

Lista de lucrări

Teza de doctorat: *Noi Polimeri de Coordinație Încorporând Liganzi Polipirazolici Rígizi și Flexibili cu Metale Tranzitionale. Microporozitate, Rezistență Termică, Fotoluminiscentă și Acțiune Antibacteriană* (2010 – 2013, Ciclul al XXV-lea). Departamentul de Științe Chimice, Universitatea din Camerino, Italia. Conducători: Prof. dr. Claudio Pettinari și Prof. dr. Fabio Marchetti. <https://pubblicazioni.unicam.it/handle/11581/401708?mode=full.1041>

1. Publicații științifice

1.1. Cărți și/sau capitole de carte

1. **Aurel Tabacaru, Simona Butan**, *Chimie generală: note de seminar și exerciții*, Galați University Press, Galați, Romania, **2021**, ISBN 978-606-696-212-4.
2. **Aurel Tabacaru**, *Coordination polymers incorporating poly(pyrazole)-type ligands*, Lambert Academic Publishing, Saarbrücken, Germany, **2017**, ISBN 978-3-330-06582-6.

1.2. Articole ISI

1. Nertil Khaferaj, **Aurel Tabacaru**, Claudio Pettinari, Kostiantyn V. Domasevitch, Simona Galli, „*Synthesis and structural characterization of new metal azolate/carboxylate frameworks incorporating the 1-H-pyrazol-3,4,5-tricarboxylate ligand*”, *Inorganica Chimica Acta* **2023**, 544, 121236. DOI: 10.1016/j.ica.2022.121236. <https://www.sciencedirect.com/science/article/pii/S0020169322004480?via%3Dihub>
2. **Aurel Tabacaru**, Simona Butan, Romica Cretu, „*Colloidal matter separation of industrial wastewaters from Galati city area by semipermeable membranes*”, *Ovidius University Annals of Chemistry* **2022**, 33(1), 56-63. DOI: 10.2478/auoc-2022-0008. <http://anale-chimie.univ-ovidius.ro/wp-content/uploads/2022/04/Article-8-2022.pdf>
3. Mihaela Cudalbeanu, David Peitinho, Francisco Silva, Rosa Marques, Teresa Pinheiro, Ana Ferreira, Fernanda Marques, António Paulo, Catarina Soeiro, Sílvia Andreia Sousa, Jorge Humberto Leitão, **Aurel Tabacaru**, Sorin Marius Avramescu, Rodica Mihaela Dinica, Maria Paula Cabral Campello, „*Sono-biosynthesis and characterization of AuNPs from Danube Delta Nymphaea alba root extracts and their biological properties*”, *Nanomaterials* **2021**, 11(6), 1562. DOI: 10.3390/nano11061562. <https://www.mdpi.com/2079-4991/11/6/1562>
4. Federica Bertolotti, **Aurel Tabacaru***, Viorica Musat, Nicolae Tigau, Antonio Cervellino, Norberto Masciocchi, Antonietta Guagliardi, „*Band gap narrowing in silane-grafted ZnO nanocrystals. A comprehensive study by wide-angle X-ray total scattering methods*”, *Journal of Physical Chemistry C* **2021**, 125(8), 4806-4819. DOI: 10.1021/acs.jpcc.0c10502. <https://pubs.acs.org/doi/abs/10.1021/acs.jpcc.0c10502>
5. Fernanda Marques, **Aurel Tabăcaru**, Mariana Bușilă, Teresa Pinheiro, António P. A. Matos, „*Modification of ZnO nanoparticles with silanes enables their application as anticancer agents*”, *Annals of Medicine* **2021**, 53:sup1, S43, DOI: 10.1080/07853890.2021.1896916. <https://www.tandfonline.com/doi/abs/10.1080/07853890.2021.1896916>
6. Mariana Busila, **Aurel Tabacaru***, Viorica Musat, Bogdan Stefan Vasile, Ionela Andreea Neacsu, Teresa Pinheiro, Catarina Roma-Rodrigues, Pedro V. Baptista, Alexandra R. Fernandes, António P. Matos, Fernanda Marques, „*Size-dependent biological activities of fluorescent organosilane-modified zinc oxide nanoparticles*”, *Journal of Biomedical Nanotechnology* **2020**, 16(2), 137-152. DOI: 10.1166/jbn.2020.2882. <https://www.ingentaconnect.com/content/asp/jbn/2020/00000016/00000002/art00001>
7. **Aurel Tabacaru***, Rais Ahmad Khan, Giulio Lupidi, Claudio Pettinari, „*Synthesis, characterization and assessment of the antioxidant activity of Cu(II), Zn(II) and Cd(II) complexes derived from scorpionate ligands*”, *Molecules* **2020**, 25(22), 5298. DOI: 10.3390/molecules25225298. <https://www.mdpi.com/1420-3049/25/22/5298/htm>
8. **Aurel Tabacaru**, Andreea Veronica Botezatu Dediu, Rodica Mihaela Dinica, Geta Carac, Vasile Basliu, Maria Paula Cabral Campello, Francisco Silva, Catarina I.G. Pinto, Joana F. Guerreiro, Marta Martins, Filipa Mendes, Fernanda Marques, „*Biological properties of a new mixed lanthanide(III) complex incorporating a dipyrindinium ylide*”, *Inorganica Chimica Acta* **2020**, 506, 119517. DOI: 10.1016/j.ica.2020.119517. <https://www.sciencedirect.com/science/article/pii/S002016931931655X?via%3Dihub>



