

Universitatea Națională de Știință și Tehnologie POLITEHNICA BUCUREȘTI
Facultatea: INGINERIE CHIMICĂ ȘI BIOTEHNOLOGII
Departament: CHIMIE GENERALĂ
Conf. dr. ing. Tihan GrațIELa Teodora

LISTA
lucrărilor științifice în domeniul disciplinelor din postul didactic

(a) teza de doctorat;

T1. Gratiela Teodora Tihan, *Contribuții la studiul unor biomateriale polimerice: sinteză, caracterizare fizico-chimică și aplicații*, susținută în data de 04.05.2007.

(b) brevete de invenție

B 1. I. Bujor Ionescu, **G. T. Zgarian**, I. Demetrescu, H. Iovu, D. Iordachescu, *Compoziție biopolimerică și procedeu de obținere a acesteia*, Data eliberării: **30.03.2009**. BOPI nr. 3/2009. Număr patent: **RO122282-B1**.

B 2. **G. T. Tihan**, I. Bujor Ionescu, I. Demetrescu, A. Meghea, *Filme biopolimerice ternare*, Data eliberării: **30.03.2009**. BOPI nr. 3/2009. Număr patent: **RO122287-B1**.

B 3. Căprărescu S., Zgarian R.G., **Tihan G.T.**, Grumezescu A., *Membrane polimerice dopate și nedopate cu nanoparticule de dioxid de titan activate hidrotermal pentru tratarea apelor uzate*, A/00302/07.06.2024.

(c) cărți și capitole în cărți;

1. Tihan Gratiela Teodora, Badea Maria Nicoleta, Ionita Mioara Daniela, *Aplicatii de laborator si probleme de chimie pentru facultatile de profil mecanic*, Editura Politehnica Press, ISBN: 978-606-515-033-1, 117 pag., **2009**.

(d) articole / studii *în extenso*, publicate în reviste din fluxul științific internațional principal (*cotate / indexate ISI Thomson Reuters, sau indexate în alte Baze de Date Internationale - BDI specific domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță*)

