

INFORMAȚII PERSONALE



Pirvu Valeriu Cristian

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Data nașterii

| Naționalitatea romana

LOCUL DE MUNCA

Universitatea Politehnica din Bucuresti

Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală

EXPERIENȚA PROFESIONALĂ

1995 – 1997,	inginer, SC Romceram S.A. – activități de cercetare și organizarea unui laborator de laborator analiză cantitativă.
1997 – 2000,	preparator, Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală;
2000 – 2004,	asistent, Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală;
2004	Titlul de Doctor in domeniul Inginerie Chimica
2004 – 2009	Sef lucrari, Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală;
2009 -2014	Conferentiar, Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală;
2014 -prezent	Profesor, Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Aplicata si Stiinta Materialelor, Departamentul Chimie Generală;
2016	Abilitare – Conducere de doctorat

EDUCAȚIE ȘI FORMARE

2010-2013, POSDRU/89/1.5/S/54785, UPB	Post-doc, - Program postdoctoral pentru cercetare avansata in domeniul nanomaterialelor,
2005, Acoperiri pe baza de electrozi modificați cu proprietăți electrocatalitice pentru oxidarea electrochimica a poluanților organici in diverse conditii experimentale.	Italia, Universitatea din Modena, Departamentul de Chimie Analitica, Prof. Renato Seeber –
2004	-doctor . in domeniul fundamental Stiinte exacte, domeniul Inginerie Chimica
2003,	Italia, Universitatea din Modena, Departamentul de Chimie Analitica,–
2001,	Obținerea prin electrodepunere a electrozilor modificați cu acoperiri pe baza de polimeri conductori.
1995 – 1996,	Spania, Universitatea din Barcelona, Departamentul de Chimie Fizica, Degradarea poluanților organici (fenol si derivati clorurati) prin metodele AEOP - electro-Fenton, fotoelectroFenton.
1990 – 1995,	Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Industriala, Studii aprofundate, Specializarea Medicamente și cosmetice, Titlul de MASTER în profilul CHIMIE.
	Universitatea POLITEHNICA Bucuresti, Facultatea Chimie Industriala, Specializarea Tehnologia Substanțelor Organice, Titlul de INGINER în profilul CHIMIE.

COMPETENTE PERSONALE

Limba maternă	Romana
Limba străină cunoscută	Engleza

Activitatea didactică:

Curs – Licenta (2004-2021)

- predare curs licenta : *Disciplina "Procese Electrochimice in Medii Fiziologice"*, Facultatea Inginerie Medicala;
- predare curs licenta: *Disciplina Chimie Generală* la Facultatea de Inginerie Aerospațială;

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- predare curs licenta : *Disciplina Chimie Generală* la Facultatea de Electronică Telecomunicații și Tehnologia Informației,

Curs – Master (2009-2021)

- predare curs master : *Disciplina Expertizarea biomaterialelor* Facultatea de Chimie Aplicata si Stiinta Materialelor ;
- predare curs master : *Disciplina Acoperiri biocompatibile*, Facultatea de Inginerie Medicala ;
- predare modul curs master : *Disciplina Bioelectrochimie*, Facultatea de Inginerie Medicala ;

Lucrări de laborator (1997 – 2018)

- conducere lucrări de laborator licenta la *disciplina Chimie Generală* la Facultățile Inginerie Aerospațială, Electronică, Telecomunicații și Tehnologia Informației;
- conducere lucrări de laborator licenta *Disciplina Procese Electrochimice in Medii Fiziologice*, Facultatea Inginerie Medicala;
- conducere lucrări de laborator master : *Disciplina Bioelectrochimie*, Facultatea de Inginerie Medicala ;

APTITUDINI SI COMPETENTE

Parcurea de cursuri pentru evaluatori interni si externi pe platforma e-learning Aracis.ro.

