



## Stelian LUPU

Professor Dr. HDR

**Faculty of Chemical Engineering and Biotechnologies**

**Department of Analytical Chemistry and Environmental Engineering**

**Group of Chemical Sensors and Biosensors**

### Contact Details

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### Biography

Date	Role
2015-present	Professor, Department of Analytical Chemistry and Environmental Engineering, Politehnica University of Bucharest.
2012-2015	Associate Professor, Department of Analytical Chemistry and Environmental Engineering, Politehnica University of Bucharest.
2011-2012	Habilitation à Diriger des Recherches (HDR), University of Besançon, France, Habilitation Thesis: "Capteurs électrochimiques et matériaux nanocomposites pour la chimie analytique".
2001	Ph.D. in Chemistry, Faculty of Chemistry, University of Bucharest, Thesis Title: "The study of the preparation and electrochemical characterization of chemically modified electrodes", Thesis Supervisor: Senior Researcher C.S. I. Dr. Nicolae Totir.
2002-2012	Senior Lecturer, Department of Analytical Chemistry and Environmental Engineering, Politehnica University of Bucharest.
1997-2002	Assistant Professor, Department of Analytical Chemistry and Instrumental Analysis, Politehnica University of Bucharest.
1996-1997	Researcher, Institute for Rubber and Elastomers Processing, Bucharest, Romania.
1992-1995	Researcher, Institute for Chemical Researches of Bucharest, Bucharest, Romania.

### Research

#### Research Interests

- instrumental analysis, bioanalytical chemistry, analytical chemistry, chemometry;
- development of novel electrochemical sensors and biosensors;
- development of innovative procedure for the electrochemical in situ preparation of noble metals nanoparticles;
- conventional size electrodes, microelectrodes, dual bands microelectrodes, and microelectrodes arrays modified with conducting polymers and bio-composite materials;
- electroanalysis of biologically active compounds (ascorbic acid, dopamine, glucose, uric acid, hydrogen peroxide), inorganic and organic pollutants (heavy metals, phenol, phenol derivatives);
- characterization of metal nanoparticles based composite materials and inorganic – organic hybrid materials by 3D profilometry, scanning electron microscopy, and atomic force microscopy.



### Selected Research Projects

- *Electrochemical micro-biosensors based on electrodes and their arrays modified with composite materials*, UEFISCDI, PNII, IDEAS PCE 2011-2016, Project manager.
- *Innovative electrochemical sensors for clinical and environmental analysis (NOVASENS)*, MEdC, CEEX 06-1143, 2006-2008, Project manager.
- *Innovative systems for rapid evaluation of potentially toxic compounds in beverages and foods*, MEdC, CEEX 2006 BIOTECH no. 68, 2006-2008, Project manager.

### Academic interests

#### Teaching activity

Studies	Program Name/Faculty	Code	Title	Activity type
Bachelor	Chemical Engineering, Environmental Engineering/Chemical Engineering and Biotechnologies	UPB.11.D.02.Ob.002	Analytical Chemistry and Instrumental Analysis / Instrumental analysis	Course
	Chemical Engineering, Environmental Engineering/ Chemical Engineering and Biotechnologies	UPB.11.D.03.Op.010	Chemical sensors and biosensors	Course
Master	Analytical Environmental Control and Remediation Techniques / Chemical Engineering and Biotechnologies	UPB.11.2.1.I.01.03	Chemometry	Course / Project
Master	Environmental Engineering	UPB.11.2.2.I.03.02	Elements of Chemometrics. Statistical processing of the data	Course / Seminar

#### Other Teaching

16.03.2007 – 30.03.2007: ERASMUS teaching stage at University of Modena, Department of Chemistry, Modena, Italy; Course title: "Electrochemical sensors based on modified electrodes" in Chemistry Degree, Licence.

17.05.2009 – 31.05.2009: ERASMUS teaching stage at University of Modena, Department of Chemistry, Modena, Italy; Course title: "Chemical sensors and biosensors in chemical and microbiological analysis of food matrices", PhD School.

01.10.2009 – 31.12.2009: INVITED PROFESSOR at University of Modena, Department of Chemistry, Modena, Italy; Course and laboratory of "Analytical Chemistry and Instrumental Analysis" in Chemistry Degree, Licence, and PhD School.

