



LISTA DE LUCRĂRI

1. Teza de doctorat

- Doctorand in Chimie – perioada: noiembrie 1997-aprilie 2003
- Facultatea de Chimie; Universitatea din Craiova
- **Coordonator științific:** Prof. univ. dr. Alexandru Popescu
- **Titlul tezei de doctorat:** Faze staționare chimic modificate utilizate în cromatografia de lichide. Aplicații analitice.
- Susținută la: **18 aprilie 2003**
- **Confirmare: Ministerul Educației și Cercetării, Diploma de Doctor Seria C Nr. 0009995**

2. Teza de abilitare

Titlul tezei de abilitare: Prevention and control of pollution of industrial environments with non-specific compounds - Domeniul Inginerie Industrială

Confirmare: Ministerul Educației, Atestat de abilitare Nr. 7791/17.12.2024

3. Articole științifice, publicate în reviste de specialitate recunoscute la nivel național și internațional;

3.1. Articole publicate în reviste cotate ISI

1. A. Dobrițescu, A. Samide *, N. Cioateră *, O. C. Mic, C. Ionescu, I. Dăbuleanu, **C. Tigae**, C. I. Spînu, B. Oprea, *The inhibitory effect and adsorption properties of testagen peptide on copper surface in saline environment. Experimental and computational study*, **Molecules**, volume 30, issue 15, 3141, **2025**.
2. O. E. Nicolaescu, C. Ionescu *, A. Samide, **C. Tigae**, C. I. Spînu, B. Oprea, *Advancements in cyclodextrin complexes with bioactive secondary metabolites and their pharmaceutical applications*, 17(4), 506; [DOI: 10.3390/pharmaceutics17040506](https://doi.org/10.3390/pharmaceutics17040506), **Pharmaceutics**, **2025**.
3. O. F. Nemeș, C. Măruțoiu, D. Nemeș, V. C. Măruțoiu, A. Dumitran, M. Cotețiu, T. Tia, **C. Tigae***, *Establishing the Authorship of Two Wooden Icons From the Museikon Collection, Alba Iulia*, **Journal of spectroscopy**, <https://doi.org/10.1155/jspe/6345481>, **2025**.