Evaluator proiecte internationale : Remote Expert Evaluator (22 June 2018 until 27 July 2018) European Commission / The Research Executive Agency, Horizon 2020 call FETOPEN-01-2018-2019-2020: FET-Open Challenging Current Thinking, which is part of the Future and Emerging Technologies (FET) programme. Research and Innovation Actions (RIA)

INFORMATII SUPLIMENTARE**Publicatii**

100 lucrari indexate ISI; H-index – 17; 8 brevete de inventie;

Articole selectate

1. Buica GO, Stoian AB, Manole C, Demetrescu I, Pirvu C: Zr/ZrO₂ nanotube electrode for detection of heavy metal ions. *Electrochemistry Communications* 2020, 110.
2. Barbulescu LE, Dumitriu C, Dragut DV, Nicoara A, Badanoiu A, Pirvu C: Residual titanium flakes as a novel material for retention and recovery of rare earth and relatively rare earth elements. *Environmental Science and Pollution Research* 2020, 27(4):4450-4459.
3. Barbinta-Patrascu ME, Badea N, Bacalum M, Ungureanu C, Suica-Bunghez IR, Lordache SM, Pirvu C, Zgura I,

- Maraloiu VA: 3D hybrid structures based on biomimetic membranes and *Caryophyllus aromaticus* - "green" synthesized nano-silver with improved bioperformances. *Mater Sci Eng C-Mater Biol Appl* 2019, 101:120-137.
4. Badea SL, Enache S, Tamaian R, Niculescu VC, Varlam M, Pirvu CV: Enhanced open-circuit voltage and power for two types of microbial fuel cells in batch experiments using *Saccharomyces cerevisiae* as biocatalyst. *Journal of Applied Electrochemistry* 2019, 49(1):17-26.
 5. Albu AM, Draghicescu W, Munteanu T, Ion R, Mitran V, Cimpean A, Popescu S, Pirvu C: Nitrodopamine vs dopamine as an intermediate layer for bone regeneration applications. *Mater Sci Eng C-Mater Biol Appl* 2019, 98:461-471.
 6. Manole CC, Dinischiotu A, Nica C, Demetrescu I, Pirvu C: Influence of electrospun TiO₂ nanowires on corrosion resistance and cell response of Ti50Zr alloy. *Mater Corros* 2018, 69(11):1609-1619.
 7. Ion R, Mazare A, Dumitriu C, Pirvu C, Schmuki P, Cimpean A: Nanochannelar Topography Positively Modulates Osteoblast Differentiation and Inhibits Osteoclastogenesis. *Coatings* 2018, 8(9).
 8. Ichim L, Pirvu C, Manole CC: Electrochemical stability of Titanium-Hydroxyapatite implantable material modified with Ceftriaxone. *International Journal of Electrochemical Science* 2018, 13(12):11895-11905.
 9. Dumitriu C, Voicu SI, Muhulet A, Nechifor G, Popescu S, Ungureanu C, Carja A, Miculescu F, Trusca R, Pirvu C: Production and characterization of cellulose acetate - titanium dioxide nanotubes membrane fraxiparinized through polydopamine for clinical applications. *Carbohydr Polym* 2018, 181:215-223.
 10. Anton AM, Rau I, Kajzar F, Simion AM, Pirvu C, Radu N, Simion C: Natural materials with enhanced optical damage threshold. *Optical Materials* 2018, 86:1-6.
 11. Negroiu R, Svasta P, Pirvu C, Vasile A, Marghescu C, Ieee: Electrochemical Impedance Spectroscopy for Different Types of Supercapacitors. In: 2017 40th International Spring Seminar on Electronics Technology. 2017.
 12. Barbulescu L, Badanoiu A, Nicoara A, Pirvu C: USE OF WASTES FROM TITANIUM INDUSTRY AS ALTERNATIVE AGGREGATE FOR PORTLAND CEMENT MORTARS. *Revista Romana De Materiale-Romanian Journal of Materials* 2017, 47(1):16-23.
 13. Barbinta-Patrascu ME, Badea N, Ungureanu C, Pirvu C, Ifimie V, Antohe S: PHOTOPHYSICAL STUDIES ON BIOCOMPOSITES BASED ON CARBON NANOTUBES AND CHLOROPHYLL-LOADED BIOMIMETIC MEMBRANES. *Romanian Reports in Physics* 2017, 69(1).