15.01.2010 – 15.04.2010: INVITED PROFESSOR at University Franche-Comte, IUT, Besancon, France; Course and laboratory in "Analytical Chemistry", Licence Degree.

18.01.2012 – 13.04.2012: INVITED PROFESSOR at University Franche-Comte, IUT, Besancon, France; Course and laboratory in "Analytical Chemistry", Licence Degree.

16.04.2015 – 15.06.2015: INVITED PROFESSOR at University Franche-Comte, IUT, Besancon, France; Course and laboratory in "Analytical Chemistry", Licence Degree.

12.06.2017 - 11.07.2017: INVITED SENIOR RESEARCHER at University of Cadiz, Faculty of Sciences, Cadiz, Spain. Topic: "Development of electrochemical sensors and biosensors based on sonogel carbon electrodes".

2017, 2018, 2019: INVITED SENIOR RESEARCHER at Institute of Physical Chemistry "Rotislav Kaishev", Sofia, Bulgaria. Topic: "Electrosynthesis and electroanalytical applications of nanocomposite materials based on conducting polymers".



## Honours and Awards

### *Invited Lectures and Presentations*

- Lupu, S.**, *Electrochemical sensors based on modified electrodes. Fundamentals and applications*, Dipartimento di Scienze e Tecnologie Chimiche, April 2008, Università degli Studi di Roma Tor Vergata, Rome, Italy.
- Lupu, S.**, *Chemical sensors arrays. Fundamentals and Applications*, February 2012, Université de Franche-Comté, cycle de conférences de l'Institut UTINAM, Besancon, France.
- Lupu, S.**, *Development of electrochemical sensors and biosensors using sinusoidal voltages and currents methods*, July 2017, University of Cadiz, Spain.

### *Awards*

- 2021 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): One prize for research results (RU/PN-III-P1-1.1-PRECISI-2021-64999)
- 2019 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): Two prizes for research results (RU/PN-III-P1-1.1-PRECISI-2019-30291; RU/PN-III-P1-1.1-PRECISI-2019-40378)
- 2018 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): One prize for research results (RU/PN-III-P1-1.1-PRECISI-2018-23916)
- 2017 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): One prize for research results (RU/PN-III-P1-1.1-PRECISI-2017-16657)
- 2015 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): Three prizes for research results (RU/PN-II-RU-PRECISI-2015-9-7866; RU/PN-II-RU-PRECISI-2015-9-7884; RU/PN-II-RU-PRECISI-2015-9-7907)
- 2014 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): One prize for research results (RU/PN-II-RU-PRECISI-2014-8-4924)
- 2013 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): Two prizes for research results (RU/PN-II-RU-PRECISI-2013-7-2379; RU/PN-II-RU-PRECISI-2013-7-2882)
- 2012 Executive Unit for Financing Higher Education, Research Development and Innovation (UEFISCDI): One prize for research results (RU/PN-II-RU-PRECISI-2012-6-1317)
- 2011 National Research Council of Romania: Three prizes for research results (RU/PN-II-RU-PRECISI-2011-3-0030; RU/PN-II-RU-PRECISI-2011-3-0807; RU/PN-II-RU-PRECISI-2011-3-1520)
- 2010 National University Research Council of Romania (CNCSIS): One Prize for research results (RU/Cod CNCSIS 344)
- 2009 National University Research Council of Romania (CNCSIS): One Prize for research results (RU-460, Stage I 2009)
- 2008 National University Research Council of Romania (CNCSIS): Four Prizes for research results (RU-176; RU-177; RU-223; RU-224 December 2008)

### *Membership of Professional Bodies*

- From 1999: Member of the Romanian Society of Chemistry
- From 2003: Member of the International Society of Electrochemistry



