

Dr. Liviu Cosmin COTET
(Curriculum Vitae)



Cluj-Napoca, October 2018

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Researcher ID: G-6268-2012

Nationality: Romanian

- **31 ISI papers (Total Journal I.F. = 61.50);**
- **342 citations (source Google Scholar);**
- **h-index: 8 (source Google Scholar);**
- **Manager of 4 projects.**

QUALIFICATIONS

- **Baccalaureate Degree in Chemistry-Physics**, 1995, 'Mihai Eminescu' High School, Baia Mare
- **B.Sc. in Chemistry-Physics**, 2000, 'Babes-Bolyai' University, Cluj-Napoca
- **Certificate of Teacher's Training**, 2000, 'Babes-Bolyai' University, Cluj-Napoca
- **M.Sc in Chemistry**, 2001, 'Babes-Bolyai' University, Cluj-Napoca
- **M.Sc in Physics** 2003, 'Babes-Bolyai' University, Cluj-Napoca
- **Ph.D. degree in Chemistry** - 2008, 'Babes-Bolyai' University, Cluj-Napoca
- **Certificate of Project Manager**, 2012, Institute of Economical and Social Formation, Cluj-Napoca (I.F.E.S Cluj)

EDUCATION

- 'Mihai Eminescu' High School, Baia Mare, Romania, SEPT. 1991-JUNE 1995 with Baccalaureate Degree in Chemistry-Physics
- 'Babes-Bolyai' University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania. SEPT. 1996-JUNE 2000. University courses and B.Sc. Project in Chemistry-Physics
- 'Babes-Bolyai' University, **Faculty of Chemistry** and Chemical Engineering, Cluj-Napoca, Romania, SEPT. 2000-JUNE 2001. Master courses (Catalysis and Biocatalysis) and Degree Project in Chemistry.
- 'Babes-Bolyai' University, **Faculty of Physics**, Cluj-Napoca, Romania, SEPT. 2002-JUNE 2003. Master courses (Science and Technology of Advanced Materials) and Degree Project in Physics.
- 'Babes-Bolyai' University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania, Oct. 2002- Dec. 2007. Ph.D. Student (PhD diploma / 10.04.2008).

RESEARCH ACTIVITY of QUALIFICATIONS

Cotet, L.C., "Cyclisation reactions of the 1,5-terpens in various conditions of catalysis"
B.Sc. Project in Chemistry, 2000
Cotet, L.C., "Catalytic reduction of some derivatives with Saccharomices Cerevisiae"
M.Sc. Project in Chemistry, 2001
Cotet, L.C., "Preparation and structural analysis of carbon aerogels"
M.Sc. Project in Physics, 2003
Cotet, L.C., "Carbon Aerogels. Synthesis, Characterization and Applications"
Ph.D. Project in Chemistry 2007

RESEARCH FELLOWSHIPS / STAGES

- European Union's "Marie Curie" FP6-PHD-training site program (HPMT-CT-2000-00006-)

Early Research fellowship

Period: 1.10.2003-31.07.2004:

Place: Institute of Science Materials from Barcelona, (Spain),
Physics Department: Laboratory of Solid State Chemistry and Crystallography,
Prof. Elies Molins' research group
Address: ICMAB (CSIC) Campus UAB, Bellaterra, E-08193, Spain

- European Union's "Marie Curie" –**Post-doc fellowship**

Period: 19.12.2007-31.10.2008; 01.12.2009-31.01.2010

Place: Universitat Rovira I Virgili, (Spain),
Physics Department de Ingenieria Quimica,
Prof. Dani Montane's research group
Address: Paisos Catalans str., 26, Tarragona, Spain

- POSDRU /89/1.5/S/60189 – **Post-doc fellowship**

Period: 01.11.2010-30.10.2012,

Place: Babeş-Bolyai University, (Romania),
Chemistry Physics Department,
Arany Janos, 11, RO-400028, Cluj-Napoca

Supervisors: Dr. Virginia Danciu and Dr Andrada Măicăneanu.

- **Post-doc stages funded by POSDRU Program:**

- 01.05.2011-30.06.2011 and 01.02.2012-31.03.2012, Institute of Material Science from Barcelona, (ICMAB-CSIS, Spain), Dr. Anna Roig's research group.