9. Nertil Xhaferaj, **Aurel Tabacaru***, Marco Moroni, Ganna A. Senchyk, Kostiantyn V. Domasevitch, Claudio Pettinari, Simona Galli, „New coordination polymers of zinc(II), copper(II) and cadmium(II) with 1,3-bis(1,2,4-triazol-4-yl)adamantane”, *Inorganics* **2020**, 8(11), 60. DOI: 10.3390/inorganics8110060. <https://www.mdpi.com/2304-6740/8/11/60>
10. **Aurel Tabacaru***, Claudio Pettinari, Mariana Busila, Rodica Mihaela Dinica, „New antibacterial silver(I) coordination polymers based on a flexible ditopic pyrazolyl-type ligand”, *Polymers* **2019**, 11(10), 1686. DOI: 10.3390/polym11101686. <https://www.mdpi.com/2073-4360/11/10/1686>
11. **Aurel Tabacaru**, Valentina Colombo, Constantin Apetrei, „Development of sensor based on copper(II) thiocyanate pyridine polymeric complex for detection of catechol”, *IEEE Sensors Journal* **2019**, 19(22), 10198-10206. DOI: 10.1109/JSEN.2019.2927283. <https://ieeexplore.ieee.org/document/8756163>
12. **Aurel Tabacaru**, Andreea Veronica Dediu Botezatu, Georgiana Horincar, Bianca Furdui, Rodica Mihaela Dinica, „Green accelerated synthesis, antimicrobial activity and seed germination test of quaternary ammonium salts of 1,2-bis(4-pyridyl)ethane”, *Molecules* **2019**, 24(13), 2424. DOI: 10.3390/molecules24132424. <https://www.mdpi.com/1420-3049/24/13/2424>
13. **Aurel Tabacaru***, Rodica Mihaela Dinica, Mihaela Cudalbeanu, Cristina Mihaela Nicolescu, Marius Bumbac, „Catalytic effect of photoluminescent zinc oxide nanoparticles formed in the presence of quaternary ammonium salts”, *Materials* **2019**, 12(13), 2066. DOI: 10.3390/ma12132066. <https://www.mdpi.com/1996-1944/12/13/2066>
14. Rais Ahmad Khan, **Aurel Tabacaru***, Farman Ali, Bon H. Koo, „Anticancer and antimicrobial properties of inorganic compounds/nanomaterials”, *Bioinorganic Chemistry and Applications* **2019**, 2019, ID 6019632. DOI: 10.1155/2019/6019632. <https://www.hindawi.com/journals/bca/2019/6019632/>
15. **Aurel Tabacaru**, Claudio Pettinari, Simona Galli, „Coordination polymers and metal-organic frameworks built up with poly(tetrazolate) ligands”, *Coordination Chemistry Reviews* **2018**, 372, 1-30. DOI: 10.1016/j.ccr.2018.05.024. <https://www.sciencedirect.com/science/article/pii/S0010854518301279>
16. Andreea Carac, Rica Boscencu, Rodica Mihaela Dinica, Joana Guerreiro, Francisco Silva, Fernanda Marques, Maria Paula Cabral Campello, Calin Moise, Oana Brincoveanu, Marius Enachescu, Geta Carac, **Aurel Tabacaru***, „Synthesis, characterization and antitumor activity of two new dipyridinium ylide based lanthanide(III) complexes”, *Inorganica Chimica Acta* **2018**, 480, 83-90. DOI: 10.1016/j.ica.2018.05.003. <https://www.sciencedirect.com/science/article/pii/S0020169317317541>
17. **Aurel Tabacaru**, Bianca Furdui, Ioana Otilia Ghinea, Geta Carac, Rodica Mihaela Dinica, „Recent advances in click chemistry reactions mediated by transition metal based systems”, *Inorganica Chimica Acta* **2017**, 455, 329-349. DOI: 10.1016/j.ica.2016.07.029. <http://www.sciencedirect.com/science/article/pii/S0020169316304078>
18. Claudio Pettinari, **Aurel Tabacaru**, Simona Galli, „Coordination polymers and metal-organic frameworks based on poly(pyrazole)-type ligands”, *Coordination Chemistry Reviews* **2016**, 307, 1-31. DOI: 10.1016/j.ccr.2015.08.005. <http://www.sciencedirect.com/science/article/pii/S0010854515002751>
19. **Aurel Tabacaru**, Nertil Xhaferaj, Luisa M.D.R.S. Martins, Elisabete C.B.A. Alegria, Rogerio S. Chay, Carlotta Giacobbe, Konstantin V. Domasevitch, Armando J.L. Pombeiro, Simona Galli, Claudio Pettinari, „Metal azolate/carboxylate frameworks as catalysts in oxidative and C-C coupling reactions”, *Inorganic Chemistry* **2016**, 55(12), 5804-5817. DOI: 10.1021/acs.inorgchem.5b02997. <http://pubs.acs.org/doi/abs/10.1021/acs.inorgchem.5b02997>
20. Elisa Lavigna, Nertil Xhaferaj, **Aurel Tabacaru***, Marco Lamperti, Luca Nardo, Massimo Mella, Claudio Pettinari, Simona Galli, „Investigating the structural features and spectroscopic properties of bis(tetrazolato)-based coordination polymers”, *Crystal Growth & Design* **2016**, 16(11), 6390-6404. DOI: 10.1021/acs.cgd.6b01056. <http://pubs.acs.org/doi/abs/10.1021/acs.cgd.6b01056>
21. **Aurel Tabacaru**, Viorica Musat, Rodica M. Dinica, Constantin Gheorghies, „Catalytic effect of zinc oxide nanoparticles prepared through assisted modification with a diquaternary salt of bis(pyridinium)”, *Revista de Chimie (Bucharest)* **2016**, 67(8), 1508-1512. http://www.revistadechimie.ro/article_eng.asp?ID=5128
22. **Aurel Tabacaru**, Viorica Musat, Nicolae Tigau, Bogdan Stefan Vasile, Vasile-Adrian Surdu, „Vinyltrimethoxysilane-modified zinc oxide quantum dots with tuned optical properties”, *Applied Surface Science* **2015**, 359, 766-773. DOI: 10.1016/j.apsusc.2015.10.175. <http://www.sciencedirect.com/science/article/pii/S0169433215025945>
23. **Aurel Tabacaru**, Simona Galli, Claudio Pettinari, Norberto Masciocchi, Thomas M. McDonald, Jeffrey R. Long, „Ni(II) and Cu(I,II)-based metal-organic frameworks incorporating an extended tris-pyrazolate linker”, *CrystEngComm* **2015**, 17, 4992-5001. DOI: 10.1039/C5CE00561B.