4. C. Ionescu A. Samide , **C. Tigae**, *Trend in detection of anthocyanins from fresh fruits and the influence of some factors on their stability impacting human health. Kinetic study assisted by UV-Vis spectrophotometry*, acceptat spre publicare la revista **Antioxidants**, **2025**.
5. B. Tutunaru , A. Samide , **C. Tigae** , B. Oprea, *Assessment of captan pesticide stability by thermal and spectroelectrochemical analysis*, **International Journal of Electrochemical Science**, **Volume 19, Issue 5**, May 2024, **100561**.
6. A. Samide, G. E. Iacobescu, B. Tutunaru, **C. Tigae** , C. I. Spînu, B. Oprea, *New inhibitor based on hydrolyzed keratin peptides for stainless steel corrosion in physiological serum. Electrochemical and thermodynamic study*, acceptat spre publicare la **Polymers**, **2024**.
7. S. M. Popescu, **C. Tigae**, A. Dobrițescu, D. M. Ștefănescu, *Exploring the Climatic Niche Evolution of the Genus Falco (Aves: Falconidae) in Europe*, **13(2)**, 113; [DOI: 10.3390/biology13020113](https://doi.org/10.3390/biology13020113), **Biology**, **2024**.
8. A. Samide, A. Dobrițescu, **C. Tigae**, C. I. Spînu, B. Oprea, *Experimental and computational study on inhibitory effect and adsorption properties of N-acetylcysteine amino acid in acid environment*, **Molecules**, **2023**
9. B. Tutunaru, A. Samide, C.I. Spînu, **C. Tigae**, B. Oprea, *Induced Effect of Gold Nanoparticles (AuNPs) and Halide Ions on the Pyridoxine Molecule Stability*, **Applied Sciences**, **11(20)**, **2021**.
10. B. Tutunaru, A. Samide, S. Iordache, **C. Tigae**, A. Simionescu, A. Popescu, *Ceftriaxone Degradation in the Presence of Sodium Halides Investigated by Electrochemical Methods Assisted by UV-Vis Spectrophotometry*, **Applied Sciences**, **11(4)**, **2021**.
11. S. Iordache, B. Tutunaru, A. Samide, **C. Tigae**, A. Simionescu, A. Popescu, *Electrochemical Degradation and Thermal Deactivation of Valproic Acid Drug*, **International Journal of Electrochemical Sciences**, **16(3)**, **2021**.
12. C. Merișanu, A. Samide, G. E. Iacobescu, B. Tutunaru, **C. Tigae**, A. Popescu, *Anticorrosive Performance of Vinyl Butyral-co-vinyl alcohol-co-vinyl Acetate Based Copolymer Adsorbed on Steel Surfaces. Electrochemical and AFM Studies*, **International Journal of Electrochemical Science**, **15(10)**, 10197-10211/ [Sursa: web of science](https://www.sciencedirect.com/science/article/pii/S1462018220300064), **2020**.
13. A. Samide, S. Iordache, G. E. Iacobescu, **C. Tigae**, C. Spînu, *Titanium Implant Surface Modification in Physiological Serum Containing New Mixed Inhibitor Based on Poly(vinyl) Alcohol/Silver Nanoparticles/Epirubicin*, **International Journal of Electrochemical Science**, **13(12)**, 12125 – 12139/ [sursa: web of science/ WOS:000452744500064](https://www.sciencedirect.com/science/article/pii/S146201821830064), **2018**.
14. B. Tutunaru, A. Samide, C. Neamțu, **C. Tigae**, *Spectroelectrochemical Studies of Interactions between Vitamin A and Nanocolloidal Silver*, **International Journal of Electrochemical Science**, **13(6)**, 5850 – 5859/ [sursa: web of science/ WOS:000436261400058](https://www.sciencedirect.com/science/article/pii/S146201821830058), **2018**.
15. A. Samide, G. E. Iacobescu, B. Tutunaru, R. Grecu, **C. Tigae**, C. Spînu, *Inhibitory Properties of Neomycin Thin Film Formed on Carbon Steel in Sulfuric Acid Solution: Electrochemical and AFM Investigation*, **Coatings**, **7(11)**, 181; [doi: 10.3390/coatings7110181](https://doi.org/10.3390/coatings7110181)/ [Sursa: web of science](https://www.sciencedirect.com/science/article/pii/S2032048617300181), **2017**.

16. B. Tutunaru, C. *Tigae*, C. Spînu, I. Prunaru, Spectrophotometry and Electrochemistry of Brilliant Blue FCF in Aqueous Solution of NaX , **International Journal of Electrochemical Science**, **12(1)**, 396-412, 2017.
17. A. Samide, R. Grecu, B. Tutunaru, C. *Tigae**, C. Spînu, *Cisplatin-chemotherapeutic Drug Interactions with the Surface of Some Metal Bioimplants in Physiological Serum*, **International Journal of Electrochemical Science**, **12(12)**, 11316 – 11329; doi: 10.20964/2017.12.66/ Sursa: web of science, 2017.
18. A. Samide, G. E. Iacobescu, B. Tutunaru, C. *Tigae*, *Electrochemical and AFM Study of Inhibitory Properties of Thin Film Formed by Tartrazine Food Additive on 304L Stainless Steel in Saline Solution*, **International Journal of Electrochemical Science**, **12 (3)**, 2088-2101/ Sursa: web of science, 2017.
19. S. Neamțu, D. Dițescu, M. Forțofoiu, L.Stanca, C. *Tigae*, M. Niculescu, C.O. Neamțu, M.M. Manolea, M.A. Siminel, L.E. Surtea, A.V. Neamțu, M.B. Novac, L. Vasile, A. Gluhovschi, *Correlation of clinical and biological evidence - a dominant therapeutic element of succeeding in ectopic pregnancy*, **Romanian Journal of Morphology and Embryology**, **58(1)**,167-174, 2017.
20. A. Samide, B. Tutunaru, A. Dobrițescu, P. Ilea, A.C. Vladu, C. *Tigae*, *Electrochemical and theoretical study of metronidazole drug as inhibitor for copper corrosion in hydrochloric acid solution*, **International Journal of Electrochemical Science**, **11 (7)**, 5520 – 5534, 2016.
21. A. Samide, B. Tutunaru, N. Cioateră, A. C. Vladu, C. Spînu, C. *Tigae*, *Catalytic Activity of Thallium on Electrochemical Degradation of Metronidazole from Aqueous Solutions*, **Chemical Engineering Communications**, **203(12)**, 1572-1581, 2016.
22. Mădălina Drăgoi, A Moanță, C. *Tigae*, Marius Drăgoi, *Removal of Some Triphenylmethane Dyes from Aqueous Solutions by Fenton Reagent. I*, **Revista de Chimie**, **66(9)**, 1273-1277,2015.
23. O. F. Măruțoiu, I. Bratu, C. Măruțoiu, S. Hodișan, M. Lazăr, I. Perhaita, C. *Tigae*, *Bentonite Modified with gamma - aminopropyltriethoxysilane as Stationary Phase for Thin-layer Chromatography*, **Revista de Chimie**, **66(9)**, 1455-1458, 2015.
24. A. Samide, B. Tutunaru, A. Moanță, C. Ionescu, C. *Tigae*, A. C. Vladu, *A Study of the Surface Protective Layer Formed on Carbon Steel in Water-Dioxane Solution Containing 0.15 M NaCl in Presence of an azo Dye with Antimicrobial Activity*, **International Journal of Electrochemical Science**, **10(6)**, 4637 – 4653, 2015.
25. B. Tutunaru, A. Samide, A. Moanță, C. Ionescu, C. *Tigae**, *Electrochemical Study of Metribuzin Pesticide Degradation on Bismuth Electrode in Aqueous Solution*, **International Journal of Electrochemical Science**, **10(1)**, 223-234, 2015.