SIGNIFICANT WORKS PRESENTED AT SCIENTIFIC SESSIONS:

1. L.C. Cotet, V. Danciu, V. Cosoveanu, I.C. Popescu, "Nanoscale three-dimensional carbon aerogel matrix for sensor development", *The 11th Physical Chemistry Conference*, Timisoara Romania., 2-5 September 2003.
2. M. Gich, L.C. Cotet, A. Roig, E. Molins, "New trends in Fundamental materials science research", 2003, ICMAB, Barcelona, Spain, November 26-27th.
3. V. Danciu, V. Coşoveanu, C. Cotet, A. Peter, L. Baia, E. Indrea, "Synthesis and morphological characterization of TiO₂- and C- aerogels" *Primul Simpozion National Inginerie si Nanostiinte*, Bucuresti, Romania, 23 aprilie 2004.
4. M. Gich, M. Popovici, L.C. Cotet, A. Roig, E. Molins "Several synthetic routes to obtain ultra-light and/or transparent magnetic materials", *The 3th National Reunion of The Solid State Physics*, San Sebastian, Spain 2- 4 July 2004.
5. V. Andronic, V. Danciu, L. C. Cotet, A. Barau, V. Coman, I.C. Popescu, "Electroanalytical detection of catechol and phenol at tyrosinase modified carbon aerogel past electrodes", *Proceedings of the International Conference on Electrified Interfaces - ICEI 2004*, Leuven, Belgia, 11-16 July 2004.
6. L.C. Cotet, V. Cosoveanu, V. Danciu, "Nanostructured advanced materials based on metal-oxid and carbon aerogels applied at the storage, conversion and generation of energy", *BSUN- Cosent Nano Forum*, Constanta, Sept. 3-4, 2004.

7. V. Andronic, V. Danciu, V. Cosoveanu, L.C. Cotet, V. Coman, I. C. Popescu "Probing bioelectroanalytical detection of phenol at a carbon aerogel paste electrode", *Proceedings of the 55th Annual Meeting International Society Of Electrochemistry*, Thessaloniky, Greece, 19-24 Sept.2004.
8. V. Andronic, V.Danciu, L. C. Cotet, A.Barau, V.Coman, I.C.Popescu, Electroanalytical detection of catechol and phenol at tyrosinase modified carbon aerogel paste electrodes" *International Conference on Electrified Interfaces - ICEI 2004*, Leuven, Belgia, July 11-16 2004.
9. Vera Andronic, Virginia Danciu, Liviu Cosmin Cotet, Vasile Coman, Sorin Aurel Dorneanu, Ionel Catalin Popescu, "Undoped and metal-doped carbon aerogel composite materials as platforms for potentiometric and amperometric sensors", accepted communication to "*Journeesd'Electrochimie*"-Saint Malo, France, July 2005.
10. L. C. Cotet, M. Baia, A. Roig, L. Baia, E. Molins, I. C. Popescu, V. Cosoveanu, E. Indrea, J. Popp and V. Danciu "Structural Properties of Some Transitional Metal Highly Doped Carbon Aerogels" *The 12th International Symposium on Metastable and Nano Materials*, Paris, France, 2005, July 4-7.
11. L. C. Cotet, A. Roig, E. Molins, I.C. Popescu, V. Cosoveanu and V. Danciu "Synthesis and Characterization of the Magnetic Co, Ni, Fe Doped Carbon Aerogels" *European Congress on Advanced Materials and Processes*, Sept. 5-8, 2005 Prague.
12. L.C. Cotet, Anna Roig, E. Molins, I.C. Popescu, Veronica Cosoveanu, Virginia Danciu "Metal Doped Carbon Aerogels: Preparation and Morpho-Structural Characterization" *The 14th National Conference of Chemistry and Chemical Engineering*, Sept. 22-24, 2005 Bucharest, Romania.
13. L.C. Cotet, Anna Roig, E. Molins, I.C. Popescu, Veronica Cosoveanu, Virginia Danciu, "Synthesis and characterisation of some resorcinol-formaldehyde and carbon aerogels", *Sol-gel chemistry and technology*, Romanian Academy, Dec. 8, 2005, Bucharest, Romania.
14. L.C. Cotet, L. Baia, M. Baia, V.Danciu, V. Cosoveanu, I.C. Popescu, "The growth of graphitic nanostructures on iron-doped carbon aerogels", *RomPhysChem-12, Sol-Gel Science and Technology Symposium*, Bucharest, Romania, 6-8 Sept., 2006.
15. L.C. Cotet, A. Maicanean, V. Danciu, M. Stanca, I.C. Popescu, "Catalytic Phenol Oxidation with Iron Doped Carbon Aerogels", *Environmental Applications of Advanced Oxidation Processes (EAAOP-1)*, Chania, Greece, 7-9 Sept. 2006.
16. L.C. Cotet, I.C. Popescu, V. Danciu, "Carbon Aerogels as Promising Materials for Heterogeneous Catalysis" *The 6th National Seminar of Nanoscience and Nanotechnology ROMNET-NANO*, Romanian Academy Library, Bucharest, Romania, 26 Mach 2007.
17. L.C.Cotet, D. Gligor, A. Roig, I.C. Popescu, V. Cosoveanu, V. Danciu, "Electrochemical Behavior of Iron Doped Carbon Aerogels" Lion, France, July 2007.
18. A. Maicaneanu, L.C. Cotet, V. Danciu, M. Stanca, "Applications of carbon aerogels in wastewater treatment" *International Symposium of Metastable and Nano Matreials*, Corfu, Greece, 26-30 August 2007.
19. L.C. Cotet, L.Baia, M. Baia, V. Danciu, "Multiwalled Graphite Nanotubes in Iron Highly Doped Carbon Aerogels" *EUROMAT*, 10-13 September 2007, Nurberg, Germany.
20. L.C. Cotet, I.C. Ladiu, V. Cosoveanu, V. Danciu, "Carbon Aerogels-Supported Pt with applications in fuel cells", *Clean Technologies Conference*, 1-5 June 2008, Boston, USA.