- <http://pubs.rsc.org/en/Content/ArticleLanding/2015/CE/c5ce00561b#!divAbstract>
24. Aurel Tabacaru*, Mariana Busila, Viorica (Ghisman) Plescan, Viorica Musat, „Photocatalytic study of organosilane modified zinc oxide nanoparticles”, *Ovidius University Annals of Chemistry* **2015**, 26(2), 61-66. DOI: 10.1515/auoc-2015-0012. <https://content.sciendo.com/view/journals/auoc/26/2/article-p61.xml>
 25. Viorica Musat, Aurel Tabacaru, Vasile Stefan Bogdan, Vasile-Adrian Surdu, „Size-dependent photoluminescence of zinc oxide quantum dots through organosilane functionalization”, *RSC Advances* **2014**, 4, 63128-63136. DOI: 10.1039/C4RA10851E. <http://pubs.rsc.org/is/content/articlelanding/2014/ra/c4ra10851e/unauth#!divAbstract>
 26. Graham A. Bowmaker, John V. Hanna, Scott P. King, Fabio Marchetti, Claudio Pettinari, Adriano Pizzabiocca, Brian W. Skelton, Alexandre N. Sobolev, Aurel Tabacaru, Allan H. White, „Complexes of copper(I) thiocyanate with monodentate phosphine and pyridine ligands and the P(N)-donor diphenyl(2-pyridyl)phosphine”, *European Journal of Inorganic Chemistry* **2014**, 6104-6116. DOI: 10.1002/ejic.201402791. <http://onlinelibrary.wiley.com/doi/10.1002/ejic.201402791/abstract>
 27. Aurel Tabacaru*, Claudio Pettinari, Fabio Marchetti, Simona Galli, Norberto Masciocchi, „Bis(pyrazolato)-based MOFs fabricated with 4,4'-bis((3,5-dimethyl-1H-pyrazol-4-yl)methyl)biphenyl and late transition metals”, *Crystal Growth & Design* **2014**, 14, 3142-3152. DOI: 10.1021/cg500459v. <http://pubs.acs.org/doi/abs/10.1021/cg500459v>
 28. Simona Galli, Carlotta Giacobbe, Aurel Tabacaru, Nertil Xhaferaj, Claudio Pettinari, „Unsolvated ruthenium(II) dichloride: the beta polymorph”, *Journal of Molecular Structure* **2014**, 1067, 233-238. DOI: 10.1016/j.molstruc.2014.03.046. <http://www.sciencedirect.com/science/article/pii/S0022286014003147>
 29. Aurel Tabacaru*, Claudio Pettinari, Ivan Timokhin, Fabio Marchetti, Francisco Carrasco-Marín, Francisco José Maldonado-Hódar, Simona Galli, Norberto Masciocchi, „Enlarging an isoreticular family: 3,3',5,5'-tetramethyl-4,4'-bipyrazolato-based porous coordination polymers”, *Crystal Growth & Design* **2013**, 13, 3087-3097. DOI: 10.1021/cg400495w. <http://pubs.acs.org/doi/abs/10.1021/cg400495w>
 30. Graham A. Bowmaker, Corrado Di Nicola, Effendy, John V. Hanna, Peter C Healy, Scott P. King, Fabio Marchetti, Claudio Pettinari, Ward T. Robinson, Brian W. Skelton, Alexandre N. Sobolev, Aurel Tabacaru, Allan H. White, „Oligo-nuclear silver(I) thiocyanate complexes with monodentate tertiary phosphine ligands, including novel 'cubane' and 'step' tetramer forms of AgSCN:PR₃ (1:1)₄”, *Dalton Transactions* **2013**, 42, 277-291. DOI: 10.1039/C2DT31853A. <http://pubs.rsc.org/en/content/articlelanding/2013/dt/c2dt31853a/unauth#!divAbstract>
 31. Aurel Tabacaru, Claudio Pettinari, Fabio Marchetti, Corrado di Nicola, Konstantin V. Domasevitch, Simona Galli, Norberto Masciocchi, Stefania Scuri, Iolanda Grappasonni, Mario Cocchioni, „Antibacterial action of 4,4'-bipyrazolyl-based silver(I) coordination polymers embedded in PE disks”, *Inorganic Chemistry* **2012**, 51(18), 9775-9788. DOI: 10.1021/ic3011635. <http://pubs.acs.org/doi/abs/10.1021/ic3011635>
 32. Claudio Pettinari, Aurel Tabacaru, Ishtvan Boldog, Konstantin V. Domasevitch, Simona Galli, Norberto Masciocchi, „Novel coordination frameworks incorporating the 4,4'-bipyrazolyl ditopic ligand”, *Inorganic Chemistry* **2012**, 51(9), 5235-5245. DOI: 10.1021/ic3001416. <http://pubs.acs.org/doi/abs/10.1021/ic3001416>
 33. Graham A. Bowmaker, John V. Hanna, Robert D. Hart, Peter C. Healy, Scott P. King, Fabio Marchetti, Claudio Pettinari, Brian W. Skelton, Aurel Tabacaru, Allan H. White, „Mechanochemical and solution synthesis, X-ray structure and IR and ³¹P solid state NMR spectroscopic studies of copper(I) thiocyanate adducts with bulky monodentate tertiary phosphine ligands”, *Dalton Transactions* **2012**, 41, 7513-7525. DOI: 10.1039/c2dt30579h. <http://pubs.rsc.org/en/Content/ArticleLanding/2012/DT/c2dt30579h#!divAbstract>
 34. Bianca Furdui, Rodica M. Dinica, Aurel Tabacaru, Claudio Pettinari, „Synthesis and Physico-chemical Properties of a Novel Series of Aromatic Electron Acceptors Based on N-Heterocycles”, *Tetrahedron* **2012**, 68(31), 6164-6168. DOI:10.1016/j.tet.2012.05.077. <http://www.sciencedirect.com/science/article/pii/S0040402012007958>
 35. Bianca Furdui, Oana Constantin, Aurel Tabacaru, Rodica M. Dinica, „New Bis-Pyridinium Diquaternary Salts with Antimicrobial Properties”, *Revista de Chimie (Bucharest)* **2012**, 63(7), 667-671. <http://www.revistadechimie.ro/pdf/FURDUI%20B.pdf%207%2012.pdf>
 36. Aurel Tabacaru*, Claudio Pettinari, Riccardo Pettinari, Mariglen Angjellari, „Rigidity versus flexibility upon the porosity degree of new metal-organic polymeric materials”, *Revue Roumaine de Chimie* **2012**, 57(9-10), 871-875. http://revroum.lew.ro/wp-content/uploads/2012/RRCh_9-10_2012/Art%2013.pdf
 37. Aurel Tabacaru*, Claudio Pettinari, Norberto Masciocchi, Simona Galli, Fabio Marchetti, Mariglen Angjellari, „Pro-porous coordination polymers based on 1,4-bis((3,5-dimethyl-1H-pyrazol-4-yl)methyl)benzene with late transition metals”, *Inorganic Chemistry* **2011**, 50(22), 11506-11513. DOI: 10.1021/ic2013705. <http://pubs.acs.org/doi/abs/10.1021/ic2013705>