26. O. F. Măruțoiu, I. Bratu, C. Măruțoiu, S. Hodișan, **C. Tigae**, *Synthesis and characterization of diatomaceous earth chemically modified with n-trichlorooctadecylsilane*, **Revista de Chimie**, vol. 65, nr.3, 320-324, 2014.
27. O. F. Măruțoiu, I. Bratu, S. Hodișan, **C. Tigae**, *Synthesis and characterization of n-octyl chemically modified diatomaceous earth*, **Croatica Chemica Acta**, vol. 87, nr.1, pag. 1-6, 2014.
28. A. Samide, B. Tutunaru, **C. Tigae**, R. Efrem, A. Moanță, M. Drăgoi, *Removal of methylene blue and methyl blue dyes from wastewater by electrochemical degradation*, **Environment Protection Engineering**, vol.40, nr.4, pag. 93-104, 2014.
29. A. Samide, B. Tutunaru, A. Didu, C. Luculescu, **C. Tigae**, C. Spînu and M. Preda, *Better corrosion management in sodium chloride solution of some pieces obtained from metallurgical iron powder ancorsteel 1000B using cadmium and zinc coatings to protect underlying substrate*, **International Journal of Electrochemical Science**, 8(4), 5108-5120, 2013.
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30. A. Samide, B. Tutunaru, C. Ionescu, **C. Tigae**, A. Moanță, *Electrochemical study of haematoxylin inhibitory activity to control carbon steel corrosion in natrium nitrate solution*, **International Journal of Electrochemical Science**, 8(3), 3589-3601, 2013.
31. F. Pătrașcu, M. Badea, M. N. Grecu, N. Stănică, L. Măruțescu, D. Marinescu, C. Spînu, **C. Tigae**, R. Olar, *Thermal, spectral, magnetic and antimicrobial behaviour of new Ni (II), Cu(II) and Zn(II) complexes with a hexaazamacrocyclic ligand*, **Journal Thermal Analysis and Calorimetry**, 113(3), 1421-1429, 2013.
32. O. F. Măruțoiu, **C. Tigae**, C. Măruțoiu, I. Kacso, I. Bratu, I. Perhaita, *Preparatoin and characterization of some ethyl-phenyl modified stationary phases*, **JPC-Journal of planar chromatography-Modern TLC**, 25(6), 548-553, 2012.
33. **C. Tigae**, O.F. Măruțoiu, N.G. Băghină, M.L. Soran, A. Simionescu, C. Măruțoiu, *Separation of pesticides mixture by bidimensional HPTLC*, **Revista de chimie**, vol. 60, nr. 5, 494-496, 2009.
34. L. Mitu, **C. Tigae**, C. Spînu, M. Pleniceanu, *Mixed complex combinations with a new Schiff base used as membranes ion-selective for cooper and nickel ions. Analytical applications*, **Journal of the Chemical Society of Pakistan**, 31(5), 744-749, 2009.
35. C. Spînu, M. Pleniceanu, **C. Tigae**, *Biologically active transition metal chelates with 2-thiophenecarboxaldehyde-derived Schiff base: synthesis, characterization and antibacterial properties*, **Turkish Journal of Chemistry**, 32(4), 487 - 493, 2008.