## Other Significant Activities

**Socrates Bilateral Agreement 2002-2022** Politehnica University of Bucharest - University of Modena, Italy.

**Socrates Bilateral Agreement 2008-2022** Politehnica University of Bucharest - University of Besancon, France.

**Socrates Bilateral Agreement 2011-2022** Politehnica University of Bucharest - University of Cadiz, Spain.

**Socrates Bilateral Agreement 2006-2007** Politehnica University of Bucharest - University of Rostock, Germany.

**Reviewer** for *Sensors and Actuators B: Chemical; Electrochimica Acta; Electrochemistry Communications; Talanta; Materials Science and Engineering C; Bioelectrochemistry; Journal of Materials Chemistry A, B; Journal of Electroanalytical Chemistry; International Journal of Environmental Analytical Chemistry; Synthetic Metals; Functional Materials Letters; Journal of Solid State Electrochemistry; Central European Journal of Chemistry; International Journal of Carbohydrate Chemistry; Inorganica Chimica Acta; Clays and Clay Minerals; Applied Catalysis: A General; Journal of Hazardous Materials*

## Further Information

### International Cooperation

*Prof. Renato SEEBER and Assoc. Prof. Laura Pigani*, Università degli Studi di Modena e Reggio Emilia, Dipartimento di Scienze Chimiche e Geologiche, Modena, Italy.

*Prof. Dr. DSc. Vessela Tsakova*, Institute of Physical Chemistry "Rotislav Kaishev", Department of Phase Formation, Crystalline and Amorphous Materials, Sofia, Bulgaria.

*Prof. Jean-Yves HIHN and Prof. Boris LAKARD*, Université Franche-Comte, Institute UTINAM, Département de Chimie, Besancon, France.

*Dr. Francisco Javier DEL CAMPO*, BCMaterials, Basque Center for Materials, Applications and Nanostructures, Leioa, Spain; Ikerbasque Basque Foundation for Science, Bilbao, Spain.

*Assoc. Prof. Dr. Jose Maria PALACIOS SANTANDER*, Erasmus Coordinator for the Degree in Chemistry, Department of Analytical Chemistry, Faculty of Science, Universidad de Cádiz, Spain.

*Dr. Rabah BOUKHERROUB*, Groupe NanoBiointerfaces, Institut de Recherche Interdisciplinaire, Université de Lille, France.

## Publications

### Journal Articles

S.A. Leau, M. Marin, A.M. Toader, M. Anastasescu, C. Matei, C. Lete, **S. Lupu\***, *MeNPs-PEDOT composite-based detection platforms for epinephrine and quercetin*, *Biosensors*, 14(7), **2024**, 320.

S.A. Leau, I. Diaconu, C. Lete\*, C. Matei, **S. Lupu\***, *Electroanalysis of serotonin at platinum nanoparticles modified electrode*, *U.P.B. Sci. Bull., Series B*, 86(3), **2024**, pp. 3-14.

S.A. Leau, C. Lete, C. Matei, **S. Lupu\***, *Electrochemical sensing platform based on metal nanoparticles for epinephrine and serotonin*, *Biosensors*, 13(8), **2023**, 781.



S.A. Leau, C. Lete, M. Marin, F.J. del Campo, I. Diaconu, **S. Lupu\***, *Electrochemical sensors based on antimony tin oxide-Prussian blue screen-printed electrode and PEDOT-Prussian blue for potassium ion detection*, J. Solid State Electrochem., 27(7), **2023**, pp. 1755 - 1766.

S.A. Leau, C. Lete, **S. Lupu\***, *Nanocomposite materials based on metal nanoparticles for the electrochemical sensing of neurotransmitters*, Chemosensors, 11(3), **2023**, 179.

C. Lete, D. Lopez-Iglesias, J. J. Garcia-Guzman, S.A. Leau, A.E. Stanciu, M. Marin, J. M. Palacios-Santander, **S. Lupu\***, L. Cubillana-Aguilera, *A sensitive electrochemical sensor based on sonogel - carbon material enriched with gold nanoparticles for melatonin determination*, Sensors, 22(1), **2022**, 120.