- Ris 1. **Tihan, G.T.**; Ungureanu, C.; Rău, I.; Zgârian, R.G^{*}; Barbaresso, R.C.; Albu Kaya, M.G.; Dinu-Pîrvu, C.-E.; Ghica, M.V. Physical–Chemical Assessment and Antimicrobial Activity of Chlortetracycline-Loaded Collagen Sponges. *Materials* **2025**, *18*, 4029. <https://doi.org/10.3390/ma18174029>, **Q2 (FI=3.2/2025)**
- Ris 2. Caprarescu, S.; **Tihan, G.T.**, Zgârian*, R.G., Grumezescu, A.M., Lazau, C., Bandas, C., Atanase, L.I., Nicolae, C.A., Synthesis and Characterization of Cellulose Acetate/Polyethylene Glycol/Poly(Styrene)-b-Poly(4-Vinylpyridine) Membrane Embedded with Hydrotermally Activated TiO₂ Nanoparticles for Waste-Waters Treatment by Membrane Processes, *Polymers*, Vol. 17, Iss. , 4, ART. No. 446, **2025**, DOI 10.3390/polym17040446, WOS:001432586700001, FI=4,9/2025, **Q1**
- Ris 3. Ungureanu, C.; Zgârian, R.; **Tihan*, G.**; Fadeev V.; Exploring pathogenic bacteria in cheese: insights from microbial isolation studies, *U.P.B. Sci. Bull., Series B*, Vol. 86, Iss. 3, pp. 49-64, **2024**, WOS:001301114000004
- Ris 4. Ungureanu, C.; Răileanu, S.; Zgârian*, R.; **Tihan, G.**; Burnei, C. State-of-the-Art Advances and Current Applications of Gel-Based Membranes. *Gels* **2024**, *10*, 39. <https://doi.org/10.3390/gels10010039>, WOS:001149253000001, (IF=5/2023), **Q1**
- Ris 5. Cristian Daniel IOAN, Ileana RĂU, Mădălina Georgiana ALBU-KAYA, Roxana Gabriela ZGÂRIAN, **Gratiela Teodora TIHAN**, Cristina-Elena DINU-PÎRVU, Lăcrămioara POPA, Mihaela Violeta GHICA, *Collagen based sponges for veterinary applications*, **U.P.B. Sci. Bull., Series B**, Vol. 86, Iss. 1, pp. 135-144, **2024**, WOS:001196525500007, (IF=0,3/2023), **Q4**
- Ris 6. Ungureanu, C.; **Tihan*, G.**; Zgârian, R.*; Pandelea, G. *Bio-Coatings for Preservation of Fresh Fruits and Vegetables*, **Coatings**, **2023**, *13* (8), 1420. <https://doi.org/10.3390/coatings13081420>, WOS:001056542300001, **Q2**, (IF=3.4/2022-2023)
- Ris 7. Ungureanu, C, **Tihan, GT***, Zgarian, RG*, Fierascu, I, Baroi, AM, Raileanu, S, Fierascu, RC, *Metallic and Metal Oxides Nanoparticles for Sensing Food Pathogens-An Overview of Recent Findings and Future Prospects*, **Materials**, **2022**, 15(15), Article Number, 5374, DOI: 10.3390/ma15155374, WOS:000839164100001, **Q1**, (IF=3.748/2021)
- Ris 8. Ana-Maria Manea-Saghin, **Gratiela Teodora Tihan**, Roxana Gabriela Zgarian*, Carla-Cezarina Pădurețu, François Kajzar, Linear and non-linear optical properties of gelatin membranes doped with photoresponsive berries extracts, **Optical Materials** **108** Article number **110429**, **2020** **Q2** 10.1016/j.optmat.2020.110429, WOS 000587290900002, FI=3.745
- Ris 9. Simona Caprarescu, Roxana Gabriela Zgârian, **Gratiela Teodora Tihan***, Violeta Purcar, Eugenia Eftimie Totu, Cristina Modrojan, Anita-Laura Chiriac, Cristian Andi Nicolae, *Biopolymeric Membrane Enriched with Chitosan and Silver for Metallic Ions Removal*, **Polymers** **2020**, 12, 1792; doi:10.3390/polym12081792, **Q1** WOS:000567278500001, (FI=4.967)
- Ris 10. Daniel-Cristian Ioan, Ileana Rau, Madalina Georgiana Albu Kaya, Nicoleta Radu, Marinela Bostan, Roxana Gabriela Zgârian, **Gratiela Teodora Tihan**, Cristina-Elena Dinu-Pîrvu, Alina Lupuliasa and Mihaela Violeta Ghica, *Ciprofloxacin-Collagen-Based Materials with Potential Oral Surgical Applications*, **Polymers**, **2020**, 12, 1915; doi:10.3390/polym12091915, **Q1**, WOS:000582022800001, (FI=4.967)
- Ris 11. **G. T. Tihan**, M. Mindroiu, I. Rau, L. M. Nóbrega de Assis, A. Pawlicka^b, R. G. Zgarian*, The electrochromic device performance with DNA based electrolyte, **Materials Chemistry and Physics**, Volume 241, **2020**, 122349, <https://doi.org/10.1016/j.matchemphys.2019.122349>, **Q2**, FI = 4.778, ISSN 0254-0584, WOS: 000514749500029
- Ris 12. **G. T. Tihan**, I. Rău ¹, R. G. Zgârian*, C. Ungureanu*, R. C. Barbaresso, M. G. Albu Kaya, C. Dinu-Pîrvu, M. V. Ghica, *Oxytetracycline versus Doxycycline Collagen Sponges Designed as Potential Carrier Supports in Biomedical Applications*, **Pharmaceutics**, 363, 11(8), ISSN:1999-4923, pp. 1-20, **2019**, (FI=6.525), (WOS: 000484515100040), DOI: 10.3390/pharmaceutics11080363, **Q1** WOS:000484515100040