36. C. Spînu, M. Isvoranu, M. Pleniceanu, **C. Tigae**, *Potentiometric determination of K^+ ions using a K^+ -selective electrode with macrocyclic liquid membrane*, **Bulletin of the Chemical Society of Ethiopia**, **22(2)**, 295 - 299, 2008.
37. C. Spînu, M. Pleniceanu, **C. Tigae**, *Biologically active new Fe(II), Co(II), Ni(II), Cu(II), Zn(II) and Cd(II) complexes of N-(2-thylenilmethylidene)methanamine*, **Journal of the Serbian Chemical Society**, **73(4)**, 415-421, 2008.
38. C. Măruțoiu, I. Gogoasă, I. Oprean, O. F. Măruțoiu, M. I. Moise, **C. Tigae**, M. Rada, *Separation and Identification of Piperine and Chavicine in Black Pepper by TLC and GC-MS*, **JPC-Journal of Planar Chromatography-Modern TLC**, **19(109)**, 250-252, 2006.
39. I. Gogoasă, C. Măruțoiu, I. Gergen, M. Rada, **C. Tigae**, *The use of vegetables as indicators in determining the environment pollution*, **Revista de chimie**, vol. **56**, nr. **12**, 1275–1276, 2005.

40. C. Măruțoiu, L. Oprean, O. F. Măruțoiu, M. L. Soran, **C. Tigae**, M. C. Goncea, *Quality control of commercial mustard by thin-layer chromatography*, **JPC-Journal of Planar Chromatography-Modern TLC**, **18(104)**, 282-284, 2005.
41. C. Măruțoiu, M. Dascălu, M. L. Soran, **C. Tigae**, A. Popescu, C. Spînu, *The utilization of some inorganic ion exchangers in thin layer chromatography. I. The separation of some complexes on zirconium silicate (IV)*, **Revista de chimie**, vol. **54**, nr. **2**, 178–180, 2003.
42. C. Măruțoiu, **C. Tigae**, M. I. Moise, A. Popescu, I. Ilea, *Synthesis and characterization of diatomaceous earth chemically modified with gamma-aminopropyltrimethoxysilane*, **JPC-Journal of Planar Chromatography-Modern TLC**, **16(1)**, 32-35, 2003.
43. C. Măruțoiu, M. Filip, **C. Tigae**, V. Coman, R. Grecu, G. Marcu, *Synthesis and Characterization of Alumina R Chemically Modified with n-Octyl for Use as a Stationary Phase in TLC*, **JPC-Journal of Planar Chromatography-Modern TLC**, **16(3)**, 183-185, 2003.
44. I. Gănescu, I. Papa, A. Gănescu, **C. Tigae**, L. Chirigiu, A. Barbu, *Dragendorff reagents utilisation in chemical analyses rudotel determination*, **Revista de chimie**, vol. **52**, nr. **11**, 690-692, 2001.

3.2. Articole publicate în reviste internaționale indexate BDI (necotate ISI)

1. C. Măruțoiu, I. Bratu, O. F. Nemeș, D. Nemeș, C. Neamțu, Z. Moldovan, T. Tia, I. Udrea, **C. Tigae**, *Scientific Investigation of the Paintings from the Agarbiciu (Cluj County) Wooden Church*, **Journal of Minerals and Materials Characterization and Engineering**, **8**, 177 – 196, 2020.

2. C. Spînu, A. Kriza, A. Meghea, **C. Tigae**, *Studies on N-[2-thienylmethylidene]-2-aminopyridine complexes of Fe(II), Co(II), Ni(II), Cu(II), Zn(II) and Cd(II).*, **Southern Brazilian Journal of Chemistry**, vol. 9, nr. 10, 17-22, 2001.
3. I. Gănescu, I. Papa, A. Gănescu, G. Brătulescu, **C. Tigae**, D. Cârțână, *Chromium(III) complex anions in chemical analysis. Thioridazine determination*, **Southern Brazilian Journal of Chemistry**, vol. 9, Nr. 10, 31-39, 2001.
4. I. Gănescu, G. Brătulescu, I. Papa, A. Gănescu, D. Cârțână, **C. Tigae**, *New mixed tetradentate chelates of Co(III) with ethylendiimino- bis-dibenzoylmethane*, **Southern Brazilian Journal of Chemistry**, vol. 10, Nr. 11, 39-48, 2002.