 14. Barbinta-Patrascu ME, Badea N, Ungureanu C, Iordache SM, Constantin M, Purcar V, Rau I, Pirvu C: Ecobiophysical Aspects on Nanosilver Biogenerated from *Citrus reticulata* Peels, as Potential Biopesticide for Controlling Pathogens and Wetland Plants in Aquatic Media. *Journal of Nanomaterials* 2017.
 15. Ungureanu C, Dumitriu C, Popescu S, Enculescu M, Tofan V, Popescu M, Pirvu C: Enhancing antimicrobial activity of TiO₂/Ti by torularhodin bioinspired surface modification. *Bioelectrochemistry* 2016, 107:14-24.
 16. Popescu S, Mindroiu M, Cabuzu D, Pirvu C: The Roll of NaPSS Surfactant on the Ceria Nanoparticles Embedding in Polypyrrole Films. *Journal of Nanomaterials* 2016.
 17. Pirvu C, Mindroiu M, Craciunescu O, Constantin D: The Bioactivity and Stability Evaluation of the PPy/Ca-P Hybrid Films on Titanium Alloy Implant. *Mater Plast* 2016, 53(4):722-726.
 18. Manole CC, Pirvu C, Maury F, Demetrescu I: Novel Approach to Surface Plasmon Resonance: A Third Dimension in Data Interpretation Through Surface Roughness Changes. *Journal of Nanoscience and Nanotechnology* 2016, 16(6):6332-6337.
 19. Manole CC, Pirvu C, Demetrescu I: Surface Plasmon Resonance in the Study of Phenol Electropolymerization at Ultralow Concentration. *Rev Chim* 2016, 67(5):884-886.
 20. Lazar CA, Kajzar F, Mihaly M, Pirvu C, Petcu AR, Olteanu NL, Rau I: DNA based materials doped with praseodymium (III) hydroxide nanoparticles. *Optical Materials* 2016, 56:3-7.
 21. Iacob F, Tihan GT, Zgarian RG, Pauliuc M, Rau I, Pirvu C: Preliminary studies concerning some natural extracts influence on dentin. *Mol Cryst Liquid Cryst* 2016, 628(1):110-114.
 22. Huluba R, Pirvu C, Nicolescu C, Gheorghe M, Mindroiu M: Counter Electrode Based on PEDOT:PSS - TiO₂ NTs Films for Dye-sensitized Solar Cells. *Mater Plast* 2016, 53(1):130-134.
 23. Barbinta-Patrascu ME, Badea N, Ungureanu C, Constantin M, Pirvu C, Rau I: Silver-based biohybrids "green" synthesized from *Chelidonium majus* L. *Optical Materials* 2016, 56:94-99.
 24. Barbinta-Patrascu ME, Badea N, Pirvu C, Bacalum M, Ungureanu C, Nadejde PL, Ion C, Rau I: Multifunctional soft hybrid bio-platforms based on nano-silver and natural compounds. *Mater Sci Eng C-Mater Biol Appl* 2016, 69:922-932.
 25. Andrei M, Tovar S, Parlatescu I, Gheorghe C, Pirvu C: Correlation of corrosion resistance of dental alloy restorations with oral lichen planus pathology. *Mater Corros* 2016, 67(8):882-887.
 26. Manole CC, Popescu S, Pirvu C: SPR SENSITIVITY IMPLICATIONS ON PYRROLE POLYMERIZATION. *University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science* 2015, 77(4):169-176.
 27. Manole CC, Pirvu C, Stoian AB, Moreno JMC, Stanciu D, Demetrescu I: The Electrochemical Stability in NaCl Solution of Nanotubes and Nanochannels Elaborated on a New Ti-20Zr-5Ta-2Ag Alloy. *Journal of Nanomaterials* 2015.
 28. Dumitriu C, Ungureanu C, Popescu S, Tofan V, Popescu M, Pirvu C: Ti surface modification with a natural antioxidant and antimicrobial agent. *Surface & Coatings Technology* 2015, 276:175-185.
 29. Dumitriu C, Popescu M, Ungureanu C, Pirvu C: Antibacterial efficiencies of TiO₂ nanostructured layers prepared in organic viscous electrolytes. *Appl Surf Sci* 2015, 341:157-165.