- Ris 13. Ioan D.C. Rau I., **Tihan G.T.**, Zgarian R.G.*, Ghica M.V., Kaya M.G.A., Dinu-Pirvu, E.C., *Piroxicam-Collagen-Based Sponges for Medical Applications*, **International Journal Of Polymer Science**, Article Number: 6062381, ISSN: 1687-9422 **2019**, (FI=2.973) (WOS:000471019400001), DOI: 10.1155/2019/6062381, Q2
- Ris 14. **Tihan G.T.**, Zgarian R.G.*, Berteanu E., Ionita D., Totea G., Iordachel C., Tatia R., Prodana M., Demetrescu I., *Alkaline Phosphatase Immobilization on New Chitosan Membranes with Mg^{2+} for Biomedical Applications*, **Marine Drugs** 16 (8), article number 287, ISSN: 1660-3397 **2018**, (FI=6.085) (WOS: 000442868200014). Q1
- Ris 15. Marin Ș., Albu Kaya M. G., Voicu G., **Tihan G. T.**, *Hidrogeluri compozite sensibile la pH și temperatura pentru tratamentul arsurilor / pH and temperature sensitive composite hydrogels for burn treatment*, **Revista Română de Materiale / Romanian Journal of Materials**, 47 (1), 1583-3186, pp. 78-83, **2017**, (FI=0.628) (WOS:000396979900010).
- Ris 16. Zgârian R. G, **Tihan G. T.**, Kajzar F., Rău I., Pawlicka A., Mîndroiu M. V., *Chromophore doped DNA based solid polymer electrolyte for electrochromic devices*, **Arabian Journal of Chemistry**, 10, ISSN:1878-5352, pp. 232-239, **2017** (FI=6.212) (WOS:000396238000010).
- Ris 17. Zgârian R. G., Iacob F., Kaya D. A., Rău I., Voicu G., **Tihan G. T.***, *Effect of different essential oils on human dentine structure*, **Farmacia** 47 (1), ISSN: 0014-8237, pp. 247 -251, **2017**, (FI=1.55) (WOS: 000400126800014).
- Ris 18. **Tihan G.T.**, Sereanu V., Meghea A., Voicu G., Albu M.G., Mitran V., Cimpean A., Zgârian R.G., *Innovative methodology for developing a bone grafting composite biomaterial starting from the seashell of *Rapana thomasiana**, **Comptes Rendus - Chimie**, 20, ISSN: 1631-0748, pp. 440-445, **2017**, (FI=2.55) (WOS:000400656200014). Q2
- Ris 19. Gijiu C.L., Dinculescu D.D., Rau I., **Tihan G.**, Ghica M., *Modeling the drugs release from composite materials based on collagen*, **Molecular Crystal & Liquid Crystal**, 655, 1, pp. 250-254, **2017**, DOI: 10.1080/15421406.2017.1361300, ISSN: 1542-1406, WOS:000423110900027, (FI=0.672)
- Ris 20. Apetroaei A., Manea A. M., **Tihan G.***, Zgârian R.*, Schroder V., Rău I., *Improved Method Of Chitosan Extraction From Different Crustacean Species Of Romanian Black Sea Coast*, **U.P.B., Sci. Bull., Series B**, Vol. 79, Iss. 1, ISSN 1454-2331, pp. 25-36, **2017**, WOS:000405772200003
- Ris 21. Iacob F. **Tihan G. T.***, Zgarian R. G.*, Voicu G., Rău I. *Impact of some essential oils on the collagenic stability of the human dentine*, **U.P.B., Sci. Bull., Series B**, Vol. 79, Iss. 1, ISSN 1454-2331, pp. 45-50, **2017**, WOS:000405772200005
- Ris 22. Iacob F., **Tihan G.**, Zgârian R., Pauliuc M., Pirvu C., Rau I., *Preliminary studies concerning some natural extracts influence on the dentine*, **Molecular Crystal & Liquid Crystal**, 628:1, ISSN:1542-1406, pp. 110-114, **2016**, (FI=0.672) (WOS: 000378126400014)
- Ris 23. **Tihan T. G.**, Rău I., Zgârian R. G., Ghica M. V., *Collagen-based biomaterials for ibuprofen delivery*, **Comptes rendus - Chimie**, 19(3), ISSN: 1631-0748, pp. 390-394, **2016**, (FI=2.55) (WOS:000385784900017)
- Ris 24. Apetroaei M. R., Zgârian R. G., Manea A.M., Rău I., **Tihan G. T.***, Schroder V., *New source of chitosan from Black Sea marine organisms identification*, **Molecular Crystal & Liquid Crystal**, 628:1, ISSN:1542-1406, pp. 102-108, **2016**, (FI=0.672) (WOS:000378126400013)
- Ris 25. Florea N. M., Lungu A., Balanuca B., Badica P., Craciun L., Damian C.M., Enculescu M., Ionescu C., **Tihan G.**, Iovu H., *Effect of polyhedral oligomeric silsesquioxane nanoreinforcement on the properties of epoxy resin/monoglycidylether-terminated poly(dimethylsiloxane) nanocomposites*, **High Performance Polymers**, 28(6), ISSN: 0954-0083, pp. 724-734, **2016**, (FI=1,73) (WOS:000382225900011)
- Ris 26. Zgârian R. G., **Tihan G. T.***, Barbaresso R. C., Rău I., *Spectral characterization of some collagen based composite for dental application*, **U.P.B. Sci. Bull., Series B**, Vol. 78, Iss. 1, ISSN: 1454-2331, pp.

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(e) Rns -Reviste de specialitate de circulație națională recunoscute de CNCSIS.