3.3. Articole publicate în reviste din țară indexate BDI / recunoscute CNCIS – categoria: B și B+

1. M. Pleniceanu, M. Isvoranu, C. Spînu, **C. Tigae**, *Spectrophotometric Study of the Binary System Ni(II)-N-[2-Thienylmethyliden]-2-Aminothiazole and the Determination of Ni(II)*, **Acta Universitatis Cibiniensis, seria F Chimia**, vol. 8, nr. 2, 75-83, 2005.
2. A. Simionescu, A. Popescu, **C. Tigae**, I. Regos, *The determination of sucrose in wine by HPLC*, **Analele Univ. din Craiova, seria Chimie, XXXVIII, nr. 2, 79-83, 2009.**
3. B. Tutunaru, **C. Tigae**, *The influence of aminoacids on electrochemical behaviour of 316L stainless steel*, **Analele Univ. din Craiova, seria Chimie, XLI, nr. 2, 5-9, 2012.**
4. B. Tutunaru, C. Tigae, S.D. Neamțu, *Electrochemical study of passive film formed on 316L stainless steel surface in physiological media*, **Annals Univ Craiova, Seria Chimie**, vol. XLIII, no. 1, 3-13, 2016.

3.4 Articole publicate în alte reviste de specialitate

1. I. Gănescu, A. Popescu, I. Papa, A. Gănescu, **C. Tigae**, I. Pițiche, *Tetraiodo-et tetratiocyanato-mercurates (II). La determination gravimetrique du mercure avec des reactifs analytiques complexes*, **Analele Univ. din Craiova, seria Chimie, XXVII, 1-5, 1999.**
2. I. Gănescu, A. Popescu, A. Gănescu, **C. Tigae**, *L'étude sur l'obtention de l'acetate de cellulose pour le membrane semi-permeables*, **Analele Univ. din Craiova, seria Chimie, XXVIII, 13-19, 1999.**
3. A. Samide, O. Rusu, **C. Tigae**, N. Cioateră, *Die chromatographische bestirumung der kohlenwasserstoffe C₂-C₄ die entstanden sind bei der pyrolise des methans*, **Analele Univ. din Craiova, seria Chimie, XXVIII, 148-150, 1999.**
4. A. Popescu, **C. Tigae**, O. Croitoru, *High performance liquids chromatography of some organics anions*, **Analele Univ. din Craiova, seria Chimie, XXIX, 5-8, 2000.**
5. A. Popescu, O. Croitoru, **C. Tigae**, *Purity determination of mercaptobenzthiazole by high performance liquid chromatography*, **Analele Univ. din Craiova, seria Chimie, XXIX, 65-69, 2000.**