30. Comorosan S, Popescu I, Polosan S, Pirvu C, Ionescu E, Paslaru L, Apostol M: Conformational changes and metastable states induced in proteins by green light. *European Physical Journal B* 2015, 88(1).
31. Andrei M, Gheorghe D, Voicu G, Pirvu C: TRACING THE CORROSION PROCESSES OF DIFFERENT METAL-CERAMIC DENTAL CROWNS BY EIS AND SEM INVESTIGATION. *University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science* 2015, 77(4):113-122.
32. Ungureanu C, Popescu S, Purcel G, Tofan V, Popescu M, Salageanu A, Pirvu C: Improved antibacterial behavior of titanium surface with torularhodin-polypyrrole film. *Mater Sci Eng C-Mater Biol Appl* 2014, 42:726-733.
33. Stoian AB, Pirvu C, Demetrescu I, Ieee: Effects of PEG on the stability and electrochemical properties of PEDOT: PSS films obtained by spin coating. In: 2014 International Semiconductor Conference. 2014: 81-84.
34. Popescu S, Ungureanu C, Albu AM, Pirvu C: Poly(dopamine) assisted deposition of adherent PPy film on Ti substrate. *Prog Org Coat* 2014, 77(11):1890-1900.
35. Penta V, Pirvu C, Demetrescu I: Electrochemical Impedance Spectroscopy Investigation on the Clinical Lifetime of ProTaper Rotary File System. *Biomed Research International* 2014.
36. Mindroiu M, Pirvu C, Galateanu B, Demetrescu I: Corrosion Behaviour and Cell Viability of Untreated and Laser Treated Ti6Al7Nb Alloys. *Rev Chim* 2014, 65(3):328-334.
37. Manole CC, Pirvu C, Demetrescu I, Ieee: Gigahertz Resonance at Gold Surface as a Tool for Ions Study Under Polarized Electric Fields. In: 2014 International Semiconductor Conference. 2014: 51-54.
38. Andrei M, Pirvu C, Demetrescu I: Electrochemical impedance spectroscopy in understanding the influence of ultrasonic dental scaling on the dental structure-dental filling interface. *European Journal of Oral Sciences* 2014, 122(6):411-416.
39. Andrei M, Buica G, Burlibasa M, Gheorghe D, Pirvu C, Ieee: Monitoring on short-term the corrosion processes of three different metal-ceramic crowns. In: 2014 International Semiconductor Conference. 2014: 99-102.
40. Popescu S, Manole CC, Pirvu C: Surface Features Changes and Corrosion Stability of Titanium Surfaces by Suitable Treatments. *Rev Chim* 2013, 64(8):796-802.
41. Pirvu C, Manole CC: Electrochemical surface plasmon resonance for in situ investigation of antifouling effect of ultra thin hybrid polypyrrole/PSS films. *Electrochim Acta* 2013, 89:63-71.
42. Penta V, Vornicescu D, Keusgen M, Pirvu C: UNDERSTANDING THE CLEANING EFFECT WITH SODIUM HYPOCHLORITE OF ENTEROCOCCUS FAECALIS ENDODONTIC PATHOGEN USING ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY (EIS), ATOMIC FORCE MICROSCOPY (AFM) AND SURFACE PLASMON RESONANCE (SPR). *Digest Journal of Nanomaterials and Biostructures* 2013, 8(3):1205-U1676.
43. Penta V, Pirvu C, Demetrescu I: Electrochemical Impedance Spectroscopy (EIS) Investigation on Dental Hard Tissue Whitening Process Using Fluoride and Non-Fluoride Carbamide Peroxide Gels. In: 3rd International Conference on Biomedical Engineering and Technology - Icbet 2013. Edited by Dan Y, vol. 7; 2013: 67-72.
44. Penta V, Pirvu C: Electrochemical Impedance Spectroscopy (EIS) Investigation on the Action of Dental Endodontic Lavage Substances. *Rev Chim* 2013, 64(9):965-970.
45. Mindroiu M, Ungureanu C, Ion R, Pirvu C: The effect of deposition electrolyte on polypyrrole surface interaction with biological environment. *Appl Surf Sci* 2013, 276:401-410.
46. Mindroiu M, Pirvu C, Cimpean A, Demetrescu I: Corrosion and biocompatibility of PPy/PEG coating electrodeposited on Ti6Al7Nb alloy. *Mater Corros* 2013, 64(10):926-931.
47. Mindroiu M, Ion R, Pirvu C, Cimpean A: Surfactant-dependent macrophage response to polypyrrole-based coatings electrodeposited on Ti6Al7Nb alloy. *Mater Sci Eng C-Mater Biol Appl* 2013, 33(6):3353-3361.
48. Dumitriu C, Pirvu C, Demetrescu I: The Electrochemical Formation and Shielding Mechanism of TiO₂ Nanotubes in Organic Electrolytes with Different Viscosity. *Journal of the Electrochemical Society* 2013, 160(2):G55-G60.
49. Drob SI, Pirvu C, Moreno JMC, Vasilescu C, Popa MV: Characterization and Protective Properties of a New Water-based Acryl Coating. *Rev Chim* 2013, 64(3):287-293.
50. Ungureanu C, Pirvu C, Mindroiu M, Demetrescu I: Antibacterial polymeric coating based on polypyrrole and polyethylene glycol on a new alloy TiAlZr. *Prog Org Coat* 2012, 75(4):349-355.
51. Demetrescu I, Ionita D, Pirvu C: Processing Metallic Biomaterials for a Better Cell Response; 2012.
52. Cursaru DL, Andronesu C, Pirvu C, Ripeanu R: The efficiency of Co-based single-wall carbon nanotubes (SWNTs) as an AW/EP additive for mineral base oils. *Wear* 2012, 290:133-139.
53. Pirvu C, Manole CC, Stoian AB, Demetrescu I: Understanding of electrochemical and structural changes of polypyrrole/polyethylene glycol composite films in aqueous solution. *Electrochim Acta* 2011, 56(27):9893-9903.
54. Pirvu C, Manole C, Bojin D, Demetrescu I: Monitoring hydrophilic-hydrophobic character of a surface electrode via TiO₂ nano particles addition as aspect of interface phenomena; 2011.
55. Pirvu C, Demetrescu I, Drob P, Vasilescu E, Ivanescu S, Mindroiu M, Vasilescu C, Drob SI: Corrosion behaviour of a new Ti-6Al-2Nb-1Ta alloy in various solutions. *Mater Corros* 2011, 62(10):948-955.
56. Mehedintu A, Pirvu C, Giurca Vasilescu L, Pirvu C, Nicolae Balcescu Land Forces A: THE IMPACT OF INFORMATION TECHNOLOGY IN PERFORMANCE MANAGEMENT ORGANIZATIONS. In: 17th International Conference the Knowledge-Based Organization, Conference Proceedings 1: Management and Military Sciences. 2011: 706-713.
57. Manole CC, Pirvu C: Surface and electrochemical analysis for the understanding of TiO₂ nanopores/nanotubes changes

