POSDRU/156/1.2/G/134774 / value: 1000 lei.</i>  |
| 2   | <i>Personalul didactic din sistemul de învățământ preuniversitar și universitar de stat – promotor al învățării pe tot parcursul vieții/2015/ conf. dr. ing. A. Maicanean/ MEN / POSDRU/174/1.3/S/149155 / value: 700 lei.</i> |

- 3 *Comprehensive evaluation of redox activity and lipophilicity for biogenic amines and related compounds/ 2011-2015/* prof. dr. C. Sarbu/ CNCSIS/ PN-II-ID-PCE-2011-3-0366/ **value:** -.
- 4 *Program doctoral performant pentru formarea resursei umane înalt calificate în cercetarea științifică interdisciplinară, expert științific/ 2010-2011/* prof. dr. S. Simon/ -/ POSDRU/21/1.5/G/36154/2010 / **value:** 3000 lei/2010; 3000 lei/2011.
- 5 *Nanoparticule biofunctionale pentru dezvoltarea unor noi metode de imagistica, senzorială, diagnostic și terapie moleculară în medii biologice (NanoBioFun)/ 2010-2013/* prof. dr. S. Astillean/ CNCSIS/ PNII\_ID\_PCCE\_129/2008 / **value:** 50000 lei/2010; 50000 lei/2011; 50000 lei/2012; 25000 lei/2013.
- 6 *Membru în colectivul de elaborare a documentație pentru contractul de dotare a laboratoarelor didactice finanțate din bugetul MEN (macro)/ 2008 /* prof. dr. L. Muresan/ MEN / **value:** -.
- 7 *Materiale de electrod de înaltă performanță pentru recunoașterea amperometrică selectivă a unor specii de interes biomedical: preparare și caracterizare electrochimică/ 2007-2008/* prof. dr. I. C. Popescu/ CNCSIS/ A-16/1319-2008; A-54/1319/2008 / **value:** 82000 lei/2008.
- 8 *Senzori și aparatură pentru controlul calității unor produse alimentare (SENSALIM)/ 2007-2010/* prof. dr. I. C. Popescu/ CNMP/ PNII 71-098/2007 / **value:** 72000 lei/2007; 281413 lei/2008; 136693 lei/2009; 76939 lei/2010.
- 9 *Membru în colectivul de elaborare a documentație pentru contractul de dotare a laboratoarelor didactice finanțate din bugetul MEN (macro)/ 2007/* prof. dr. I. C. Popescu/ MEN / **value:** 30000 Ron
- 10 *Senzori electrochimici ion-selectivi pe bază de nanostructuri redox cu proprietăți de recunoaștere ionică/ 2006/* prof. dr. I. C. Popescu/ Academia Română/ GAR 49/2006 / **value:** -.
- 11 *Comunicarea electrică în bio-nanostructuri cu activitate electrocatalitică/ 2005/* prof. dr. I. C. Popescu/ Academia Română/ GAR 224/2005 / **value:** 48000000 lei.
- 12 *Dezvoltarea infrastructurii de cercetare a laboratorului de cercetări în electrochimie pentru creșterea performanței științifice pe plan intern și internațional/ 2005/* prof. dr. I. C. Popescu/ CNCSIS/ E 2/58 – 2004 / **value:** 500000000 lei
- 13 *Studiul procesului de transfer eterogen de electroni în sisteme electrochimice neconvenționale: electrozi modificați utilizați ca traductori amperometrici pentru realizarea de biosenzori enzimatici de generația a treia/ 2003-2004/* prof. dr. I. C. Popescu/ Academia Română/ GAR 43/2003; GAR 40/2004 / **value:** 40000000 lei/2003; 43000000 lei/2004.
- 14 *Structuri supramoleculare cu activitate electrocatalitică/ 2003-2005/* prof. dr. I. C. Popescu/ CNCSIS-A/ A 32/1716/2003; A 114/1716/2004; A 64 / 1716-2005 / **value:** - /2003; 100000000 lei/2004; 120000000 lei/2005.
- 15 *Noi compozite polimerice electroactive de tipul polimer conductor - polimer izolator și*