J.J. García-Guzmán, D. López-Iglesias, L. Cubillana-Aguilera, D. Bellido-Milla, J.M. Palacios-Santander\*, M. Marin, S.D. Grigorescu, C. Lete\*, **S. Lupu\***, *Silver nanostructures - poly(3,4-ethylenedioxythiophene) sensing material prepared by sinusoidal voltage procedure for detection of antioxidants*, Electrochim. Acta, 393, **2021**, 139082. ISSN: 0013-4686. DOI: 10.1016/j.electacta.2021.139082. WOS:000691762300010

C. Lete\*, D. López-Iglesias, J.J. García-Guzmán, S.-A. Leau, A.E. Stanciu, M. Marin, J.M. Palacios-Santander, **S. Lupu\***, L. Cubillana-Aguilera, *A sensitive electrochemical sensor based on sonogel-carbon material enriched with gold nanoparticles for melatonin determination*, Sensors, 22, **2022**, 120. ISSN: 1424-8220. DOI: 10.3390/s22010120. WOS:000743686500001

A. Nakova, E. M. Anghel, C. Lete, S. Lupu, T. Boijadjieva-Scherzer, V. Tsakova\*, *Graphite electrode-assisted electroless deposition of palladium in the absence and presence of poly(3,4-ethylenedioxythiophene) coatings*, Synthetic Metals, 247, 2019, pp. 18-25. ISSN: 0379-6779. DOI: 10.1016/j.synthmet.2018.11.006. WOS:000457511200003

D. Bottari, L. Pigani, C. Zanardi, F. Terzi, S. V. Paturca, S. D. Grigorescu, M. Cristian, C. Lete, S. Lupu\*, *Electrochemical sensing of caffeic acid using gold nanoparticles embedded in poly(3,4-ethylenedioxythiophene) layer by sinusoidal voltage procedure*, Chemosensors, 7(4), 2019, numar articol: 65. ISSN: 2227-9040. DOI: 10.3390/chemosensors7040065. WOS:000505721400003. Articol invitat.

V. Karabozhikova, V. Tsakova, C. Lete, M. Marin, S. Lupu\*, *Poly(3,4-ethylenedioxythiophene)-modified electrodes for tryptophan voltammetric sensing*, Journal of Electroanalytical Chemistry, 848, 2019, nr. 113309. ISSN: 1572-6657. DOI: 10.1016/j.jelechem.2019.113309. WOS:000504505400040

C. Lete, M. Marin, E. M. Anghel, L. Preda, C. Matei, S. Lupu\*, *Sinusoidal voltage electrodeposition of PEDOT-Prussian blue nanoparticles composite and its application to amperometric sensing of H<sub>2</sub>O<sub>2</sub> in human blood*, Materials Science and Engineering: C-Materials for Biological Applications, 102, 2019, pp. 661-669. ISSN: 0928-4931. DOI: 10.1016/j.msec.2019.04.086. WOS:000472241700064



J. J. Garcia-Guzman, D. Lopez-Iglesias, L. Cubillana-Aguilera, C. Lete, S. Lupu\*, J. M. Palacios-Santander, D. Bellido-Milla, *Assessment of the polyphenol indices and antioxidant capacity for beers and wines using a tyrosinase-based biosensor prepared by sinusoidal current method*, Sensors, 19(1), 2019, numar articol: 66. ISSN: 1424-8220. DOI: 10.3390/s19010066. WOS:000458574600066

J. J. García Guzmán, L. Cubillana Aguilera, D. Bellido Milla, I. Naranjo Rodríguez, C. Lete\*, J. M. Palacios Santander\*, S. Lupu\*, *Development of sonogel-carbon based biosensors using sinusoidal voltages and currents methods*, Sensors and Actuators B: Chemical, 255, 2018, pp. 1525-1535. ISSN: 0925-4005. DOI: 10.1016/j.snb.2017.08.161. WOS: 000414319900044

M. Bem, R. Baratoiu, C. Radutiu, C. Lete, S. Mocanu, G. Ionita, S. Lupu, M.T. Caproiu, A.M. Madalan, B. Patrascu, I. Zarafu, P. Ionita, *Synthesis and structural characterization of some novel methoxyamino derivatives with acid-base and redox behavior*, Journal of Molecular Structure, 1173, 2018, pp. 291-299. ISSN: 0022-2860. DOI: 10.1016/j.molstruc.2018.06.114. WOS:000446286200033