- in post-elaboration treatment. *Surf Interface Anal* 2011, 43(7):1022-1029.
58. Lacatusu I, Badea N, Murariu A, Pirvu C, Meghea A: Vegetal nanoclusters in hybrid silica films prepared by sol-gel spin coating technique. *J Non-Cryst Solids* 2011, 357(7):1716-1723.
 59. Popescu S, Pirvu C, Mindroiu M, Manole C, Demetrescu I: Electrochemical Synthesis and Characterization of Ti Modified Electrodes with Polypyrrole - Polyethylene Glycol Hybrid Coating. *Rev Chim* 2010, 61(3):245-248.
 60. Popescu S, Pirvu C, Mindroiu M, Demetrescu I: Enhancing the Stability of PPy Film on Ti by PEG Incorporation. *Mol Cryst Liquid Cryst* 2010, 522:425-435.
 61. Popescu R, Pirvu C, Moldoveanu M, Grote JG, Kajzar F, Rau I: Biopolymer Thin Films for Optoelectronics Applications. *Mol Cryst Liquid Cryst* 2010, 522:529-537.
 62. Pirvu C, Mindroiu M, Popescu S, Demetrescu I: Electrodeposition of Polypyrrole/Poly(Styrene Sulphonate) Composite Coatings on Ti6Al7Nb Alloy. *Mol Cryst Liquid Cryst* 2010, 521:126-139.
 63. Pirvu C, Marcu M, Banu A: Deactivation of Gold Electrode at Chlorophenols Electrooxidation. *Rev Chim* 2010, 61(6):585-589.
 64. Pirvu C, Demetrescu I, Drob P, Vasilescu E, Vasilescu C, Mindroiu M, Stancu R: Electrochemical stability and surface analysis of a new alkyd paint with low content of volatile organic compounds. *Prog Org Coat* 2010, 68(4):274-282.
 65. Mindroiu VM, Pirvu C, Popescu S, Demetrescu I: Polypyrrole Electrodeposition on Ti6Al7Nb Alloy in Aqueous and Non-aqueous Solutions. *Rev Chim* 2010, 61(4):390-394.
 66. Mindroiu M, Pirvu C, Ion R, Demetrescu I: Comparing performance of nanoarchitectures fabricated by Ti6Al7Nb anodizing in two kinds of electrolytes. *Electrochim Acta* 2010, 56(1):193-202.
 67. Manole CC, Pirvu C, Demetrescu I: Evaluation of TiO₂ Nanotubes Changes after Ultrasonication Treatment. *Mol Cryst Liquid Cryst* 2010, 521:84-92.
 68. Demetrescu I, Pirvu C, Mitran V: Effect of nano-topographical features of Ti/TiO₂ electrode surface on cell response and electrochemical stability in artificial saliva. *Bioelectrochemistry* 2010, 79(1):122-129.
 69. Demetrescu I, Ionita D, Pirvu C, Portan D: Present and Future Trends in TiO₂ Nanotubes Elaboration, Characterization and Potential Applications. *Mol Cryst Liquid Cryst* 2010, 521:195-203.
 70. Pirvu C, Stancu R, Drob P, Vasilescu E, Vasilescu C, Mindroiu M: Influence of Various Binder of the Protective Properties of Paint Coatings. In: *Electrochemistry and Physical Chemical Methods in Serving Materials for Sustainable Development*. Edited by Ionita D, vol. 415; 2009: 73-+.
 71. Pirvu C, Mindroiu M, Demetrescu I: One-Step Potentiostatic Electrodeposition of Polypyrrole Coatings on Zinc Coated Steel Surfaces. In: *Electrochemistry and Physical Chemical Methods in Serving Materials for Sustainable Development*. Edited by Ionita D, vol. 415; 2009: 65-68.