6. A. Popescu, P. Capotă, M. Boșcaiu, D. Bogdea, **C. Tigae**, *The study of the composition of the pictorial coats used in XVIIIth-XIXth century's churches from Transylvania*, **Analele Univ. din Craiova, seria Chimie, XXIX, 91-97, 2000.**
 7. P. Atym, I. Bolocan-Viașu, O. Croitoru, **C. Tigae**, *The linear dependence between the specific volum and the anhydrous ashes in Roumanian lignite*, **Analele Univ. din Craiova, seria Chimie, XXIX, 139-142, 2000.**
 8. I. Gănescu, I. Papa, A. Popescu, A. Gănescu, L. Chirigiu, **C. Tigae**, *Determination of Hg (II) by using piperazinyllalkylphenotiazine derivates as analytical reagents*, **Analele științifice ale Univ. "Al. I. Cuza" din Iași, seria Chimie, VIII, nr. 2, 389-394, 2000.**
 9. I. Gănescu, A. Popescu, I. Papa, A. Gănescu, I. Pițiche, **C. Tigae**, *New methods for Hg (II) determination*, **Analele Univ. din Craiova, seria Chimie, XXX, 42-49, 2001.**
 10. I. Bolocan-Viașu, I. Bucur, P. Atym, **C. Tigae**, O. Croitoru, *Radionuclide impurities in injectable solutions used to determine the diagnosis*, **Analele Univ. din Craiova, seria Chimie, XXX, 121-125, 2001.**
 11. I. Gănescu, A. Popescu, I. Papa, A. Gănescu, **C. Tigae**, *Solvation of the $[Cr(NCS)_4(p\text{-ethylaniline})_2]^-$ ion in the ethanol-water mixtures*, **Analele Univ. din Craiova, seria Chimie, XXXI, 79-86, 2002.**
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12. I. Gănescu, G. Brătulescu, I. Papa, S. Sbîrnă, A. Gănescu, A. Barbu, **C. Tigae**, *Contribution a l'etude de certaines medicaments antituberculeux . Determination de la pyrazinamide*, **Analele științifice ale Univ. "Al. I. Cuza" din Iași, seria Chimie, X, nr. 2, 357-366, 2002.**
 13. I. Bolocan-Viașu, A. Popescu, C. Spînu, **C. Tigae**, *Indoor radon and its contribution to the radiation exposure*, **Analele " Universității de Vest " din Timișoara, seria Chimie, 12 (3), 191-194, 2003.**
 14. Al. Popescu, **C. Tigae**, C. Spînu, A. Popescu, *The separation for the certain enantiomers used as pharmaceuticals by HPLC*, **Analele Univ. din Craiova, seria Chimie, XXXIII, 11-15, 2004.**
 15. Al. Popescu, **C. Tigae**, C. Spînu, M. Isvoranu, A. Popescu, *The separation of some metal chelats by HPLC with spectrophotometric detection*, **Analele Univ. din Craiova, seria Chimie, XXXIII, 17- 20, 2004.**
 16. M. Drăgoi, C. Ionescu, A. Moanță, **C. Tigae**, I. Jenic, S. D. Neamțu, *Degradation of methyl blue by Fenton process*, **Analele Univ. din Craiova, seria Chimie, XLVII, nr. 2, 53-59, 2021.**

4. Brevete

5. Cărți și capitole din cărți publicate

5.1. Cărți/capitole publicate în edituri internaționale

5.2. Cărți/capitole publicate în edituri naționale

- 1 Alexandru Popescu și **Cristian Tigae**.
" Metode electrochimice de analiză ". 191 pagini
Editura Universitaria Craiova, 2000.
2. Alexandru Popescu și **Cristian Tigae**.
" Metode electrochimice de analiză ". 185 pagini
Editura Universitaria Craiova, 2005.
3. Cezar Spînu, Marian Isvoranu și **Cristian Tigae**.
" Chimia materialelor ". 210 pagini
Editura Universitaria Craiova, 2006.
4. **Cristian Tigae** și Alexandru Popescu.
" Metode de separare ". 159 pagini
Editura Universitaria Craiova, 2007.
5. Maria Pleniceanu, Alexandru Popescu și **Cristian Tigae**.
" Chimie analitică. Analiză instrumentală ". 349 pagini
Editura Universitaria Craiova, 2007.



6. Cristian Tigae

- „ Faze staționare chimic modificate utilizate în cromatografia de lichide. Aplicații analitice ”. 206 pagini
Editura Universitaria Craiova, 2008.
7. Constantin Marutoiu, Olivia Florena Nemes și **Cristian Tigae**
„Cromatografia de lichide. Investigarea operelor de arta”. 340 pagini
Editura Universitaria Craiova, 2013.
 8. Șerban – Ion Blejoiu, Nicoleta Cioateră, **Cristian Tigae** și Mădălina Drăgoi.
„Chimie”. 266 pagini
Editura Universitaria Craiova, 2022.

6. Comunicări științifice la conferințe/simpozioane

6.1. Studii comunicate la conferințe/simpozioane naționale

1. I. Bolocan-Viașu, A. Popescu, **C. Tigae**, O. Croitoru, “Considerations about nonhomogeneity of ash composition obtained at lignite combustion in thermoelectric power station”, **Simpozionul Național de Chemometrie, Cluj-Napoca, Romania, september 20-21, 2001.**
2. Al. Popescu, A. Gănescu, A. Popescu, **C. Tigae**, “ Senzor potențiometric pentru oxitettraciclină “, **National Conference with international participation “ Chimia 2006 “, May 12-13, 2006, Constanța, Romania.**