1.3. Articole BDI

1. Nertil Khaferaj, **Aurel Tabacaru***, Claudio Pettinari, „*Synthesis and characterization of new silver(I) coordination polymers incorporating a bis(triazolyl)-type ligand*”, Annals of the “Dunarea de Jos” University of Galati, Romania, Fascicle II – Mathematics, Physics, Theoretical Mechanics, Year X (XLI) **2018**, No. 2, 128-134, ISSN 2067-2071. DOI: 10.35219/ann-ugal-math-phys-mec.2018.2.02.
<http://www.gup.ugal.ro/ugaljournals/index.php/math/article/view/2510>
2. Orleans Ngomo, Joseph Sieliechi, Jean Bosco Tchatchueng, Richard Kamga, **Aurel Tabacaru**, Rodica Dinica, Mirela Praisler, „*The effect of chlorhydric acid activation on the physico-chemical and rheological properties of a kaolinite*”, *Int. J. Sci. Eng. Technol.* **2014**, 3(7), 876-879.
<https://www.indianjournals.com/ijor.aspx?target=ijor:ijset1&volume=3&issue=7&article=010>
3. Claudio Pettinari, Corrado di Nicola, **Aurel Tabacaru***, Rodica Dinica, „*Synthesis of the [Cu(NCS)(py)₂(PPh₃)] coordination compound with photoluminescent properties*”, The Annals of the “Dunarea de Jos” University of Galati, Romania, Fascicle II – Mathematics, Physics, Chemistry, Informatics (CD-ROM), Year III (XXXII) **2009**, 195-199, ISSN 2067-2071.