 72. Pirvu C, Mindroiu M, Stancu R, Bojin D, Demetrescu I: Scanning Electronic Microscopy in Supporting Electrochemical Deposition and Characterization of Hybrid Polymeric Composite. In: *Electrochemistry and Physical Chemical Methods in Serving Materials for Sustainable Development*. Edited by Ionita D, vol. 415; 2009: 69-+.
 73. Mindroiu M, Pirvu C, Popescu S, Demetrescu I: Polypyrrole as Conducting Polymer Coating on Ti6Al7Nb Alloy. *Mater Plast* 2009, 46(4):394-398.
 74. Mihaly M, Comanescu A, Rogozea A, Pirvu C, Rau I: Biomaterials based on DNA embedded in silica matrix. In: *Nanobiosystems: Processing, Characterization, and Applications II*. Edited by Kobayashi N, Ouchen F, Rau I, vol. 7403; 2009.
 75. Manole CC, Pirvu C, Demetrescu I: TiO₂(2): from nanotubes to nanopores by changing the anodizing voltage in fluoride-glycerol electrolyte. In: *Electrochemistry and Physical Chemical Methods in Serving Materials for Sustainable Development*. Edited by Ionita D, vol. 415; 2009: 5-8.
 76. Comorosan S, Kappel W, Constantinescu I, Gheorghe M, Ionescu E, Pirvu C, Cinca S, Cristache L: Green light effects on biological systems: a new biophysical phenomenon. *J Biol Phys* 2009, 35(3):265-277.
 77. Pirvu C, Banu A, Radovici O, Marcu M: APPLICATION OF ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY (EIS) TO STUDY OF PHENOLIC FILMS. *Rev Roum Chim* 2008, 53(11):1007-+.
 78. Marcu M, Pirvu C, Banu A, Vulpasu E: Effect of Chlorine Substitute on Phenols Electrooxidation Studied by Cyclic Voltammetry. *Rev Chim* 2008, 59(8):867-870.
 79. Man I, Pirvu C, Demetrescu I: Enhancing Titanium stability in Fusayama Saliva using electrochemical elaboration of TiO₂(2) nanotubes. *Rev Chim* 2008, 59(6):615-617.
 80. Pirvu C, Stancu R, Sovar MM: Anticorrosive properties of hybride organic (polypyrrole) inorganic (zinc) coatings on steel surface. *Rev Chim* 2007, 58(9):933-937.
 81. Pigani L, Musiani M, Pirvu C, Terzi F, Zanardi C, Seeber R: Electro-oxidation of chlorophenols on poly (3,4-ethylenedioxythiophene)-poly(styrene sulphonate) composite electrode. *Electrochim Acta* 2007, 52(5):1910-1918.
 82. Banu A, Marcu M, Radovici O, Pirvu C, Vasilescu M: Electrodissolution studies of three aluminum alloys in acid, neutral and alkaline solutions. *Rev Roum Chim* 2006, 51(3):193-198.
 83. Heras MA, Lupu S, Pigani L, Pirvu C, Seeber R, Terzi F, Zanardi C: A poly(3,4-ethylenedioxythiophene)-poly(styrene sulphonate) composite electrode coating in the electrooxidation of phenol. *Electrochim Acta* 2005, 50(7-8):1685-1691.
 84. Pirvu C, Brillas E, Radovici O, Banu A: The electrochemical degradation of chlorophenols by anodic oxidation in the presence of electrogenerated H₂O₂. *Rev Chim* 2004, 55(6):430-434.