21. I.C. Ladiu, P. Marginean, L.C. Cotet, L. Barbu-Tudoran, E. Indrea, V. Danciu, "Pt-Ru/Carbon Aerogels with Applications in Direct Methanol Fuel-Cells", Journées d'Electrochimie Conference, July 2009, Sinaia, Romania.
22. C. I. Fort, L. C. Cotet, V. Danciu, I. C. Popescu, NADH Electrocatalytic Oxidation at Glassy Carbon Electrodes Modified with Meldola Blue Adsorbed on Carbon Aerogel, *Journées d'Electrochimie* **2011**, Grenoble, 4-8 July, France
23. C.I. Forț, L.C. Cotet, M. Pașcalău, V. Danciu, I.C. Popescu, "Pt-Ru nanoparticles immobilized onto carbon aerogel for direct methanol fuel-cells", *4th Advanced Micro- and Mesoporous Materials, Rivera Resort*, 6-9 Sept 2011, Bulgaria.
24. L.C. Cotet, C.I. Forț, V. Danciu, A. Măicăneanu, "Pesticide adsorption on carbon aerogel and xerogel", *4th Advanced Micro- and Mesoporous Materials, Rivera Resort*, 6-9 Sept 2011, Bulgaria.
25. L.C. Cotet, K. Briceno, V. Danciu, R. Garsia-Valls, D. Montane, "Preparation and characterization of ceramic-supported molecular membranes based on polymeric and carbon xerogel for gas separation", *4th Advanced Micro- and Mesoporous Materials, Rivera Resort*, 6-9 Sept 2011, Bulgaria.
26. L.C. Cotet, C.I. Forț, V. Danciu, A. Măicăneanu, "Wet air oxidation of phenol using Cu doped carbon aerogel and xerogel as catalyst", *Processes in Isotopes and Molecules, PIM-2011*, 29 sept.-01 oct. 2011, Cluj-Napoca, Romania.
27. C.I. Forț, L.C. Cotet, G. Turdean, V. Danciu, I.C. Popescu, "H₂O₂ electrocatalytic reduction at carbon paste electrodes modified with Fe doped carbon aerogel", *Processes in Isotopes and Molecules, PIM-2011*, 29 sept.-01 oct. 2011, Cluj-Napoca, Romania.
28. L.C. Cotet, C.I. Forț, V. Danciu, A. Măicăneanu, "Cu and Cd Adsorption on Carbon Aerogel and Xerogel", ICHMET-2012, 22-27 sept. Roma, Italy.
29. : M. Gich, C. Fernández-Sánchez, L.C. Cotet, P. Niu, A. Roig, "Bismuth-Carbon Nanocomposite Electrodes for the Simultaneous Detection of Heavy Metals" E-MRS 2013 Fall Meeting, September 16-20, 2013, Warsaw University of Technology, Poland.
30. L.C. Cotet, R. Deac, I. Fort, K. Magyari, L. Baia, G. Turdean, V. Danciu, L. Muresan Synthesis and characterization of monolithic carbon xerogels-aerogel impregnated with Bi nanoparticles for electrochemical sensing application, NN14, 8-19 July 2014, Thessaloniki, Greece.
31. L.C. Cotet, R. Deac, I. Fort, K. Magyari, A. Vulpoi, L. Baia, V. Danciu, Very large area of graphene-based materials synthesized by an improved top-down method, NN14, 8-19 July 2014, Thessaloniki, Greece.
32. L.C. Cotet, L. Baia, V. Danciu, Obtaining process by liquid phase exfoliation of large area graphene based materials (graphene oxide and reduced graphene oxide), Romanian Research Saloon, 14-17 October 2015, Bucharest, Romania.
33. L.C. Cotet, et al., Preparation of Bi Impregnated Carbon Xerogels and Aerogels for Heavy Metal Amperometric Sensor Construction, "Global Nanotechnology Congress and Expo" April 21-23, 2016, Dubai, United Arabian Emirate.