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Vi 2. V. Trandafir, **G. Zgirian**, I.Bujor Ionescu, H. Iovu, G. Conache, I. Demetrescu, *The contribution of biopolymer films doped with different ions*, **Proceedings of 13th Romanian International Conference on Chemistry and Chemical Engineering**, Bucharest, Romania, (RICCCE 13), Vol. 3, pp. 47-50, ISBN: 973-652-825-1, **2003**

Vi 3. Daniela Ionescu (Ionita) and **Grațela Zgirian**, *The corrosion of titanium and titanium alloys in NaCl solution*, **1st International Conference Study and Control of Corrosion in the perspective of sustainable Development of Urban Distribution Gas 2002**, pp.156-158, ISBN: 973-95041-3-2, **2002**,

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E 2. Simona Căprărescu, **Grațela Teodora Tihan**, Roxana Gabriela Zgârian, Alexandru Mihai Grumezescu, Cristina Modroga, Annette Madelene Dăncilă, *Performance of polymeric membrane containing nanoparticles for the removal of heavy metal ions from a simulated wastewater*, **23rd Romanian International**

Conference on Chemistry and Chemical Engineering, Constanța - Mamaia, ROMANIA - September 4–7, **2024**

E 3. Simona Căprărescu, Roxana Gabriela Zgârian, **Grațiela Teodora Tihan**, Alexandru Mihai Grumezescu, Adina Alexandra (Matei) Scarlat, Cristina Modroga, Titanium Dioxide Nanoparticles-Doped Polymeric Membrane For Cadmium Ions Removal In Wastewater Treatment, *22nd International Balkan Workshop on Applied Physics and Materials Science*, Constanta, Romania 09-12 July **2024**

E 4. S. Căprărescu, R.G. Zgârian, **G.T. Tihan**, A.M. Grumezescu, *Synthesis and Characterization of Polymeric Membranes Enhanced with Hydrothermally Activated Titanium Dioxide Nanoparticles*, The International Scientific Conference “Applications of Chemistry in Nanosciences and Biomaterials Engineering” 19-21.06. **2024**, Bucharest, Romania.

E 5. Camelia Ungureanu, Anda Maria Baroi, Ioana Silvia Hosu, Irina Fierascu, Roxana Zgârian, **Grațiela Tihan**, Radu Claudiu Fierascu, ‘Green’ synthesis of metallic nanoparticles: applications for Biosensor Platform, 16th edition of the International Scientific Symposium Current Trends in Natural Sciences, organized by the Faculty of Sciences, Physical Education and Informatics from University of Pitesti, Romania, 18-20 May **2023**.

E 6. Vasilica Mihaela Mîndroiu, **Grațiela Teodora Tihan**, Roxana Gabriela Zgârian, Andrei Stoian, *Optimization of Physical and Optical Properties of TiO₂ Nanostructures Deposited on FTO Substrate by Slow Hydrolyses*, RICCE 22, 22nd Romanian International Conference o Chemistry and Chemical Engineering, Sinaia, Romania, September 7-9, **2022**.

E 7. **Grațiela Teodora Tihan**, Roxana Gabriela Zgârian, Elena Berteanu, Daniela Ioniță, Ioana Demetrescu, Georgeta Țoțea, Cătălin Iordăchel, Mihaela-Ionică Enache, Adina-Lidia Zuav and Luminița Tcacenco, *Immobilization of the Alkaline Phosphatase on Genipin-cross-linked chitosan-gelatine membranes for biomedical applications*, The International Symposium on Inorganic and Environmental Materials 2018 (ISIEM 2018), Ghent, Belgium, June 17-21, **2018**

E 8. Roxana Gabriela Zgârian, **Grațiela Teodora Tihan**, Elena Berteanu, Daniela Ioniță, Luminița Tcacenco, Mihaela-Ionică Enache, Adina-Lidia Zuav, Maria Paraschiv, Georgeta Țoțea and Ioana Demetrescu, *The influence of magnesium ion on the antibacterial activity of the polymeric membranes*, The International Symposium on Inorganic and Environmental Materials 2018 (ISIEM 2018), Ghent, Belgium, June 17-21, **2018**

E 9. D.C. Ioan, **G.T. Tihan**, R.G. Zgârian, Mihaela Violeta Ghica, Mădălina Georgiana Albu Kaya, Ileana Rău, *New collagen-piroxicam based materials for oral applications*, 20th Romanian International Conference on Chemistry and Chemical Engineering Poiana Brasov, ROMANIA - September 6-9, **2017**