1.4. Articole publicate în volume de conferințe internaționale

1. Orleans Ngomo, Joseph Marie Sieliechi, Jean Bosco Tchatchueng, Richard Kamga, **Aurel Tabacaru**, Rodica Dinica, Mirela Praisler, „*Differences between structural, textural and rheological properties of two Cameroonian mineral clays used as cosmetic mask*”. Proceedings of the 2014 International Conference on Chemistry and Chemical Engineering (CCE 2014), 17-21 July **2014**, Santorini, Greece. Published in: Advances in Environmental Sciences, Development and Chemistry, pp 425-431, ISBN: 978-1-61804-239-2.
<http://www.europment.org/library/2014/santorini/bypaper/ENVIR/ENVIR-65.pdf>

2. Participări la conferințe naționale și internaționale

1. **Aurel Tabacaru**, „*Zinc(II) complexes containing pyridyl-type ligands for fluorescent detection of antiinflammatory drugs*” (poster presentation), The 17th International Conference of Physical Chemistry (ROMPHYSICHEM-17), 25-27 September **2023**, Bucarest, Romania. Book of Abstracts, pag. 109.
2. **Aurel Tabacaru**, „*Surface modification of Zinc Oxide nanoparticles with organosilanes*” (invited lecture), Scientific Conference of Doctoral Schools (SCDS-UDJG), 11th Edition, 8-9 June **2023**, Galati, Romania. Book of Abstracts, pag. 45.
3. Alexandru Cornel Dorobat, Nicolae Petrache, **Aurel Tabacaru**, „*Photoluminescent copper(I) and zinc(II) complexes for fluorescent detection of antibiotic and antiinflammatory drugs*” (oral presentation), Scientific Conference of Doctoral Schools (SCDS-UDJG), 11th Edition, 8-9 June **2023**, Galati, Romania. Book of Abstracts, pag. 111.
4. **Aurel Tabacaru**, Nertil Khaferaj, Claudio Pettinari, Kostiantyn V. Domasevitch, Simona Galli, „*New Co(II) and Cd(II) azolate/carboxylate frameworks*” (poster presentation), A XXXVI-a Conferință Națională de Chimie, 4-7 October **2022**, Călimănești-Căciulata, Vâlcea, Romania. Book of abstracts, pag. 94.
5. Nertil Khaferaj, **Aurel Tabacaru**, Claudio Pettinari, Kostiantyn V. Domasevitch, Simona Galli, „*Synthesis and structural characterization of new metal azolate/carboxylate frameworks incorporating the 1-H-pyrazol-3,4,5-tricarboxylate ligand*” (oral presentation), Scientific Conference of Doctoral Schools (SCDS-UDJG), 10th Edition, 9-10 June **2022**, Galati, Romania. Book of Abstracts, pag. 90.
6. **Aurel Tabacaru**, Rais Ahmad Khan, Giulio Lupidi, Claudio Pettinari, „*Evaluation of the antioxidant activity of new scorpionate complexes*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG), 9th Edition, 10-11 June **2021**, Galati, Romania. Book of Abstracts, pag. 108.
7. Andreea Veronica Dediu (Botezatu), Anna Cazanevscaia (Busuioc), **Aurel Tabacaru**, Bianca Furdui, Martine Demeunynck, Rodica Mihaela Dinica, „*Novel indolizine derivatives synthesis and the investigation of their fluorescent properties*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG), 9th Edition, 10-11 June **2021**, Galati, Romania. Book of Abstracts, pag. 109.
8. **Aurel Tabacaru**, Rodica Mihaela Dinica, Mariana Busila, Claudio Pettinari, „*New silver(I) coordination polymers with antibacterial action against Escherichia coli and Staphylococcus aureus*” (oral presentation), Polymer