6.2. Studii comunicate la conferințe/simpozioane internaționale

1. C. Măruțoiu, **C. Tigae**, A. Popescu, I. Viașu Bolocan, "Synthesis and characterization of diatomitic sand chemical modified with γ -aminopropyltrimethoxysilane", ***Euroanalysis XII, Dortmund, Germany, september 8-13, p. 432, 2002.***
 2. G. Niac, I. Viașu Bolocan, A. Popescu, O. Croitoru, **C. Tigae**, "Elemental composition of size classes for a power plant lignite ash and the grain size distribution", ***Euroanalysis XII, Dortmund, Germany, september 8-13, p. 606, 2002.***
 3. C. Măruțoiu, M. I. Moise, D. N. Badea, **C. Tigae**, C. H. Barbu, C. F. Ciobotea, "Utilization of thin-layer chromatography for the discovery of faked alcoholic beverages", ***Proceedings of the International Symposium on Planar Separations, Visegrad, Hungary, 23-25 may 2004.***
 4. C. Spînu, A. Popescu, **C. Tigae**, M. Isvoranu, I. Bolocan-Viașu, "The separation of some metal chelates by HPLC with spectrophotometric detection", ***Euroanalysis XIII, Salamanca, Spain, september 5-10, poster session PS 2 – 258, 2004.***
 5. Al. Popescu, **C. Tigae**, C. Spînu, I. Bolocan-Viașu, A. Popescu, "The separation of the certain enantiomers used as pharmaceuticals by HPLC", ***Euroanalysis XIII, Salamanca, Spain, september 5-10, poster session PS 2 – 192, 2004.***
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6. I. Bolocan-Viașu, A. Popescu, C. Spînu, **C. Tigae**, "Spectrometric determination of natural radionuclides into the indoor air", ***Euroanalysis XIII, Salamanca, Spain, september 5-10, poster session PS 1 –96, 2004.***
 7. A. Samide, B. Tutunaru, **C. Tigae**, C. Spînu, „Aminophylline: thermal characterization and its inhibitory properties for carbon steel corrosion in acidic environment", ***2st Central and Eastern European Conference on Thermal Analysis and Calorimetry, (CEEC-TAC2), 27-30 August 2013, Vilnius, Lithuania, PS2.90, p. 344.***
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 9. A. Moanță, B. Tutunaru, C. Ionescu, A. Samide, **C. Tigae**, „A new azo-derivative as corrosion inhibitor for carbon steel in mixed electrolyte", ***The 46th International October Conference on Mining and Metallurgy, 01-04 October, 2014, Bor, Serbia, p.196-199.***
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24. A. Rotaru, P. Rotaru, A. Moanță, **C. Tigae**, C. Spînu, C. Popescu, „Thermal decomposition kinetics of some aromatic azomonoethers. Part V. Non-isothermal kinetics of CODA liquid crystal and its lifetime prediction for improving thermochromatographic applications”, **1st Central and Eastern European Conference on Thermal Analysis and Calorimetry, 7-10 September 2011, Craiova, Romania.**
25. O. F. Măruțoiu, **C. Tigae**, C. Măruțoiu, I. Kacso, I. Bratu, I. Perhaita, „Thermoanalytical study of some phenyl chemically modified stationary phases for chromatography”, **1st Central and Eastern European Conference on Thermal Analysis and Calorimetry, 7-10 September 2011, Craiova, Romania.**
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26. N. Cioateră, A. Maxut, A. Dobrițescu, **C. Tigae**, C. Spînu, „Synthesis of nanocrystalline titania-doped YSZ by a modified Pechini method”, **1st Central and Eastern European Conference on Thermal Analysis and Calorimetry, 7-10 September 2011, Craiova, Romania.**
27. B. Tutunaru, A. Samide, **C. Tigae**, C. Spînu, A. Vladu, „Electrochemical study of Metronidazole Degradation on Thallium Electrosynthesized Electrodes”, **19th Romanian International Conference on Chemistry and Chemical Engineering, Sibiu, Romania, 2-5 septembrie, 2015, S3 - 248P.**
28. B. Tutunaru, A. Samide, **C. Tigae**, P. Ilea, A.C. Vladu, „Electrochemical degradation of coloring food Brilliant Blue FCF from simulated wastewaters”, **International Conference of Physical Chemistry, ROMPHYSCHEM 16, September 21-24, 2016, Galati, ROMANIA.**
29. A. Samide, B. Tutunaru, C. Merișanu, **C. Tigae**, C. Spînu, „Thermal analysis – an effective characterization method of polymer films formed by poly(vinyl acetate)”, **5th Central and Eastern European Conference on Thermal Analysis and Calorimetry & 14th Mediterranean Conference on Calorimetry and Thermal Analysis, 27-30 August 2019, Roma, Italy.**
30. A. Samide, B. Tutunaru, S. Iordache, C. Spînu, **C. Tigae**, „Thermal characterization of metal/polymer system based on silver nanoparticles/poly(vinyl alcohol)”, **5th Central and Eastern European Conference on Thermal Analysis and Calorimetry & 14th**