34. C. Cadar, L.C. Cotet, et al., Preparation of *Porous Carbon/Bi-Fe nanoparticles/TiO₂* Composite Materials with Potential in Water Analysis and Purification, “Global Nanotechnology Congress and Expo” April 21-23, 2016, Dubai, United Arabian Emirate.
35. L.C. Cotet, L. Baia, et al., Preparation of graphene-material membranes with potential in water filtration and energy storage, “Global Nanotechnology Congress and Expo” April 21-23, 2016, Dubai, United Arabian Emirate.
36. M. Rusu, L.C. Cotet, et al., In situ preparation of “Graphene/Porous Carbon/Bi-Fe nanoparticles” heterostructures for analytical applications”, Graphene Week-2016, 13-17 June 2016, Poland;
37. L.C. Cotet, et.al. „Preparation of self-assembled graphene membranes for bismuth support in analytical applications”, Graphene Week-2016, 13-17 June 2016, Poland;
38. N. Cotelan, L.C. Cotet, et al., Iron and bismuth doped carbon xerogel nanocomposites for voltammetric detection of H₂O₂”, *Materials, Methods & Technologie*, 18th International Conference, 26–30 June 2016, Bulgaria;
39. C.L. Fort, L.C. Cotet, et al., Bismuth doped carbon aerogel nanocomposites incorporated in chitosan matrix for voltammetric detection of heavy metals”, *Materials, Methods & Technologie*, 18th International Conference, 26–30 June 2016, Bulgaria;
40. M. Rusu, L.C. Cotet, et al., Composite materials based on Carbon Xerogel/Bi-Fe nanoparticles with environmental analytical applications”, ICPAM-11, September 2016, Bucharest Romania.
41. L.C. Cotet et.al., "PREPARATION OF CARBONACEOUS STRUCTURES INTO BISMUTH-IRON IMPREGNATED CARBON XEROGELS AND AEROGELS", ROCAM , 10-14 July 2017, Bucharest, Romania
42. L.C. Cotet, M. Rusu, K. Magyari, M. Díaz-González, C.I. Fort, M. Gich, L. Baia, C. Fernández-Sánchez, A. Roig, “Printed graphene electrodes by the selective reduction of graphene oxide films”, Graphene Week, 25-29 September 2017, Athena, Greece
43. L.C. Cotet, A. Chuquitarqui, M. Rusu, E. György, L. Baia, C. Logofatu, A. Pérez del Pino, “Laser-induced Reduction of Free-standing Graphene Oxide Membranes”, Graphene Week, 10-13 sept 2018, San Sebastian, Spain.

PUBLICATION LIST

ISI Publications

(* J.I.F./2004 - Journals Impact Factor in 2004)

(Total J.I.F. = 61.5/31 papers)

1. M.M. Rusu, C.I. Fort, L.C. Cotet, A. Vulpoi, M. Todea, G.L. Turdean, V. Danciu, I.C. Popescu, L. Baia, Insights into the morphological and structural particularities of highly sensitive porous bismuth-carbon nanocomposites based electrochemical sensors, *Sensors & Actuators: B. Chemical*, 628 (2018) 398-410 (*J.I.F = 5.401/2018).
2. A.R. Deac, L.M. Muresan, L.C. Cotet, L. Baia, G.L. Turdean, Hybrid composite material based on graphene and polyhemin for electrochemical detection of hydrogen peroxide, *J. Electroanalytical Chem.* 802 (2017) 40-47 (*J.I.F = 3.012/2017).