E 10. I. Rau, M. Mindroiu, **G. Tihan**, R. Zgarian, A. Pawlicka, C. Pirvu - *DNA based materials for electrochromic applications*, 3rd International Workshop on Nano and Bio-Photonics, martie 2016 la Aussois, Franta, invited lecture

E 11. I. Rau, F. Kajzar, M. Mindroiu, **G. Tihan**, A. M Manea, A. Pawlicka, C. Pirvu, *DNA-based membranes for multiple applications*, Photonics West 2016 -Organic Photonic Materials and Devices XVIII, San Francisco, SUA , feb. 2016, invited lecture

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E 13. A. Pawlicka, A. Firmino, F. Sentanin, R. C. Sabadini, D.E.Q. Jimenez, C.C. Jayme, M. Mindroiu, R. G. Zgarian, **G. T. Tihan**, I. Rau, M.M. Silva, A.F. Nogueira, J. Kanicki, F. Kajzar, *Bio-inspired materials for electrochemical devices*, Optics & Photonics for Counterterrorism, Crime, Fighting, and Defence XI; and Optical Materials and Biomaterials in Security and Defence Systems Technology XII, Septembrie **2015**

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E 15. Rău I., Mîndroiu M., **Tihan G.**, Zgârian R., Manea A. M., Nobrega De Assis L.M., Pawlicka A., Kajzar F., *DNA based materials with electrochromic properties*, International Workshop, Cabourg, Franta, Decembrie **2015**, invited lecture

E 16. Iacob F., **Tihan G.**, Zgarian R., Pauliuc M., Rau I., *Natural extracts influence on the dentin collagen*, 13th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM), Marrakesh, Maroc, 30 March - 02 April **2015**

- E 17. Florea N. M., Lungu A., Ghiță D. G., Crăciun L., Ionescu C., Mărginean N., **Tihan G.**, Zgârian R. G., Iovu H., *Effect of POSS nanoreinforcement on the physical properties of epoxy resin / epoxy functionalized polydimethylsiloxane nanocomposites*, Fourth International Conference on Multifunctional, Hybrid and Nanomaterials (HYMA 2015), Sitges, Spain, 9-13 March, **2015**, poster
- E 18. Rău I., Mindroiu M., **Tihan G.**, Zgârian R., Pawlicka A., Kajzar F., *Electrochromic characterization of some DNA based materials*, 11-th International Conference – Micro- to Nano-Photonics IV-ROMOPTO 2015, București, Romania, 1 – 4 September, **2015**, Invited Lecture
- E 19. Mircea M. L., **Tihan G.**, Mindroiu M., Zgarian R., Rău I., *DNA based materials with electrochromic properties*, Fourth International Conference on Advanced, Nano- and Biomaterials and their Device Application, Iasi, Romania, 17-21 Sept., **2014**, prezentare orală
- E 20. Rău I., **Tihan G.**, Mindroiu M., Zgarian R., Kajzar F., Marinho Nobrega de Assis L., Sentanin F., Pawlicka A., *Electrochemical properties of some DNA based materials*, SPIE Optics & Photonics, Nanoscience and Engineering, Nanobiosystems: Processing, Characterization, and Applications VII, San Diego, USA, August **2014**, invited lecture
- E 21. Rău I., **Tihan G.**, Mindroiu M., Zgarian R., Kajzar F., *Biopolymer conformations and dopant aggregation in DNA-based complexes for photonics application*, Photonics West 2014 - Organic Photonic Materials and Devices XVI, San Francisco, SUA, February **2014**, invited lecture
- E 22. Rau I., **Tihan G.**, Mindroiu M., Zgârian R., Kajzar F., de Oliveira H. C. L., Pawlicka A., *DNA based materials for application in electro-optics*, XII ICFPAM, Auckland, New Zealand, 8 – 13 december, **2013**, invited lecture
- E 23. Zgârian R. G., Țane A., **Tihan G.**, Meghea A., Kajzar F. and Rău I., *Functionalization and characterization of DNA based materials in view of their application in electrooptics*, 18th International Conference on Chemistry and Chemical Engineering (RICCCE 18), Sinaia, Romania, 4-7 Sept. **2013**, prezentare orală.
- E 24. Rău I., Meghea A., Țane A., Kajzar F., Zgarian R., **Tihan G.**, *Matrix influence on photoluminescence of organic dyes in solid medium*, SPIE European Symposium on Optics/Photonics in Security and Defence Systems Technology X, Dresden, Germania, 23-26 Sept. **2013**, invitated paper
- E 25. Mindroiu M., **Tihan G.**, Zgârian R., Rău I., Kajzar F., de Oliveira H. C. L., *Electrochemical characterisation of some DNA based biomaterials with high potential applications*, 18th International Conference on Chemistry and Chemical Engineering (RICCCE 18), Sinaia, Romania, 4-7 Sept., **2013**, prezentare orală
- E 26. Rău I., Mindroiu M., Țane A., Zgârian R., **Tihan G.**, Kajzar F., Meghea A., *Advanced biomaterials for photonics and electronics*, 18th International Conference on Chemistry and Chemical Engineering (RICCCE 18), Sinaia, Romania, 4-7 Sept., **2013**, prezentare orală
- E 27. I. Rau, M Mindroiu, **G. Tihan**, M.L.Mircea, H.C. Leite de Oliveira, A. Pawlicka, F. Kajzar, *Application of deoxyribonucleic acid (DNA) in electronics and in photonics*, International Workshop on Nano and Bio-Photonics (IWNBP) French-Korean Meeting om Functional Material for Organic Optics, Electronics, and Devices (FUNMOOD), Biarritz, France, 3 – 8 november 2013, invited lecture
- E 28. Popescu R., Mesmin A., Boumard A., Giurginca M., **Tihan G.**, Trandafir V., Grote J. G., Kajzar F., Rau I., *On the stability of DNA and collagen-based thin films*, The First International Workshop on Advanced, Nano- and Biomaterials and Their Applications, pp. 79, Sibiu, 15-19 Septembrie **2010**
- E 29. Popescu R., **Tihan G.**, Demetrescu I., *Obtaining and characterization of collagen gel - PEG - HA films with potential applications*, 10th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM), pp. 316, Santiago, Chile, 28 September - 2 October **2009**
- E 30. Rău I., Popescu R., **Tihan G.**, Boumard A., Mesmin A., Trandafir V., Demetrescu I., Meghea A., Grote J. G., Kajzar F., *Stability of DNA and collagen-based thin films*, Photonics West 2009 - Organic Photonic Materials and Devices XI, Conference 7213-14, San Jose, SUA, 24 – 29 Jan. **2009**, invited lecture
- E 31. Rău I., Popescu R., **Tihan G.**, Boumard A., Mesmin A., Meghea A., Grote J. G., Kajzar F., *Biopolymers - Novel Materials for Application in Photonics*, The 6th International Conference “Advanced Optical Materials and Devices”, vol. Abstracts, pp. 15, Riga, Latvia, 24 - 27 August **2008**, plenary lecture
- E 32. Rău I., Popescu R., **Tihan G.**, Demetrescu I., Meghea A., Grote J. G., Kajzar F., *Biopolymer Thin Films: Processing, Properties and Stability*, SPIE Optics & Photonics, Nanoscience and Engineering,