- Science and Composite Materials Conference (Polymer Connect 2020), 26-28 February 2020, Lisbon, Portugal. Book of Abstracts, pag. 24.
9. Raluca Maghinici, **Aurel Tabacaru**, „*New photoluminescent copper(I) thiocyanate complexes based on mixed phosphorus- and nitrogen-donor ligands*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG), 8th Edition, 18-19 June 2020, Galati, Romania. Book of Abstracts, pag. 114.
 10. **Aurel Tabacaru**, Valentina Colombo, Constantin Apetrei, „*Synthesis, characterization and electrochemical behavior of a copper(II) thiocyanate pyridine polymeric complex*” (poster presentation), 47th IUPAC World Chemistry Congress, 7-12 July 2019, Paris, France. Abstract number: 100895. Poster number: P560. Book of Abstracts, pag. 3015.
 11. **Aurel Tabacaru**, Rodica Mihaela Dinica, Mariana Busila, Claudio Pettinari, „*Novel antibacterial silver(I) coordination polymers based on a flexible bis(pyrazolyl)-type ligand*” (poster presentation), 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE21), 4-7 September 2019, Constanta – Mamaia, Romania.
 12. **Aurel Tabacaru**, Nertil Xhaferaj, Claudio Pettinari, Simona Galli, Luca Nardo, „*Metal-organic frameworks incorporating a flexible poly(azolato)-based spacer*” (poster presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG), 7th Edition, 13-14 June 2019, Galati, Romania. Book of Abstracts, pag. 247.
 13. Andreea Veronica Dediu (Botezatu), **Aurel Tabacaru**, Bianca Furdui, Rodica Mihaela Dinica, „*Novel indolizine derivatives as inhibitors of acetylcholinesterase*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG), 7th Edition, 13-14 June 2019, Galati, Romania. Book of Abstracts, pag. 114.
 14. Federica Bertolotti, **Aurel Tabacaru**, Viorica Musat, Antonio Cervellino, Norberto Masciocchi, Antonietta Guagliardi, „*A comprehensive structural and morphological characterization of ZnO nanocrystals with tunable band gap*” (poster presentation), The 3rd Joint Conference of the Italian Crystallographic Association (AIC) and of the Italian Synchrotron Radiation Society (SILS), 25-28 June 2018, Rome, Italy. Book of Abstracts, pag. 143.
 15. Georgiana Horincar, Bianca Furdui, **Aurel Tabacaru**, Rodica Mihaela Dinica, „*Green accelerated synthesis of antimicrobial quaternary ammonium salts*” (poster presentation), A XXXV-a Conferinta Nationala de Chimie cu participare internationala, 2-5 October 2018, Calimanesti-Caciulata, Valcea, Romania. Book of abstracts, pag. 36.
 16. Mariana Busila, Viorica Musat, **Aurel Tabacaru**, Boris Mahltig, „*Optical, photocatalytic and antibacterial properties of GPTMS-functionalized ZnO DQs*” (poster presentation), The 2018 Fall Meeting of the European Materials Research Society (E-MRS), Symposium L: Advances in nanoparticles: synthesis, characterization, theoretical modelling, and applications, 17-20 September 2018, Warsaw, Poland.
 17. Mirela Catalina Stan, Silvia Noaptes, Constantin Apetrei, **Aurel Tabacaru**, „*Synthesis and characterization of a pyridyl-based copper(II) thiocyanate coordination polymer*” (poster presentation), The XIVth International Conference Students for Students – „Chemistry, our superpower!”, 25-30 April 2017, Cluj-Napoca, Romania. Book of Abstracts, pag. 116.
 18. Madalina Constantinescu, George Catalin Moisi, **Aurel Tabacaru**, „*New coordination polymers built with a flexible bis(tetrazole)-type ligand*” (poster presentation), The XIVth International Conference Students for Students – „Chemistry, our superpower!”, 25-30 April 2017, Cluj-Napoca, Romania. Book of Abstracts, pag. 114.
 19. Simona Galli, **Aurel Tabacaru**, Nertil Xhaferaj, Luísa M.D.R.S. Martins, Elisabete C.B.A. Alegria, Rogério S. Chay, Carlotta Giacobbe, Armando J.L. Pombeiro, Claudio Pettinari, „*Metal Azolate/Carboxylate Frameworks as Catalyst sin Oxidative and C-C Coupling Reactions*” (oral presentation), IV Meeting of the Italian and Spanish Crystallographic Associations (MISCA), 21-25 June 2016, Tenerife, Spain.
 20. **Aurel Tabacaru**, Rodica Mihaela Dinica, Viorica Musat, „*Zinc oxide nanoparticles as catalyst in the in situ transformation of a bis(pyridinium) diquaternary salt*” (poster presentation), A XXXIV-a Conferinta Nationala de Chimie, 4-7 October 2016, Caciulata, Romania.
 21. **Aurel Tabacaru**, Rodica Mihaela Dinica, Angela Daciu, Geta Carac, „*Preparation and characterization of some lanthanide compounds with pyridinium ligands as thin films with sensing potential*” (poster presentation), A XXXIV-a Conferinta Nationala de Chimie, 4-7 October 2016, Caciulata, Romania.
 22. **Aurel Tabacaru**, Viorica Musat, Nicolae Tigau, „*Novel hybrid zinc oxide nanoparticles with tuned optical properties through organosilane surface modification*” (poster presentation), The 8th International Conference on Advanced Materials, ROCAM 2015, 7-10 July 2015, Bucharest, Romania. Book of Abstracts, pag. 60.
 23. Viorica Musat, **Aurel Tabacaru**, Mariana Busila, Nicolae Tigau, „*Hybrid ZnO-nanostructures materials with photoluminescent and antimicrobial properties*” (oral presentation), Seminarul National de Nanostiinta si Nanotehnologie, Editia a 14-a, 26 Martie 2015, Academia Romana, Bucharest, Romania.