*Mediterranean Conference on Calorimetry and Thermal Analysis, 27-30 August 2019,
Roma, Italy.*

7. Proiecte de cercetare pe baza de contract/grant obținute prin competiție

7.1. Proiecte de cercetare pe baza de contract/grant obținute prin competiție internațională

7.2. Proiecte de cercetare pe baza de contract/grant obținute prin competiție națională

8. Contracte de interes științific și/sau economic cu parteneri din țară și din străinătate

1. " Determinarea conținutului de metale grele din probe de sol din incinta CET Govora și alte trei puncte situate în zone limitrofe".

Contract nr. 40 C/2006, finanțator S.C. CET Govora S.A.

- **director de proiect.**

2. " Studiu privind tratarea apelor uzate cu substanțe tensioactive, evacuate de pe platforma Romag Prod ".

Contract nr. 54 C/2006, finanțator S.C. Romag Prod. S.A.

- **membru în echipa de cercetare.**

3.. Sinteza, caracterizarea si testarea electrochimica a unor compusi noi din clasa colorantilor azoici, competitia granturi - UCV, **2013**

- **membru in echipa de cercetare.**

4. Contract de transfer tehnologic de tip know – how nr. I 15/23.02.2023, 2023, finanțator Laser Art SRL,

director de contract.

5. Contract de transfer tehnologic de tip know – how nr. I 18/27.02.2023, 2023, finanțator Laser Art SRL,

drector de contract.

9. Aplicații - Resurse umane - Premierea rezultatelor cercetării

1.,, Potentiometric determination of K⁺ ions using a K⁺-selective electrode with macrocyclic liquid membrane ”.

PN II-Program Resurse Umane, cod CNCSIS 27, 2008- **aplicant.**

2.. „Biologically active new Fe(II), Co(II), Ni(II), Cu(II), Zn(II) and Cd(II) complexes of N-[2-thienylmethylidene] methanamine”.

PN II-Program Resurse Umane, CNCSIS, 2008. - **aplicant**.

3.. „Biologically active transition metal chelates with 2-thiophenecarboxaldehyde-derived Schiff base: synthesis, characterization and antibacterial properties ”.

PN II-Program Resurse Umane, CNCSIS, 2008. - **aplicant**.

4. A. Samide, B. Tutunaru, A. Didu, C. Luculescu, **C. Tigae**, C. Spînu, M. Preda, *Better corrosion management in sodium chloride solution of some pieces obtained from metallurgical iron powder Ancorsteel 1000B using cadmium and zinc coatings to protect underlying substrate*, International Journal of Electrochemical Science, **2013**; 8 (4): 5108-5120/ Cod: PN-II-RU-PRECISI-2013-7-3109 – **aplicant**.

5. A. Samide, B. Tutunaru, C. Ionescu, **C. Tigae**, *Electrochemical study of the haematoxylin inhibition activity to control carbon steel corrosion in natrium nitrate solution*, International Journal of Electrochemical Science, 8(3): **2013**; 3589-3601/ Cod: PN-II-RU-PRECISI-2013-7-3083 – **aplicant**.

10. Proiecte Rose necompetitive

1. Implementarea unei strategii specifice de retenție a studenților din domeniul științelor exacte – **director de proiect - 2017-2019 – valoare 150.000 euro.**



11. Proiecte POCU

1. Stagii de practică pentru studenții Facultății de Științe – **membru în echipă** – 2018-2020.

12. Alte contribuții științifice

Citări/h-index

Web of Science: 177 citări (fără autocitări); h-index: 9

Scopus: 291 citări; h-index: 10

Google Scholar: 387 citări; h-index: 10

Data

3.02.2025

Semnătura