- polimer conductor - matrici zeolitice/ 2002-2003/ dr. R. Turcu – ITIM/ Program CERES, 4/11.12.2002-2004 (cod. 140-PED-DE5) / value: -/2002; 40000000 lei/2003.*
- 16 *Corelații structură - reactivitate electrochimică în cazul unor amine aromatice și hetero-aromatice, cu aplicații în electrocataliza mediată eterogenă pe electrozi modificați/ 2002/ prof. dr. I. C. Popescu/ Academia Română/ GAR 21/2002 / value: 28000000 lei*
  - 17 *Sisteme electrocatalitice cu activitate controlată bazate pe structuri auto-organizate/ 2002/ prof. dr. I. C. Popescu/ CNCSIS-A/ A-74/55/2002 / value:-*
  - 18 *Obținerea și caracterizarea unor materiale micro- și nanostructurate pe baza de polipirol și compozite polipirolice cu proprietăți controlate/ 2001-2002/ dr. R. Turcu – ITIM/ Programul MATNANTECH /2001 (Subprogramul S9), PCNDI 60/36/2001/2002 / value: 15000000 lei.*
  - 19 *Sinteza și caracterizarea fizico-chimică a noi mediatori electrochimici din clasa aminelor aromatice și heteroaromatice/ 2001/ prof. dr. I. C. Popescu/ Academia Română/ GAR 28/2001 / value: 25000000 lei.*
  - 20 *Sisteme electrocatalitice cu activitate controlată bazate pe structuri auto-organizate/ 2000-2002/ prof. dr. I. C. Popescu/ CNCSIS/ A 269/79/2000; A 57/346/2001; A 74/55/2002 / value: 28000000/2000; 30000000 lei/2001; 28000000 lei/2003.*
  - 21 *Studiul comportării electrochimice a unor electrozi modificați cu derivați fenotiazinici, folosiți pentru obținerea de biosenzori amperometrici/ 2000/ prof. dr. I. C. Popescu/ ANSTI/ T-B017/2000 / value: 14000000 lei.*
  - 22 *Electrozi modificați pentru detecția electrocatalitică a unor compuși cu importanță biologică/ 2000-2001/ prof. dr. I. C. Popescu/ ANSTI/ C - BO6/2000; A - A27/2001 / value: 26500000 lei/2000; 32000000 lei/2001.*
  - 23 *Interfețe electrochimice modificate cu derivați fenotiazinici pentru reciclarea electrocatalitică a  $\beta$ -NADH în biosenzori amperometrici pe bază de dehidrogenaze/ 1999-2000/ prof. dr. I. Al. Silberg/ Academia Română/ GAR 55/1999; GAR 37/2000 / value: 20000000 lei/1999; 33000000 lei/2000.*
  - 24 *Procese electrocatalitice și tehnici complexe de investigare în regim nestaționar. Aplicații la senzori electrochimici. Faza I: Studiul unui model de biosenzor amperometric aplicat în detecția pesticidelor/1995-1996/ prof. dr. doc. L. Oniciu/ MEI/4010/1995 / value: 4000000 lei.*
  - 25 *Biosenzori amperometrici cu aplicații în protecția mediului înconjurător. Faza I: Studiu bibliografic privind biosenzorii amperometrici utilizați în protecția mediului înconjurător/ 1994/ prof. dr. doc. L. Oniciu/ MEI/ 3010/1994/ value: -.*
  - 26 *Elaborarea unor senzori electrochimici și biosenzori/ 1994-1997/ prof. dr. doc. L. Oniciu/ MCT/ 273C-1994; 30B-1995; 279-1996; 279/1997 / value: 4000000 lei.*
  - 27 *Elaborarea unui senzor amperometric sterilizabil pentru detecția oxigenului, cu corp din inox/ 1993/ dr. E. Hopârtean/ MCT/- / value: -.*
  - 28 *Studiul unui senzor amperometric sterilizabil pentru detecția oxigenului/ 1992/ dr. E.*

Hopârtean/ MCT/- / value: -.