24. Elisa Lavigna, Nertil Xhaferaj, **Aurel Tabacaru**, Luca Nardo, Simona Galli, Claudio Pettinari, „*Transition metal-based coordination polymers with a flexible poly(azolato) tecton: structural aspects and spectroscopic properties*” (poster presentation), 2nd ICSU/IUPAC Workshop on Crystal Engineering, August 30th – September 1st, **2015**, Como, Italy. Book of Abstracts, pag. 94.
25. **Aurel Tabacaru**, Viorica Musat, Rodica M. Dinica, Constantin Gheorghies, „*Assisted modification of zinc oxide nanoparticles with a diquatery salt of bis(pyridinium)*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG) in joint with UGALnano5 Symposium, 4-5 June **2015**, Galati, Romania. Book of Abstracts, pag. 77.
26. Viorica Musat, **Aurel Tabacaru**, „*Organosilane-modified zinc oxide nanoparticles with tuned optical properties*” (poster presentation), The 2015 Spring Conference of the European Materials Research Society (E-MRS), Symposium I: Semiconductor nanostructures towards electronic & opto-electronic device applications V, 11-15 May **2015**, Lille, France.
27. Nertil Xhaferaj, **Aurel Tabacaru**, Elisa Lavigna, Simona Galli, Luca Nardo, Claudio Pettinari, „*Zinc(II), mercury(II) and silver(I) coordination polymers containing a flexible bis(tetrazolato)-based tecton*” (poster presentation), 6th EuCheMS Conference on Nitrogen Ligands, 13-17 September **2015**, Beaune, France. Book of Abstracts, pag. 257.
28. Orleans Ngomo, Joseph Marie Sieliechi, Jean Bosco Tchatchueng, Richard Kamga, **Aurel Tabacaru**, Rodica Dinica, Mirela Praisler, „*Differences between structural, textural and rheological properties of two Cameroonian mineral clays used as cosmetic mask*”. The 2014 International Conference on Chemistry and Chemical Engineering (CCE 2014), 17-21 July **2014**, Santorini, Greece.
29. **Aurel Tabacaru**, Claudio Pettinari, Fabio Marchetti, Simona Galli, Nertil Xhaferaj, Andrea Rossin, Maurizio Peruzzini, „*Novel coordination polymers based on bis- and tris-pyrazolyl ligands*” (oral presentation), First European Conference on Smart Inorganic Polymers (EUSIP 2014), 21-23 September **2014**, Maribor, Slovenia. Book of Abstracts: pag. 38.
30. **Aurel Tabacaru**, Viorica Ghisman, Alexandru Alexa, Nicolae Tigau, Viorica Musat, „*Photoluminescent hybrid materials based on ZnO*” (oral presentation), Scientific Conference of Doctoral Schools (CSSD-UDJG) in joint with UGALnano4 Symposium, 15-16 May **2014**, Galati, Romania. Book of Abstracts, pag. 39.
31. Nertil Xhaferaj, **Aurel Tabacaru**, Claudio Pettinari, Fabio Marchetti, Simona Galli, Norberto Masciocchi, Konstantin V. Domasevitch, „*1,3-bis(1,2,4-triazolyl)adamante-based coordination polymers*” (poster), 4th Scientific Day of the School of Science and Technology, 11 June **2014**, Camerino, Italy. Book of Abstracts, pag. 25.
32. **Aurel Tabacaru**, Nertil Xhaferaj, Riccardo Pettinari, Fabio Marchetti, Claudio Pettinari, Massimiliano Cuccioloni, Anna Maria Eleuteri, „*Dinuclear arene ruthenium(II) complexes with 3,3',5,5'-tetramethyl-4,4'-bipyrazole and modulation of proteasome activity*” (poster), 9th International School of Organometallic Chemistry, 30 August – 3 September **2013**, Camerino, Italia. Book of Abstracts, pag. 43.
33. **Aurel Tabacaru**, Claudio Pettinari, Ivan Timokhin, Fabio Marchetti, Francisco Carrasco-Marín, Francisco Jose Maldonado-Hódar, Simona Galli, Norberto Masciocchi, „*Enlarging an isorecticular family: 3,3',5,5'-tetramethyl-4,4'-bipyrazolato-based porous coordination polymers*” (poster), 3rd Scientific Day of the School of Science and Technology, 12 June **2013**, Camerino, Italy. Book of Abstracts, pag. 25.
34. Nertil Xhaferaj, **Aurel Tabacaru**, Claudio Pettinari, Fabio Marchetti, Riccardo Pettinari, Simona Galli, Norberto Masciocchi, Konstantin V. Domasevitch, „*Novel coordination frameworks incorporating 3,5-dimethyl-4-carboxypyrazole*” (poster), 3rd Scientific Day of the School of Science and Technology, 12 June **2013**, Camerino, Italy. Book of Abstracts, pag. 27.
35. **Aurel Tabacaru**, Claudio Pettinari, Fabio Marchetti, Corrado di Nicola, K. V. Domasevitch, Simona Galli, Norberto Masciocchi, Stefania Scuri, Iolanda Grappasonni, Mario Cocchioni, „*Novel silver(I) coordination polymers based on the 4,4'-bipyrazolyl ligand having powerful bactericide activity*” (poster), 244th ACS National Meeting & Exposition, August 19-23, **2012**, Philadelphia, Pennsylvania (USA). Division of Inorganic Chemistry (INOR), P-180.
36. **Aurel Tabacaru**, Claudio Pettinari, Norberto Masciocchi, Simona Galli, Fabio Marchetti, Corrado di Nicola, Riccardo Pettinari, Mariglen Angjellari, „*New metal-organic frameworks based on the flexible 1,4-bis((3,5-dimethyl-1H-pyrazol-4-yl)methyl)benzene and 4,4'-bis((3,5-dimethyl-1H-pyrazol-4-yl)methyl)biphenyl ligands with different transition metals*” (poster), 5th EuCheMS Conference on Nitrogen Ligands, 4-8 September **2011**, Granada, Spain. Conference Book, pag. 241.