C. Lete, B. Lakard, J.-Y. Hihn, F. J. Del Campo, S. Lupu\*, *Use of sinusoidal voltages with fixed frequency in the preparation of tyrosinase based electrochemical biosensors for dopamine electroanalysis*, Sensors and Actuators B: Chemical, 240, 2017, pp. 801-809; ISSN: 0925-4005; DOI: 10.1016/j.snb.2016.09.045. WOS:000390622300095

A. J. Shakir, A. Madalan, G. Ionita, S. Lupu, C. Lete, P. Ionita\*, *A comparison between nitroxide and hydrazyl free radicals in selective alcohols oxidation*, Chemical Physics, 490, 2017, pp. 7-11. ISSN: 0301-0104. DOI:10.1016/j.chemphys.2017.03.011. WOS:000401882400002

C. Lete, D. Berger, C. Matei, S. Lupu\*, *Electrochemical and microgravimetric studies of poly[3,4-ethylenedioxythiophene]-tyrosinase biocomposite material electrodeposited onto gold electrodes by a sinusoidal voltages method*, J. Solid State Electrochem., 20 (11), 2016, pp. 3043–3051; ISSN: 1432-8488; DOI: 10.1007/s10008-016-3270-z. WOS:000386343800013. Articol invitat.

S. Lupu\*, C. Lete, F. J. del Campo, *Dopamine electroanalysis using electrochemical biosensors prepared by a sinusoidal voltages method*, Electroanalysis, 27(7), 2015, pp. 1649–1659; ISSN 1521-4109; DOI: 10.1002/elan.201400680

C. Lete, S. Lupu\*, B. Lakard, J.-Y. Hihn, F. J. del Campo, *Multi-analyte determination of dopamine and catechol at single-walled carbon nanotubes - Conducting polymer - Tyrosinase based electrochemical biosensors*, J. Electroanal. Chem., 744, 2015, pp. 53-61; ISSN 1572-6657; DOI: 10.1016/j.jelechem.2015.03.005; WOS:000353850100008





C. Lete\*, F. Teodorescu, E.M. Anghel, S. Lupu, T. Spataru, *The influence of supporting electrolyte on the electrochemical properties of copolymer films based on azulene and 3-thiophene acetic acid*, J. Solid State Electrochemistry, 19(6), 2015, pp. 1875-1883; ISSN 1432-8488; DOI: 10.1007/s10008-015-2844-5

M. Marin\*, C. Lete, B. N. Manolescu, S. Lupu, *Electrochemical determination of  $\alpha$ -lipoic acid in human serum at platinum electrode*, J. Electroanal. Chem., 729(1), 2014, pp. 128-134; ISSN 1572-6657; DOI: 10.1016/j.jelechem.2014.07.024; WOS:000342269300019

S. Lupu\*, C. Lete, P. C. Balaure, D. I. Caval, C. Mihailciuc, B. Lakard, J-Y. Hihn, F. J. Del Campo, *Development of amperometric biosensors based on nanostructured tyrosinase-conducting polymer composite electrodes*, Sensors (Basel), 13(5), 2013, pp. 6759-6774; ISSN 1424-8220; DOI: 10.3390/s130506759; WOS: 000319445600074.

S. Lupu\*, C. Lete, P. C. Balaure, F. J. Del Campo, F. X. Muñoz, B. Lakard, J-Y. Hihn, *In situ electrodeposition of biocomposite materials by sinusoidal voltages on microelectrodes array for tyrosinase based amperometric biosensor development*, Sens. Actuators B: Chem., 181, 2013, pp. 136-143; ISSN 0925-4005; DOI: 10.1016/j.snb.2013.01.060; WOS:000317941100020.

S. Lupu\*, F. J. Del Campo, F. X. Munoz, *Sinusoidal voltage electrodeposition and characterization of conducting polymers on gold microelectrode arrays*, J. Electroanal. Chem., 687, 2012, pp. 71-78; ISSN 1572-6657; DOI: 10.1016/j.jelechem.2012.09.035; WOS:000312975300012.

S Lupu\*, B. Lakard, J.-Y. Hihn, J. Dejeu, *Novel in situ electrochemical deposition of platinum nanoparticles by sinusoidal voltages on conducting polymer films*, Synth. Met., 162 (1-2), 2012, pp. 193-198; ISSN 0379-6779; DOI: 10.1016/j.synthmet.2011.11.031; WOS:000300810300029.