Nanobiosystems: Processing, Characterization, and Applications, Conference 7040-22, 10 – 14 August, San Diego, California, USA **2008**, invited lecture

E 33. Rău I., Popescu R., **Tihan G.**, Demetrescu I., Meghea A., Grote J. G., Kajzar F., *Degradation kinetics of biopolymers based thin films*, 2nd International Conference on Functional Materials and Devices, 2008 (ICFMD-2008), pp. I40, Kuala Lumpur, Malaysia, 16 – 19 June **2008**, invited lecture

E 34. Popescu R. G., **Tihan G. T.**, Rău I., Iordăchescu D., Demetrescu I., *Structure and characterization of various films based on collagen with potential applications*, 10th International Symposium Biomaterials: Fundamentals and Clinical Applications, Biomaterials NRW 2008, pp. 61, Essen, Germania, 12-14 March **2008**

E 35. **Tihan G. T.**, Popescu R. G., Iordăchescu D., *Correlation between hydrophilic balance and biocompatibility of poly (methyl methacrylate) (PMMA) – hydroxyapatite (HA) composites*, 10th International Symposium Biomaterials: Fundamentals and Clinical Applications, Biomaterials NRW 2008, pp. 62, Essen, Germania, 12 - 14 march **2008**

E 36. **Gratiela Zgîrian**, Dana Iordachescu, H. Iovu, Ingrid Ionescu-Bujor, Ioana Demetrescu, *Effect of chemical compositions and topographical features of collagen biofilms on cell response*, 8th International Conference on Frontiers of Polymers and advanced materials, pp. 204, Cancun, Mexic, 22-26 mai **2005**

E 37. **Gratiela Tihan**, Ingrid Ionescu Bujor, Dana Iordăchescu, Iulia Kostrakievici, *Hydroxyapatite effect in enhancing cell growth on new ternary biopolymeric films*, Advanced Procedures for Environmental & Health Relation in the Frame of Sustainable Development, Workshop RICCE 14, pp.13, Bucharest, România, 23 September **2005**