3. C. Cadar, C. Cotet, L. Baia, L. Barbu-Tudoran, I. Ardelean, Probing into the mesoporous structure of carbon xerogels via the lowfield, NMR relaxometry of water and cyclohexane molecules, *Microp. Mesop. Mater.* 251 (2017) 19-25, (*J.I.F = 3.615/2017)
4. L.C. Cotet, K. Magyari, M. Todea, M.C. Dudescu, V. Danciu, L. Baia, Versatile self-assembled graphene oxide membranes obtained in ambient conditions by using a water-ethanol suspension, *J. Mater. Chem. A*, 5 (2017) 2132-2142, (*J.I.F = 8.867/2017)
5. R. Pleșa Chicinaș, L.C. Cotet, A. Măicăneanu, M. Vasilescu, A. Vulpoi, Preparation, characterization, and testing of metal-doped carbon xerogels as catalyst for phenol CWAO, *Environ Sci. Pollut. Res.* 24 (2017) 2980, (*J.I.F.: 2.760/2017)
6. Á. Pérez del Pino, E. Gyorgy, L.C. Cotet, L. Baia, C. Logofatu, Laser-induced Chemical Transformation of Free-standing Graphene Oxide Membranes in Liquid and Gas Ammonia Environments, *RSC Advances*, 6 (2016) 50034-42. (*J.I.F.: 3.289/2016)
7. C.I. Fort, R. Ortiz, L.C. Cotet, V. Danciu, I.C. Popescu, L. Gorton, Carbon Aerogel as Electrode Material for Improved Direct Electron Transfer in Biosensors Incorporating Cellobiose Dehydrogenase, *Electroanalysis*, 28, 10 (2016) 2311,. (*J.I.F.: 2.471/2016)
8. Fort, C.I., Cotet, L.C., Vasiliu, F., Marginean P., Danciu, V., Popescu, I.C, Methanol oxidation at carbon paste electrodes modified with (Pt-Ru)/carbon aerogels nanocomposites, *Mater. Chem. Phy.* 172 (2016) 179. (*J.I.F.: 2.101/2016)
9. M. Anombogo, G. Arnaud, A. Măicăneanu, B. Mbah, J. Baptiste, C.C. Ndjeumi, L.C. Cotet, R. Kamga, Physico-chemical properties and crystal violet adsorption performances of H₃PO₄-modified mango seeds kernel, *Studia Universitatis Babeș-Bolyai, Chemia* (2016) 61, (*J.I.F.: 0.148/2015)
10. Deac, A.R., Cotet, L.C., Turdean, G.L., Muresan, L.M., Carbon paste electrode modified with Bi nanoparticles - Carbon xerogel for Pb²⁺ determination by square wave anodic stripping voltammetry, *Rev. Roum. Chim.* 60(7) (2015) 697. (*J.I.F.: 0.21/2015)
11. D. Bamba, M. Coulibaly, C.I. Fort, C.L. Cotet, Z.Pap, K. Vajda, E.G. Zoro, N. A. Yao, V. Danciu, D. Robert, Synthesis and characterization of TiO₂/C nanomaterials: Applications in water treatment, *Physica Status Solidi (b)*, 252 (11) 2015, 2503. (*J.I.F.: 1.22/2015)
12. C.I. Fort, L.C. Cotet, A. Vulpoi, G.L. Turdean, V. Danciu, L. Baia, I.C. Popescu, Bismuth doped carbon xerogel nanocomposite incorporated in chitosan matrix for ultrasensitive voltammetric detection of Pb(II) and Cd(II), *Sensors and Actuators, B: Chemical*, 220 (2015) 712, (*J.I.F./2015 – 4.097)
13. C.I. Forț, L.C. Cotet, G.L. Turdean, V. Danciu, Meldola blue immobilised on mesoporous carbon aerogel new electrode material for NADH electrocatalytic oxidation, *Studia UBB Chemia LX*, 3, (2015) 215. (*J.I.F.: 0.148/2015)
14. A.R. Deac, L.C. Cotet, G.L. Turdean, L.M. Muresan, Determination of Cd(II) using square wave anodic stripping voltammetry at a carbon paste electrode containing Bi-doped carbon xerogel, *Studia Univ. Babeș-Bolyai Chem.*, 60 (2015) 203. (*J.I.F.: 0.148/2015)
15. G. Kovács, Z. Pap, L.C. Cotet, V. Coșoveanu, L. Baia, V. Danciu, Photocatalytic, Morphological and Structural Properties of the TiO₂-SiO₂-Ag Porous Structures Based System, *Materials* 8 (2015) 1059 (*J.I.F.: 2.651/2015)