37. Riccardo Pettinari, Fabio Marchetti, Claudio Pettinari, Corrado di Nicola, Ivan Timokhin, **Aurel Tabacaru**, Magda Monari, „*Metal-Assisted Formation of New Hydroxy(pyrazolyl)diphenylborate Ligands*” (poster), 8th International School of Organometallic Chemistry, 27-31 August **2011**, Camerino, Italy.
38. **Aurel Tabacaru**, Claudio Pettinari, Riccardo Pettinari, „*Rigidity versus flexibility upon the porosity degree of new metal-organic polymeric materials*”, The 10th International Conference on Colloids and Surface Chemistry, 9-11 June **2011** (oral presentation), Galati, Romania. Book of Abstracts, pag. 48.
39. Fabio Marchetti, Corrado di Nicola, **Aurel Tabacaru**, Mariglen Angjellari, „*New Luminescent Porous MOFs*” (poster), 1st Scientific Day of the School of Science and Technology, 8 June **2011**, Camerino, Italy. Book of Abstracts, pag. 24.
40. Orléans Ngomo, Rodica Dinica, Richard Kamga, Jean B. Tchatchueng, Mirela Praisler, **Aurel Tabacaru**, „*Etude du comportement rhéologique d'une argile camerounaise: Application à la dermo cosmétologie*” (poster), 1er Colloque Franco-Roumain de Chimie Medicinale, COFr-RoCM, October 7-8, **2010**, “Alexandru Ioan Cuza” University of Iasi, Romania. Book of Abstracts, pag. 57.
41. **Aurel Tabacaru**, Alessandro Marinelli, Claudio Pettinari, Fabio Marchetti, Corrado di Nicola, Norberto Masciocchi, “*Synthesis, Characterization and NH₃ Absorption of a New Coordination Polymer With Copper (II) and 4,4'-bipyrazolyl ligand*” (poster), 1st International Workshop on New Hybrid Metal-Organic Materials, 16-18 Jan. **2009**, Camerino, Italy.
42. Alessandro Marinelli, Claudio Pettinari, Augusto Cingolani, Fabio Marchetti, Adriano Pizzabiocca, Riccardo Pettinari, Corrado Di Nicola, **Aurel Tabacaru**, Norberto Masciocchi, “*Coordination Chemistry of Copper (II) and Cadmium (II) acetate with 4,4'-bipyrazolyl ligand. Construction of Supramolecular Networks*” (poster), 1st International Workshop on New Hybrid Metal-Organic Materials, 16-18 Jan. **2009**, Camerino, Italy.
43. **Aurel Tabacaru**, Alessandro Marinelli, Rodica Dinica, Claudio Pettinari, “*Synthesis, structural and spectroscopic characterization of new coordination polymers based on Cu(II), Cd(II) and 4,4'-bipyrazolyl ligand*” (oral presentation), 6th International Conference “Students for Students”, 10-12 April **2009**, Cluj Napoca, Romania.
44. Alessandro Marinelli, Corrado di Nicola, Claudio Pettinari, Adele Cerquetella, Norberto Masciocchi, **Aurel Tabacaru**, „*Nuovi polimeri di coordinazione contenenti leganti bi-pirazolici*”, Tirrenia (Pisa, Italy) 20-22 September **2009**, XXVIII Congresso Interregionale TUMA 2009, Book of Abstracts, pag. CO31.
45. **Aurel Tabacaru**, Claudio Pettinari, Corrado di Nicola, Rodica Dinica, “*Photoluminescent properties of [Cu(NCS)(py)₂(PPh₃)] coordination compound*” (oral presentation), 1st International Symposium on Applied Physics – Materials Science, Environment and Health (ISAP-1), 28-29 Nov. **2009**, Galati, Romania.
46. Rodica Dinica, Bianca Furdui, Ionel Tabacaru, **Aurel Tabacaru**, “*New N-heterocyclic compounds starting from substituted pyridines*” (oral presentation), 1st International Symposium on Applied Physics – Materials Science, Environment and Health (ISAP-1), 28-29 Nov. **2009**, Galati, Romania.
47. **Aurel Tabacaru**, Claudio Pettinari, Fabio Marchetti, Norberto Masciocchi, “*New Metal-Organic Frameworks Based on Copper(II) and Zinc(II) with 4,4'-bipyrazolyl ligand*” (poster), 1st International Symposium on Applied Physics – Materials Science, Environment and Health (ISAP-1), 28-29 Nov. **2009**, Galati, Romania.
48. **Aurel Tabacaru**, Steluta Gosav, “*ANN system and PCA method for the identification of illicit amphetamines using molecular descriptors database*” (poster), 1st International Symposium on Applied Physics – Materials Science, Environment and Health (ISAP-1), 28-29 Nov. **2009**, Galati, Romania.
49. **Aurel Tabacaru**, Rodica Dinica, Claudio Pettinari, Corrado di Nicola, „*Photoluminescent properties of new coordination compounds with copper(I)*” (poster), The 9th International Conference on Colloids and Surface Chemistry, 28-30 May **2008**, Galati, Romania. ISBN 973-8316-84-7.

3. Proiecte de cercetare

3.1. Director de proiecte de cercetare

[1] Proiect de cercetare postdoctorala “*Polimeri de coordinaie pe bază de argint pentru hârtie antibacteriană*” (SILVAPAPER), cod PN-III-P1-1.1-PD-2016-0409, 2018-2020, contract nr. 53/2018. Valoare proiect: 250.000 lei.

[2] Proiect individual de cercetare “*Noi complecsi moleculari metal-organici*” castigat prin competitia de granturi interne organizata de Universitatea „Dunarea de Jos” din Galati, 2018-2020, contract nr. GI-01/2018. Valoare proiect: 50.000 lei.

7 

3.2. Membru în proiecte de cercetare

- [1] PRIN 2010-2011 (2010BNZ3F2): *DESCARTES - Development of Energy-targeted Self-assembled supramolecular systems: a Convergent Approach through Resonant information Transfer between Experiments and Simulations*. Coordonator științific: Prof. dr. Maurizio Casarin (Universitatea din Padova, Italia). Responsabil științific: Prof. dr. Claudio Pettinari (Universitatea din Camerino, Italia).
- [2] FP7 263042/2011: *Printable Organic-Inorganic Transparent Semiconductor Devices (POINTS)*. Coordonator: Prof. dr. Viorica Mușat (Universitatea "Dunarea de Jos" din Galați, Romania).