E 38. **G. Zgîrian**, V. Trandafir, I. Ionescu Bujor, H. Iovu, I. Demetrescu, Internațional Conference “Biomaterials & Medical Devices” Biomedd’2004, Ed. Printech, pag. 82, ISBN 973-718-083-6, București, România, 5 - 7 noiembrie **2004**

E 39. **Zgîrian G.**, Zgârian (Popescu) R., Iovu H., Bujor I. I., Meghea A., Demetrescu I., *New Collagen Hybrids Composites Devoted To Cell Growth And Proliferation; The Cell Biomaterial Reaction*, extended abstract publicat în revistă cotate Medline. European Cells and Materials (ECM V), ISSN: 1473-2262, Davos, Switzerland, vol. 7, SUPPL. 1, pp. 34, 28-30 June, **2004**

E 40. Ingrid Ionescu Bujor, **Gratiela Zgârian**, Dana Iordachescu, H.M.Iovu, Ioana Demetrescu, *Chemical composition and surface characteristics in selection of biopolymer collagen films as cell growth support*, Tissue Engineering Society International, 6th Annual International Conference and Exposition, pp. 47, Orlando, SUA, decembrie **2003**

E 41. Ionescu, I.B., Trandafir, V., Demetrescu, I., Iovu, H., **Zgîrian, G.**, *New collagen composites with transdermal application*, Annual Meeting of the Swiss Society of Biomaterials 2003, DSR-Cité Universitaire, CH 2002 Neuchâtel, European Cells and Materials vol. 5 (SUPPL. 1), pp. 10-11, ISSN:1473-2262, 14 May **2003**

(b) lucrări prezentate *oral* la diferite conferințe internaționale

E 42. **Tihan G. T.**, Mîndroiu M., Țane A., Zgârian R. G., Kajzar F., de Oliveira H. C. L. and Rău I., *New DNA based biomaterials for applications in biophotonics*, 18th Romanian International Conference on Chemistry and Chemical Engineering (RICCE 18), Sinaia, Romania, 4-7 Sept., **2013**, prezentare orală

E 43. A. Torres Marques, I. Demetrescu, D. Ionita, **G. Tihan**, *Composite materials PMMA and HA, elaboration and properties*, 15th Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania (RICCE 15), 19-22 Sept., **2007**, prezentare orală

E 44. V. Trandafir, **G. Zgîrian**, I.Bujor Ionescu, H. Iovu, G. Conache, I. Demetrescu, *The contribution of biopolymer films doped with different ions*, 13th Romanian International Conference on Chemistry and Chemical Engineering, Bucharest, Romania, (RICCE 13), septembrie **2003**, prezentare orală

E 45. Iovu H., Bujor Ionescu I., **Zgîrian G.**, Demetrescu I., *The characterization of a range of bioartificial polymers*, 3rd International Conference of the Chemical Societies of the South-Eastern European Countries on Chemistry in the New Millennium- an Endless Frontier, București, România, septembrie **2002**, prezentare orală.

P. Proiecte de cercetare-dezvoltare-inovare: a) obținute prin competiție pe bază de contract/grant în țară / străinătate (Pn-naționale,Pi-internaționale)