16. M. Gich, C. Fernandez-Sanchez, L.C. Cotet, P. Niu, A. Roig, Facile Synthesis of Porous Bismuth-Carbon Nanocomposites for the Sensitive Detection of Heavy Metals, *J. Mater. Chem. A*, 1(2013) 11410. (*J.I.F./2013 – 6.626)
17. L.C. Cotet, A. Maicaneanu, C.I. Fort, V. Danciu, Alpha-cypermethrin Pesticide Adsorption on Carbon Aerogel and Xerogel, *Sep. Sci. Tech.*, 48 (2013) 2649. (*J.I.F./2013 –1.164).
18. L.C. Cotet; K. Briceño; C.I. Fort; V. Danciu; R. Garcia-Valls; D. Montané, “Preparation, Characterization and Gas Permeation Investigation of Resorcinol-Formaldehyde Polymer or Carbon Xerogels/Tubular Ceramic Composites”, *ACTA Slovenica Chimica*, 60 (2013) 343. (*J.I.F./2013 – 1.135).
19. D. Gligor, L.C. Cotet, V. Danciu, Comparative Study of Two Types of Iron Doped Carbon Aerogels for Electrochemical Applications *J. New Mat. Electroch. Syst.* 16 (2013) 97. (*J.I.F./2013 –0.532).
20. C.I. Fort, L.C. Cotet, G. Turdeanu, V. Danciu, I.C. Popescu, Iron Doped Carbon Aerogel - New Electrode Material for Electrocatalytic Reduction of H₂O₂, *Materials Chemistry and Physics*, 138 (2013) 893-898. (*J.I.F./2013 – 2.072).
21. L.C. Cotet, C.I. Fort, V. Danciu, Influence of Tubular TiO₂-ZrO₂ Ceramic Support on The Morpho-Structural Properties of the Undoped and Cu Doped Carbon Xerogels, *Studia Univ. Babeş-Bolyai Chem.*, (2012) 73-80. (*J.I.F./2012 - 0.082).
22. G. Melinte, M. Baia, D. Georgescu, L. Baia, V. Iancu, L. Diamandescu, T. Popescu, L.C. Cotet, L. Barbu-Tudoran, V. Danciu, S. Simon, The Influence of the Au Nanoparticles Dimension on the Photocatalytic Performances of TiO₂-Au Porous Composites, *Acta Phy. Polonica A*, 121 (2012) 208-210. (*J.I.F./2012 - 0.444).
23. M. Baia, L.C. Cotet, L. Baia, L. Barbu-Tudoran, V. Cosoveanu, V. Danciu, J. Popp, Multiwalled carbon nanotubes in carbon aerogel highly doped with iron, *J. Optoelect. Adv. Materials - Symposia*, 2 (2010) 9-12. (*J.I.F./2010 - 0.41)
24. Maicaneanu A., Cotet L.C., Danciu V., Stanca M., Iron doped carbon aerogels as catalyst for phenol total oxidation, *Studia Univ. Babeş-Bolyai Chem.*, 3 (2009) 117-125. (*J.I.F./2009 - 0.082)
25. Maicaneanu A., Cotet L.C., Danciu V., Stanca M., Phenol removal from water using carbon aerogel as adsorbant, *Studia Univ. Babeş-Bolyai Chem.*, 4 1 (2009) 33-42. (*J.I.F./2009 - 0.082)
26. A. Dumitru, A. Morozan, I. Stamatina, V. Danciu, L.C. Cotet, “Correlation of different carbon support and catalytic activity for Pt based catalyst” *J. Optoelect. Adv M*, 10, 4 (2008) 904 – 906 (*J.I.F./2008 - 0.577).
27. L.C. Cotet, A. Roig, I.C. Popescu, V. Cosoveanu, E. Molins, V. Danciu, “Synthesis of the Meso and Macro Carbon Aerogels”, *Rev. Roum. Chim.* 52(11) (2007) 1077-1081 (*J.I.F./2007 - 0.262).

28. L.C. Cotet, M. Baia, L. Baia, I.C. Popescu, V. Cosoveanu, E. Indrea, J. Papp, V. Danciu, “Structural Properties of Some Transition Metal Highly Doped Carbon Aerogels”, *Journal of Alloys and Compounds*, 434-435 (2007) 854 (*J.I.F./2007 - 1.455).
29. S. Cacchi, C.L. Cotet, G. Fabrizi, G. Forte, A. Goggiamani, L. Martín, S. Martínez, E. Molins, M. Moreno-Mañas, F. Petrucci, A. Roig, A. Vallribera, “Efficient Hydroxycarbonylation of Aryl Iodides Using Recoverable and Reusable Carbon Aerogels Doped with Palladium Nanoparticles as Catalyst”, *Tetrahedron* 63 (2007) 2519 (*J.I.F./2007 – 2.869).
30. L.C. Cotet, M. Gich, A. Roig, I.C. Popescu, V. Cosoveanu, E. Molins, V. Danciu, “Synthesis and Structural Characteristics of Carbon Aerogels with a High Content of Fe, Co, Ni, Cu and Pd”, *J. Non-Crist. Solids*, 352 (2006) 2772–2777 (*J.I.F./2006 - 1.362).
31. S. Martinez, A. Vallribera, L.C. Cotet, M. Popovici, L. Martin, A. Roig, M. Moreno-Manas, E. Molins ‘Nanosized Metallic Particles Embedded in Silica and Carbon Aerogels as Catalysts in the Mizoroki-Heck Coupling Reaction’, *New J. Chem.*, 29 (2005) 1342-1345 (*J.I.F./2005 - 2.10) .