S. Lupu\*, B. Lakard, J.-Y. Hihn, J. Dejeu, P. Rougeot, S. Lallemand, *Morphological characterisation and analytical application of poly(3,4-ethylenedioxythiophene)-Prussian blue composite films electrodeposited in situ on platinum electrode chips*, Thin Solid Films, 519 (22), 2011, pp. 7754-7762; ISSN 0040-6090; DOI: 10.1016/j.tsf.2011.06.011; WOS:000295057000023.

S. Lupu\*, *Electrochemical impedance spectroscopy study of electron transfer at poly(3,4-ethylenedioxythiophene) containing gold nanoparticles coating*, Collect. Czech. Chem. Commun., 76 (12), 2011, pp. 1433-1445; ISSN 0010-0765; DOI: 10.1135/cccc2011109; WOS:000299816100003.

## Books



Lupu, S., Lete, C., Mihailciuc, C., Razus, A. C., Birzan, L. **Electrochemical Sensors for Clinical and Environmental Analysis**, Ed. Printech, Bucharest, 2008, 228 pages, ISBN 978-606-521-053-0 (in Romanian).

Badea, M., Cheregi, M. C., Lete, C., Lupu, S., **Progresses in the Development of Sensors and Biosensors for Foods Quality Control**, Ed. Printech, Bucharest, 2008, 180 pages, ISBN 978-606-521-086-8 (in Romanian).

Lupu, S., **Chemical Sensors and Biosensors**, Ed. Printech, Bucharest, 2006, 157 pages, ISBN 973-718-433-5 (in Romanian).

Lupu, S., **Instrumental Analysis. Electrochemical methods of analysis**, Ed. Printech, Bucharest, 2004, 160 pages, ISBN 973-718-042-9 (in Romanian).

Lupu, S., Lete, C., Totir, N., **Chemically Modified Electrodes**, Ed. Printech, Bucharest, 2001, 152 pages, ISBN 973-652-483-3 (in Romanian).

## Chapters

J. J. García-Guzmán, D. López-Iglesias, M. Marin, C. Lete, S. Lupu\*, J. M. Palacios-Santander\*, L. Cubillana-Aguilera\*, *Electrochemical Biosensors for Antioxidants*. In: *Advanced Biosensors for Health Care Applications*, Editori: Inamuddin, Raju Khan, Ali Mohammad, Abdullah M. Asiri, Editura Elsevier, pp. 105-146, ISBN: 978-0-12-815743-5; DOI: 10.1016/B978-0-12-815743-5.00004-4; 2019, invited chapter.

S. Lupu\*, P.C. Balaure, C. Lete, C. Mihailciuc, *Biocomposite nanomaterials for electrochemical biosensors*, în *Handbook of Nanoelectrochemistry*, Editori: Mahmood Aliofkhaeaei, Abdel Salam Hamdy Makhlouf; Editura Springer International Publishing, pp. 1161-1194, ISBN: 978-3-319-15207-3 (Online); doi: 10.1007/978-3-319-15207-3\_39-1; 2016, invited chapter.

S. Lupu\*, C. Lete, B. Lakard, J.-Y. Hihn, D. Sanchez-Molas, F.J. del Campo, *Electrochemical deposition and patterning of composite nanomaterials for electrochemical sensors and biosensors*, în *Comprehensive Guide for Nanocoatings Technology, Volume 4: Application and Commercialization*, Editor: Mahmood Aliofkhaeaei, Editura Nova Science Publishers, pp. 359-406, ISBN: 978-1-63482-648-8; 2015, invited chapter.

S. Lupu\*, C. Mihailciuc, N. Totir, *Straturi electroactive și electrozi modificați chimic*, în *Electrochimie și coroziune ELCOR* (Editor Prof. Dr. T. Vișan) Vol. III, Ed. Printech, București, 85 pg., ISBN 973-718-673-7, 2006.