Programul/Proiectul	Funcția	Perioada
<u>Pn 1.</u> Contract de cercetare – “ <i>gijiuirea unor compozite polimerice: De la sinteză la proprietăți termo-mecanice și calcule cu element finit</i> ”, CNC SIS Tip A	Membru în echipa de cercetare	2001 - 2003
<u>Pn 2.</u> Contract de cercetare – “Tehnologie de reciclare a deșeurilor proteice provenite din industria de pielărie, în aplicații industriale”, MENER	Membru în echipa de cercetare	2002-2005
<u>Pn 3.</u> Contract de cercetare nr. 1122/01.10.2004 „ <i>Dezvoltarea unor biotehnologii de cultivare a unor celule umane în scopul aplicării lor în practica medicală</i> ”, CEEX – BIOTECH 4652	Membru în echipa de cercetare	2004 - 2006
<u>Pn 4.</u> Contract de cercetare – “Tehnologii noi de tratare – recuperare a metalelor grele din deșeurile rezultate din procesele de acoperiri metalice”, MENER	Membru în echipa de cercetare	2002-2005
<u>Pn 5.</u> Contract de cercetare 278 / 13.09.06, – “ <i>Compozite pe bază de polimeri ionici, utilizate ca suport biomimetic de țesut osos pentru testări in vitro</i> ”, CEEX -COMPOVIT	Membru în echipa de cercetare	2006 - 2008
<u>Pi. 6</u> Contract de cercetare - FP6 - Marie Curie-Transfer of Knowledge MTKD-CT-2004-014059nd Nanotechnologies – NANOTEC-EST - „ <i>Polymeric nanocomposites for advanced materials</i> ” - INEGI - Mechanical Engineering and Industrial Management	Stagiu postdoctoral, Porto, Portugalia	1 iunie -31 iulie 2007
<u>Pn 7.</u> Contract de cercetare - “Micro Și Nanostructuri Obținute Prin Bioactivare Chimică Și Electrochimică Cu Aplicații În Medicină Regenerativă”, CEEX, modul II	Stagiu postdoctoral, București, România	02 oct. 2007 – 30 iun. 2008
<u>Pn 8.</u> Contract de cercetare Nr. 32101 /01.10.2008 – “ <i>Ambalaje celulare ecologice biodegradabile pe bază de polimeri regenerabili</i> ”, ECO-BIO-FOAM	Membru în echipa de cercetare	2010
<u>Pi 9.</u> Contract de cercetare – FP7 Tip IRSES (International research staff exchange scheme)– BIOMOLEC 247544 - <i>Functionalized biopolymers for application in molecular electronics and in photonics</i>	Stagiu de cercetare în Brazilia la IQSC, Universitatea de São Paulo, CEP 13566-590, São Carlos-SP	12 mai- 6 iun. 2014 15 apr.- 15 mai 2015
<u>Pn 10.</u> Contract de cercetare Nr. 279/7.10.2011, Cod proiect PN-II-ID-PCE-2011-3-0505– „ <i>Elaborarea și caracterizarea de biopolimeri funcționali pentru aplicații în fonică și electronică</i> ” IDEI	Membru în echipa de cercetare	2013 - 2016
<u>Pn 11.</u> Contract de cercetare 3/2012, Cod proiect PN-II-PT-PCCA-2011-3.1-0316 – “ <i>Bio-nanofotonică pe bază de structuri supramoleculare de ADN pentru funcționalități complet optice integrate (BIO-NANO-PHOTO)</i> ”.	Membru în echipa de cercetare	2013 - 2016
<u>Pn 12.</u> Contract de cercetare nr. 155/2014, (nr. intern CH 39.14.03) tip proiect PNII-PCCA – “ <i>Tehnologii și produse inteligente pentru tratamentul și prevenirea mamitelor la rumegătoare productive bazate pe chimia verde a compozitelor destinate sănătății publice veterinare</i> ” (GREENVET)”	Membru în echipa de cercetare	2014 - 2017
<u>Pn 13.</u> Contract de cercetare nr. 190PED/2017 , (nr. intern CH CH44.17.04) Cod proiect PN-III-P2-2.1-PED-2016-1337 - “ <i>Îmbunătățirea tehnologiei de imobilizare enzimatică a alcalin fosfatazei în vederea creșterii performanțelor unor materiale implantabile</i> ”, (ECHITECH)	Director	2017 - 2018

<u>Pn 14.</u> PN-III-P4-ID-PCE-2016-0674 (contract nr. 100/2017), intitulat „Materiale "verzi" avansate pentru fotonica”	Membru în echipa de cercetare	2017 - 2018
<u>Pn 15.</u> Contract de cercetare nr. TE 100/2022 (nr. intern CAMP 2207), Cod proiect PN-III-P1-1.1-TE-2021-0417 - „ <i>Fabricarea de noi ferestre electrocromice bifunctionale care stocheaza energie</i> ” (Acronim INNOBIFEESW)	Membru tanar cercetator	15 mai 2022 – 14 mai 2024
<u>Pn 16.</u> Contract 652 PED/ 2022 , cod: PN-III-P2-2.1-PED-2021-0042 (ID CRESCDI 220223696), cod COR 211306, “ <i>Nanostructuri fitosintetizate de înaltă performanță utilizate ca senzori pentru detectarea microorganismelor patogene din produse alimentare</i> ” (Acronim NanoBIOPAT)	Membru cercetator	28 iunie 2022 –20 iunie 2024
<u>Pn 17.</u> Contract GNAC ARUT 2023 (2023-2024) este <i>Membrane polimerice dopate cu nanoparticule oxidice activate hidrotermal pentru tratare ape uzate</i> , Nr. 155/04.12.2023	Membru cercetator	2023-2024

Semnatura:
Conf. Dr.Ing. **Tihan Grațîela Teodora**

29.09.2025