Other Publication

1. M Rusu, G Kovács, C Cotet, I Fort, A Vulpoi, L Baia, Zs Pap, V Danciu, N–TiO₂–Ag Based Porous Structures: Photocatalytic, Morphological and Structural Properties, *J. Surf. Interf. Mater.* 4 (2014) 305.
2. L.C. Cotet, C.I. Fort, V. Danciu, A. Maicaneanu, Cu and Cd Adsorption on Carbon Aerogel and Xerogel, *proceeding ICHMET-2012*, Roma, Italy.
3. V. Iancu, G. Melinte, L. Baia, L. Barbu-Tudoran, Cosmin Cotet, V. Danciu, V. Cosoveanu, M. Baia, Synthesis and Morpho-Structural Analysis of TiO₂-Au Composites, *Studia Univ. Babeş-Bolyai Phy.*, 2 (2010) 69.
4. Cotet, L.C.; Dumitru, A.; Morozan, A., Stamatin I. Cosoveanu V., Danciu V., Laudon M., Romanowicz B., Laird D.L., Carbon Aerogels -Supported Pt with Applications in Fuel-Cells, Clean Technology 2008: Bio Energy, Renewables, Green Building, Smart Grid, Storage and Water (2008) 310-312.
5. V. Danciu, L.C. Cotet, V. Cosoveanu, P. Marginean, ‘Preparation and Porous Structure Determination of Resorcinol-Formaldehyde and Carbon Aerogels’, *Studia Universitatis Babeş-Bolyai, Chemia*, (2003), XLVIII, 2

BOOK CHAPTER

1. L.C. Cotet, A. Maicaneanu, V. Danciu „*Mesoporous Carbon Aerogels. Synthesis, characterisation and environmental applications*” in “**Comprehensive Guide for Mesoporous Materials**”, Volume 1: **Synthesis and Characterization**, Pub. Date: 2015 - 1st Quarter Pages: 7x10 - (NBC-C), ISBN: 978-1-63463-958-3, Nova Science Publishers, Inc., 2014, NY, 11788-3619.

PATENTS

1. **Obtained from Spanish Patent Office: ES2472368 B1/ 30.06.2014**
Title: „AMORPHOUS POROUS CARBON MATRIX AND Bi NANOPARTICLES COMPOSED MATERIAL OBTAINED BY A SOL-GEL PROCESS, SYNTHESIS WAY AND APPLICATIONS”, (MATERIAL COMPUESTO QUE COMPRENDE UNA MATRIZ POROSA DE

CARBÓN AMORFO Y NANOPARTÍCULAS DE BI OBTENIBLE MEDIANTE UN PROCEDIMIENTO SOL-GEL, PROCEDIMIENTO DE OBTENCIÓN Y SU USO).

Authors: C. Fernández Sánchez, M. Gich Garcia, A. Roig Serra, L.C. Cotet,

Owner: Concejo Superior de Investigacion Cientifico (CSIC-Spain).

2. Obtained from Romanian Patent Office (OSIM): No. 1034154/29.09.2017,

Title: „CHEMICAL EXFOLIATION OBTAINING PROCESS OF LARGE AREA GRAPHENE BASED MATERIALS (GRAPHENE OXIDE AND REDUCED GRAPHENE OXIDE)”,

(Romanian title: PROCEDEU DE OBTINERE PRIN EXFOLIERE CHIMICA A UNOR MATERIALE PE BAZA DE GRAFEN (OXID DE GRAFEN SI OXID DE GRAFEN REDUS) DE SUPRAFETE FOARTE MARI)

Authors: L.C. Cotet, L.G. Baia, V. Danciu

Owner: Babes-Bolyai University (Romania).

3. Obtained from Romanian Patent Office (OSIM): No. 1037524/23.10.2017,

Title: „OBTAINING PROCESS OF RESORCINOL-FORMALDEHIDE XEROGEL / CERAMIC AND CARBON XEROGEL / CERAMIC COMPOSITES”.

Authors: L.C. Cotet, C.I. Fort, V. Danciu

Owner: Babes-Bolyai University (Romania).

PATENT APPLICATIONS

1. Request from Romanian Patent Office (OSIM): UBB No. 16502/04.09.2017

Title: „MATERIAL COMPOSITE OBTAINING PROCESS OF NANOPOROUS CARBON/GRAPHENE/BISMUTH AND IRON NANOPARTICLES/TITANIUM DIOXIDE WITH ANALYTICAL AND PHOTODEGRADATION PROPERTIES”

Authors: L.C. Cotet, L.G. Baia, C.I. Fort, L.C. Pop, M. Rusu

Owner: Babes-Bolyai University (Romania).

2. Request from Spanish Office of Patents and Marks: CSIC No. 201830553/07.06.2018.

Title: “OBTAINING PROCESS OF A FLEXIBLE ELECTROD” (PROCEDIMIENTO DE OBTENCIÓN DE UN ELECTRODO FLEXIBLE)

Authors: A. Perez Del Pino, A.Y. Chuquitarqui Valladares, L.C. Cotet.

Owners: CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC, Spain) (67%) and BABES-BOLYAI UNIVERSITY (33%, Romania).

AWARDS

-2018:

1. GOLD MEDAL at PROINVENT 2018, Cluj-Napoca, Romania

for Patent No. 1037524/23.10.2017, Title: „OBTAINING PROCESS OF RESORCINOL-FORMALDEHIDE XEROGEL / CERAMIC AND CARBON XEROGEL / CERAMIC COMPOSITES”. Authors: L.C. Cotet, C.I. Fort, V. Danciu. Owner: Babes-Bolyai University (Romania).