### International grants - as member in the research team

- | No. | Title/period/director/ funding source/ Identification/ value  |
|-----|---|
| 1   | <i>Electrochimie pour un environnement plus propre/ 2002-2003/</i> prof. dr. I. C. Popescu/ Agence Universitaire de la Francophonie/ 2002-PAS-16/ 13000 Euro.   |
| 2   | <i>Nano-structuri auto-organizate cu efect electocatalitic/ 1999-2000/</i> prof. dr. I. C. Popescu, prof. dr. E. Dominguez/ MCT/178/I/2000 39/I/1999/ 115000 lei.   |
| 3   | <i>Dezvoltarea învățământului de masterat și doctorat la Catedra de Chimie Fizică a Facultății de Chimie și Inginerie Chimică din Cluj-Napoca/ 1998-2000/</i> prof. dr. I. Bâldea/ MEN (CNFIS), financed by World Bank/ Cod 10/1998/ 90000 USD. |

### Invited lectures

1. **Turdean G. L.** - Electrochemistry of a Keggin-type polyoxometalate. Electrocatalytic behaviour for H<sub>2</sub>O<sub>2</sub> reduction and biosensor realization, University of Alcalá (Spain), Oct. **1999**.
2. **Turdean G. L.** - Direct interaction between enzyme and electrochemical transducer, University "Tor Vergata", Roma (Italy), July, **2000**.
3. **Turdean G. L.** - "Hemin. Electrochemistry and Electrocatalysis", University "Tor Vergata", Roma (Italy), July, **2002**.
4. **Turdean G. L.** - "Biosensors. Past, present and future", University "Tor Vergata", Roma (Italy), June, program Socrates TS, **2003**.
5. **Turdean G. L.** - "Single wall carbon nanotubes modified with hemin for nitrite detection, Biosensors. Past, present and future", University "Tor Vergata", Roma (Italy), June **2004**.

### Awards and distinctions for book, oral/poster communications

1. **2001 nominalization** to Prize of "Groupe Francais de Bioelectrochimie" for "Young Researcher", at Journées d'Electrochimie, 3-6 June **2001**, Marrakech, Maroc.
2. Prize of "Babes-Bolyai" University for the book entitled: "Amperometric biosensors. Theory and Applications", Presa Universitara Clujeana, Cluj-Napoca, 2005, Diploma 30305/23.03.2006.
3. Kovács G., Mureșan L., **Turdean G. L.**, Popescu I. C., Bolla Cs., *Modified electrodes for detection glucose from wine*, The 14<sup>th</sup> International Conference of Chemistry of the Hungarian Technical Scientific Society of Transylvania, University "Babeș-Bolyai", Cluj-Napoca (Romania), 13-15 Nov. **2008**, **prize offered for oral communication** by Kajtár Márton Foundation from Budapest (Hungary).
4. Silai I. E., **Turdean G. L.**, *Structure- electrochemical properties – antioxidant capacity correlation of some catecholamines investigated by cyclic and square-wave voltammetry*,

The 16<sup>th</sup> Conference for students of Transylvania (ETDK), 20-21 May 2013, **II<sup>nd</sup> prize for oral presentation.**

5. Deac A.R., Cotet C. L., **Turdean G. L.**, Muresan L. M., *Simultaneous determination of Cd(II) and Pb(II) by square wave voltammetry based on carbon paste electrode modified with Bi doped carbon xerogel*, The 5<sup>th</sup> Regional Symposium on Electrochemistry of South-East Europe, Pravets, Bulgaria, 7-11 June 2015 (poster), **prize for the best poster.**

## Other activities

**Referee for articles to be published in ISI journals** in the period 2000-2015 at least 60 papers

**Member of the Organizing Committee** of 14<sup>eme</sup> Journées d'Electrochimie, Sinaia, 7-9 July 2009, [www.je09.org/Detaliu.aspx?t=organisation](http://www.je09.org/Detaliu.aspx?t=organisation) 1 symposium

**Referee in PhD juries** 2009-2015 9 thesis

1. MICUTARU Alexandra-Maria, (UTCN), *Cercetari privind materialele functionale destinate bioelectrozilor*, July 2009.
2. LATES Vasilica Adriana (UBB), *Sisteme bioanalitice pentru determinarea capacitatii antioxidante si a ocratoxinei a in produsele alimentare*, June 2011, thesis written in English, Thesis in co-direction with University from Perpignan (France), international jury: France.
3. POGACEAN Florina (UBB), *Metode cinetice si electrochimice de analiza a unor medicamente bazate pe reactii catalizate enzymatic si eterogen*, Sept. 2011.
4. KOVACS Gabor, *Amperometric biosensors for detection of analytes of biotechnological interest*, Febr. 2013, thesis written in English, international jury: Sweden.
5. SILAI (căs. KILLYÉNI) Catalina Anikó (UBB), *Modified electrodes with molecular recognition properties*, Aug. 2014, thesis written in English, international jury: Sweden.
6. SZEKELY (căs. MARES) Georgeta-Maria (UBB), *Electrod modificat cu hemina pentru detectia amperometrica a H<sub>2</sub>O<sub>2</sub>*, July 2014.
7. VULCU Adriana-Elena (UBB), *Electrozi modificali cu nanoparticule de metale nobile functionalizate cu molecule organice*, Jan. 2015.
8. BOSTAN Roxana Nadina (UBB), *Noi inhibitori de coroziune netoxici utilizati în protectia anticorozivă a bronzului expus factorilor de mediu*, Sept. 2015.
9. COTOLAN Nicoleta, *Smart corrosion resistant coatings*, Oct. 2015, thesis written in English, international jury: Hungary, Slovenia.