85. Pirvu C, Brillas E, Radovici O, Banu A: Degradation of 4-chlorophenol by advanced electrochemical oxidation methods. Rev Chim 2004, 55(10):764-768.

Carti

1. C. Pirvu, General Chemistry. Fundamentals, Ed. Printech, 2009, ISBN 978-606-521-241-1, 152 pg.
 2. G. Hubca, M. Tomescu, Iuliana Niță, C. Pirvu, Polymers used in electronics, electrical and computer engineering, Ed. Semne, 2006, ISBN 973-642-363-X, 638 pg.
 3. M. Ungureanu, C. Pirvu, Experimental organic electrochemistry, Ed. Printech, 2004, ISBN 973-652-978-9, 156 pg.
- #### Chapters
4. I. Demetrescu, P. Drob, S.I. Drob, D. Ionita, A. Mazare, C. Pirvu, C. Ungureanu, C. Vasilescu, E. Vasilescu, Strategies to improve bio-performance of permanent and temporary metallic implants, in Advances biocompatible structures for prospective bioengineering: concepts and strategies, The Publishing House of the Romanian Academy, Bucharest, 2013, Pages 19 - 46.
 5. Ioana Demetrescu, Daniela Ionita, and C. Pirvu, Processing Metallic Biomaterials for a Better Cell Response, chapter in Biomaterials and Stem Cells in Regenerative Medicine, edited by Murugan Ramalingam, Seeram Ramakrishna, and Serena Best, CRC Press 2012, Pages 259–280.

Brevete

1. "PROCESS FOR IMPROVING ADHERENCE OF POLYPYRROLE FILMS BY ANCHORS OF BIO-INSPIRED POLYMERS OF POLYDOPAMINE TYPE, Patent Number: RO130771-B1, Patent Assignee: UNIV BUCURESTI, Inventor(s): PIRVU C; POPESCU S A."
2. "POLYMERIC COATINGS WITH ANTIFOULING EFFECT, BASED ON POLYPYRROLE DOPED WITH SULPHONATED POLYSTYRENE, Patent Number: RO130770-A2, Patent Assignee: UNIV BUCURESTI, Inventor(s): PIRVU C; MINDROIU V M; POPESCU S A."
3. "CLEAN PROCESS FOR PREPARING A MULTILAYER CORROSION-PROOF COATING for carbon steel, Patent Number: RO127533-A2, Patent Assignee: INST CHIM FIZICA ILIE MURGULESCU, Inventor(s): PIRVU C; DEMETRESCU I; MINDROIU M; et al."
4. "PROCESS FOR MODIFYING THE SURFACE OF TITANIUM WITH POLYMERIC FILMS OF CONTROLLED HUMECTABILITY, Patent Number: RO127065-B1, Patent Assignee: UNIV POLITEHNICA DIN BUCURESTI, Inventor(s): DEMETRESCU I; PIRVU C; POPESCU S; et al."
5. "ECOLOGICAL SOLUTION FOR WHITE-BLUIISH PASSIVATION OF ZINC ELECTRO-CHEMICAL DEPOSITS, Patent Number: RO125236-A2, Patent Assignee: ICTCM INST CERC PROI TEHN CONSTR MASINI, Inventor(s): DEMETRESCU I; DROB P; MIHALCEA A; PIRVU C. et al."
6. "ECOLOGICAL SOLUTION FOR BLUE-IRIDESCENT PASSIVATION OF ZINC ELECTRO-CHEMICAL DEPOSITS, Patent Number: RO125234-A2, Patent Assignee: ICTCM INST CERC PROI TEHN CONSTR MASINI, Inventor(s): DEMETRESCU I; DROB P; MIHALCEA A; PIRVU C. et al."
7. "ECO-FRIENDLY SOLUTION FOR YELLOW PASSIVATION OF ELECTROCHEMICAL ZINC DEPOSITS, Patent Number: RO125235-A2, Patent Assignee: ICTCM INST CERC PROI TEHN CONSTR MASINI, Inventor(s): DEMETRESCU I; DROB P; MIHALCEA A; PIRVU C. et al."

Semnatura