## Conferences





C. Lete, M. Marin, F.J. del Campo, I. Diaconu, S. Lupu\*, *Antimony tin oxide-Prussian blue screen-printed electrodes for electrochemical sensing of potassium ions*, 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry, July 1-15, 2021, online. *Chem. Proc.* 2021, 5(1), 59.

C. Lete, O. Carp, D. Visinescu, A. Spinciu, S.A. Leau, M. Marin, S. Lupu, *Electrochemical sensing platform based on CuO nanoparticles*, 8th International Electronic Conference on Sensors and Applications, November 1-15, 2021, online

J.J. García Guzmán, D. López Iglesias, L. Cubillana Aguilera, D. Bellido-Milla, J.M. Palacios Santander, M. Marin, C. Lete, S. Lupu\*, *Conducting polymer - silver nanoparticles composite material: a novel sensing element for antioxidants electroanalysis*, International Conference “New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences”– NT SMT–LS 2020, July 3-4, 2020, online, Bucharest, Romania, p.4.11. ISBN: 978-606-19-1266-7.

V. Karabozhikova, V. Tsakova, C. Lete, M. Marin, S. Lupu\*, *Sensitive electrochemical detection of lipoic acid at conducting polymer modified electrode*, International Conference “New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences”– NT SMT–LS 2020, July 3-4, 2020, online, Bucharest, Romania, p.4.12. ISBN: 978-606-19-1266-7.

V. Karabozhikova, C. Lete, S. Lupu, V. Tsakova, *Electroanalytical determination of caffeic acid and tryptophan on PEDOT-modified electrodes*, International Workshop on Electrochemistry of Electroactive Materials, June 16-21, 2019, Borovets, Bulgaria, pp. 49-50.

A. Nakova, M. Ilieva, E. M. Anghel, C. Lete, S. Lupu, Tz. Boijadjieva-Scherzer, V. Tsakova, *Electroless deposition of palladium on poly(3,4-ethylenedioxythiophene) - coated graphite electrodes*, International Workshop on Electrochemistry of Electroactive Materials, June 16-21, 2019, Borovets, Bulgaria, pp. 128-129.

S. Lupu\*, C. Lete, B. Lakard, J.-Y. Hihn, F. J. del Campo, *Multianalyte detection of dopamine and hydroquinone at electrochemical microbiosensors*, The 16th International Conference of Physical Chemistry ROMPHYSICHEM-2016, September 21-23, 2016, Galați, Romania.

C. Lete\*, S. Lupu, P. C. Balaure, D. I. Caval, Y. Coffinier, R. Boukherroub, F.J. del Campo, *Electrochemical biosensors based on microelectrode arrays for phenol electroanalysis*, The 16th International Conference of Physical Chemistry ROMPHYSICHEM-2016, September 21-23, 2016, Galați, Romania.

J. J. García Guzmán, J. M. Palacios Santander, L. Cubillana Aguilera, D. Bellido Milla, I. Naranjo Rodríguez, C. Lete, S. Lupu\*, *Sonogel-carbon based biosensors prepared using sinusoidal voltages method*, The 16th International Conference of Physical Chemistry ROMPHYSICHEM-2016, September 21-23, 2016, Galați, Romania.

C. Lete\*, P. C. Balaure, D. I. Caval, S. Lupu, *Biosensors for biologically active compounds electroanalysis*, RO-ICAC 2016 International Conference on Analytical Chemistry, NOMARES workshop, August 28 - 31, 2016, Iași, Romania.



S. Lupu, C. Lete, P. C. Balaure, D. I. Caval, F. J. Del campo, B. Lakard, J.-Y. Hihn, *Novel biosensors for multi-analyte detection prepared by sinusoidal voltages*, 19<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, September 2 – 5, 2015, Sibiu, Romania.

S. Lupu, C. Lete, F. J. del Campo, B. Lakard, J.-Y. Hihn, *Simultaneous detection of dopamine and catechol at conducting polymer-tyrosinase based electrochemical biosensor*, 65<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, 31 August - 05 September 2014, Lausanne, Switzerland.

C. Lete, S. Lupu, P. C. Balaure, D. I. Caval, R. Boukherroub, *Phenol detection at tyrosinase based electrochemical biosensor*, 65<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, 31 August - 05 September 2014, Lausanne, Switzerland.

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