2. Special Award for Environmental Protection of National Institute of Research and Development in Environmental Protection at PROINVENT 2018, Cluj-Napoca, Romania.

3. SILVER MEDAL at EUROINVENT 2018, Iasi, Romania

for Patent No. 1037524/23.10.2017, Title: „OBTAINING PROCESS OF RESORCINOL-FORMALDEHIDE XEROGEL / CERAMIC AND CARBON XEROGEL / CERAMIC COMPOSITES”. Authors: L.C. Cotet, C.I. Fort, V. Danciu. Owner: Babes-Bolyai University (Romania).

4. BRONZE MEDAL at EUROINVENT 2018, Iasi, Romania

for Patent No. 1034154/29.09.2017, Title: „CHEMICAL EXFOLIATION OBTAINING PROCESS OF LARGE AREA GRAPHENE BASED MATERIALS (GRAPHENE OXIDE AND REDUCED GRAPHENE OXIDE)”, Authors: L.C. Cotet, L.G. Baia, V. Danciu, Owner: Babes-Bolyai University (Romania).

5. **Excellence Diploma and Special Prize of Banat's University Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara at EUROINVENT 2018, Iasi, Romania.**

PROFESIONAL ACTIVITY

At the present - scientific researcher III of **ELECTROCHEMISTRY AND UNCONVENTIONAL MATERIALS RESEARCH CENTER**, 'Babes-Bolyai' University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, Cluj-Napoca, Romania

GRANTS AND PROJECTS

1. **Electrode materials based on carbon porous structures, Bi-Fe and/or TiO₂, with analytical applications, PN-II-RU-TE-2014-4-1194 (Romanian Young Research Team Grant), 2015-2017, general manager. (<http://www.chem.ubbcluj.ro/~ccosmin/TE2015/>)**
2. **Synthesis and characterization of Bi impregnated C xerogels with application in new sensor electrodes for heavy metal detection, GTC-UBB-2013, 2013-2014, general manager.**
3. **Nanostructured materials based on polymeric and carbon xerogels / aerogels for environmental and gas separation application, POSDRU 89/1.5/S/60189 /2010, 2010-2013, general manager.**
4. Polyfunctional advanced materials based on TiO₂ and carbon aerogels – MATNANTECH C 101(204), 2002-2004 – research team member
5. Nanostructured composite materials based on oxide and carbon aerogels with electrochemical and environmental applications – CNCSIS 14/405/2004 and 18/405/2004 – research team member
6. Advanced photovoltaic devices based on sensibilised TiO₂ nanocrystalline layers – MATNANTECH 243(407), 2004-2006 – research team member
7. Biomaterials based on new aerogel structures formed from natural polymers, TiO₂, silicate, with conducted applications - MATNANTECH 205 (403), 2004-2006- research team member
8. Mesoporous nanostructured materials based on carbon aerogels with electrochemical and environment applications – CNCSIS Td 402, 2006-2007 – **general manager.**
9. CEEX-MENER 760/2006 "Fuel cell systems for direct electrooxidation of bio-alcohols (BioDAFC)", 2006-2008, member
10. CEEX-MENER 710/2006 "Hydrogen production by photoelectronic way" (HIDROSOL), 2006-2008, member
11. CEEX-MENER 704/2006 "Pile de Combustie de Noua Generatie cu Electrolit Solid Superacid (SAFC), pentru Exploatare la Temperaturi 200-300°C", 2006-2008, member
12. MATDECON – PN II 71-136/2007: "MATERIALE FOTOCATALITICE INOVATIVE APLICATE LA DECONTAMINAREA CHIMICA SI MICROBIOLOGICA A AERULUI DIN INCINTE", 2007-2010, member
13. NOSIVTEL- PN II 71-099/2007 "Noi sisteme vitroase telurate si germanate cu aplicatii in telecomunicatii", 2007-2010, member
14. CNCSIS-TE/2010, NOI SENZORI SERS PENTRU DETECTIA POLUANTILOR CHIMICI DIN APA, 2010-2013, member

ABILITIES

- Languages (along with Romanian): English, Spanish;
- Chemical experience: sol-gel process of undoped and metal doped SiO₂, polymeric and carbon aerogel/xerogel; graphene oxide preparation by chemical oxidative exfoliation of graphite; chemical and thermal reduction of graphene oxide materials;
- Technical devices: BET analyser ("ASAP 2000", "Sorptomatic SO-1990"), supercritical drying device (SAMDRI-PVT-3D, Tousimis), pyrolysis in inert atmosphere, microscopic characterization, etc.;
- Computer-good

HOBBIES

- sport (football especially)
- music (modern and classic)
- travels