**Referee for Eugen Ionescu fellowships given by AUF** 2010-2011 6 students

**Supervisor foreign students** 2010-2015 6 students

1. LEFEVRE Pierre Louis (University of Rennes, France, May-June 2015), Electrochemical study of grafene-chitosan modified glassy carbon electrode.
2. LEFEVRE Pierre Louis, (IUT Rouen, France, Apr.-June 2014), Study of the electrocatalytic behaviour of carbon paste electrode modified with Ru nanoparticles for H<sub>2</sub>O<sub>2</sub> reduction.
3. JANUZAJ Valdrin (University of Prishtina, Kosovo, Nov. 2013- Jan. 2014), Dissertation on Electrochemical characterisation of a carbon paste electrode modified with Ru nanoparticles by cyclic voltammetry.
4. MULA Vllaznim (University of Prishtina, Kosovo, Nov. 2013- Jan. 2014), Dissertation on Electrochemical characterisation of a carbon paste electrode modified with Ru nanoparticles – optimisation of working conditions
5. ZDRAVKOVSKA Hristina (Ss. Cyril and Methodius University in Skopje, Macedonia, Nov. 2010—Jan. 2011), Dissertation on Study of hemin by square wave voltammetry-

influence of experimental parameters.

6. NAUMOVA Galaba (Ss. Cyril and Methodius University in Skopje, Macedonia, Nov. 2011-Jan. 2012) Dissertation on Electrochemical study of Indigo Carmin by cyclic voltammetry and square wave voltammetry.

<b>Supervisor bachelor diploma (1994-2015)</b>	34 students
<b>Supervisor Master diploma (1996-2015)</b>	30 students
<b>Supervisor for profesors I degree for undergraduate studies in scool (2010), prof. Violeta IMBUZAN</b> Scoala de arte si meserii com. Buza, jud. Cluj.	1 prof.
<b>Socrates Teaching staff</b> at University “Tor Vergata”, Rome (Italy), in the field of Bioelectrochemistry, 18 June-2 July <b>2003</b>	1 mission
<b>Erasmus+ training staff</b> at University of Pisa (Italy) in the field of chemical/chemical engineering, 26 Aug.-2 Sept. <b>2015</b>	1 mission
<b>Affiliation</b>	5
1. Roumanian Chemical Society	organisations
2. Roumanian Electrochemical Society	
3. Romanian Chemical Engineering Society	
4. International Society of Electrochemistry	
5. Groupe Français de Bioélectrochimie	
<b>Participation “Open doors”</b> at Faculty of Chemistry and Chemical Engineering, Apr. 2011-2014	5 editions
<b>Participation at professional competition “Candin Liteanu”,</b> Apr. 2005-2015	5 editions
<b>Commission of awarding participation at Symposium “Students for Students”</b> at Chemistry/Chemical Engineering section, Apr. 2013-2015	3 editions
<b>Commission of graduation bachelor/master</b> (Chemistry/Advanced Chemistry/Food Chemistry and biochemical technology, etc. 2000-2015)	30 participations
<b>Member of the admissions committee at bachelor/master level</b> (2005-2015)	10 participations
<b>Secretary of the admissions committee at bachelor/master level at faculty level</b> for the academic year 2008-2009	1 mandate
<b>Tutor</b> between 2000-2015 for students at the specializations: Chemistry-Physics 4 years (CF4), Food Chemistry and biochemical technology (CATB), Clinical chemistry	15 groups of students
<b>Member of the Faculty Council</b> 2012-2015, 2016- present	2 mandate
<b>Member of Image Board of Faculty Council</b> 2012-2015	1 mandate