CURRICULUM VITAE

Name: Dr. NAZIA TARANNUM

Position: Assistant Professor

Department of Chemistry

University: CCS University Meerut

Nationality: Indian

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Research ID Profile URL: http://www.researcherid.com/rid/A-9456-2012

Languages Known: Hindi, English, Urdu, German (Elementary)



Academic studies

- Ph.D. awarded in August 2012 on topic "Synthesis, characterization and analytical applications of certain polysulfobetaines and polycarbobetaines" in Analytical Chemistry, from Department of Chemistry, Banaras Hindu University, Varanasi, India.
- Master of Science in Chemistry (2007) with specialization in Organic Chemistry from Department of Chemistry, Lucknow University, Lucknow, India. (Ist Division)
- Bachelor of Science (2005) from Lucknow University, Lucknow, India. (Ist Division)

Academic Accolades

- Qualified B.H.U. Combined Research Entrance Test-CRET 2007 (BHU Research Scholarship holder from July 2007-Dec 2008)
- Qualified CSIR Research Associate Fellowship from June 2013-March 2014.
- Received DST and INSA Travel Grant-2011 for presenting research paper in International Conference held at France.
- Received Centre for International co-operation in Science (CICS) INSA Travel Grant-2015 for presenting research paper in International Conference held at France from 5 Nov to 7 Nov 2015
- Received VIFA Young Faculty Award June 2016 (Category: Chemistry-Synthesis of Organic Polymers)
- Nominated as Young Scientist by Department of Science and Technology –GOI in September 2016 to draft and plan the science and technology enterprise for India in BRICS-STEP 2016 (Brazil Russia, India, China, South Africa-Science and Technology Enterprise)
- Visiting Scientist to AN Bach Institute, Russian Academy of Science, Moscow Russia from 20 May 2018-4 June 2018
- Received Young Researcher Award 2020 (Institute of Scholars) September 2020
- Received Innovative Teacher Award 2022 in Chemistry from International Multidisciplinary Research Foundation Institute of Higher Education and Research

External Evaluator and Examiner

- External Evaluator of PhD thesis of China Pharmaceutical University China 2018 (" Meriem)
- External Practical Examiner for B.Sc (Hons) chemistry Inorganic Chemistry III Sem on 27 Nov 2018 at Jamia Millia Islamia, New Delhi.

Areas of Research Interest

- Molecularly Imprinted Polymers
- Synthesis, characterization and analytical application of Polybetaine system
- Sensors for trace level detection of target molecule, Conducting Polymers
- Optimization and calculation of physical parameters using Gaussian software

Membership of society

- Editorial board member of International Journal "Research in Pharmacy and Health Sciences" (Official Journal of "Indian Academy of Pharmacists")
- Affiliate Member of International Union of Pure and Applied Chemistry
- Periodical Reviewer of Journal of Molecular Simulations, Journal of Applied Polymer Science, American Journal of Analytical Chemistry
- Life member of Nano and Molecular Society of India
- Life member of Institute of Scholars 2020 (Membership id InSc20200784)
- Reviewer of Journal of Institute of Scholars 2020
- Life member of International Multidisciplinary Research Foundation Institute of Higher Education and Research (Membership id 22014)

Techniques Known:

FTIR analyses UV-visible spectroscopy Fluorescence spectroscopy Thermal Analyses
XRD analyses (powdered and Single crystal)
Scanning electron microscopy

Voltametry
DSA(Double sided Aligner)
Thermal Evaporation
GC/MS, GLC

Semiprobe measurements in Glove box Spin Coater Lithography HPLC

Computational skills:

Gaussian, Amsterdam Density Functional (ADF), WinGx, Ortep, Mercury, Platon, Originlab, Chem-Draw, Sci-Lab, Adobe Photoshop

Administrative Responsibilities:

- Member of Women Cell, from January 01, 2016-July 2017 Ch Charan Singh University, Meerut
- Assistant Warden of Durga Bhabhi Girls Hostel at Ch. Charan Singh University, Meerut from 3 October 2016-30 April 2017.
- Assistant Warden of Durga Bhabhi Girls Hostel at Ch. Charan Singh University, Meerut from 27 October 2017-till date.
- Assistant Proctor of Chaudhary Charan Singh University Meerut from 12 May 2018-till date
- CCS University Admission Committee member for admission to graduation course (NEP 2020) (07/08/2021)
- Member of University NIRF data 2020 and 2022 Committee.
- Member of University NAAC data compilation 2021 Committee
- Nodal officer of Advantage Meerut from 8/2/2022 till date

Publications (54):

- 1. <u>Nazia Tarannum</u> and Meenakshi Singh. "Synthesis and characterization of certain organogels based on Schiff base chemistry." **J. Appl. Polym. Sci.** (2010) 118, 2821-2832. doi: 10.1002/app.32393.(InterWiley Science IF=1.4) ISSN: 1097-4628
- Nazia Tarannum, Hirdyesh Mishra and Meenakshi Singh. "Synthesis, Characterization and Photoluminescence of Novel Sulfobetaine Polyelectrolytes". J. Fluoresc. (2011) 21, 289-297. doi: 10.1007/s10895-010-0716-z. (Springer IF=1.8) ISSN: 1573-4994
- 3. Nazia Tarannum and Meenakshi Singh. "Synthesis and swelling characteristics carboxybetaine J. responsive gel." Appl. Polym. Sci. (2011)122, 241-248. doi:10.1002/app.341. (InterWiley Science IF=1.4) ISSN: 1097-4628
- Nazia Tarannum and Meenakshi Singh "Selective recognition and detection of L- aspartic acid by molecularly imprinted polymer in aqueous solution." Am. J. Ana. Chem. (2011) 2, 909-918 doi: 10.4236/ajac.2011. (Appeared as Journal Cover Page). (American Scientific Publisher) ISSN: 2156-8278
- 5. Tuhina Tiwari, <u>Nazia Tarannum</u>, Meenakshi Singh and Neelam Srivastava. "Electrical transport studies of a novel zwitterionic polymer electrolyte." full paper in the Proceedings of 4th International Conference on Electroactive Polymers: Materials & Devices, Volume IV during 21-26 November, 2010 at Surajkund, India (MacMillan Publishing Series) ISBN: 978-935-059-073-7

(2011)

- 6. Abhishek Kumar, Nazia Tarannum and Meenakshi Singh. "Surface Photografting of Novel Sulfobetaine Copolymers on Silica." Material Sci. Appl. (2012) 3, 467-477. doi:10.4236/msa.2012.37066. (American Scientific Publisher IF= 0.61) ISSN: 2153-1188
- 7. Lav Kumar Singh, Abhishek Kumar, <u>Nazia Tarannum</u> and Meenakshi Singh. "Chitosan-based hydrogels-synthesis, characterization and swelling behavior." Proceedings of 4th International conference on Electroactive Polymers: Materials & Devices, during 4-9 November, 2012 at BHU, Varanasi, India. ISBN: 13, 9788184242461
- 8. Nazia Tarannum and Meenakshi Singh. "Water-Compatible Surface Imprinting of 'Baclofen' on Silica Surface for Selective Recognition and Detection in Aqueous Solution". Anal. Methods (2012) 4, 3019-3026. doi: 10.1039/C2AY25365H. (Royal Society of Chemistry IF=1.9) ISSN: 1759-9679
- 9. Nazia Tarannum and Meenakshi Singh. "Advances in synthesis and applications of sulfo and carbo analogues of polybetaines: A review." Rev Adv Sci & Eng. 2 (2013) 1-22. doi:10.1166/rase.2013.1036. (American Scientific Publisher) ISSN: 2157-913X
- 10. Meenakshi Singh, Abhishek Kumar and <u>Nazia Tarannum</u> "Water-compatible 'aspartame' imprinted polymer grafted on silica surface for selective recognition in aqueous solution." Anal Bioanal Chem. 405 (12) (2013) 4245-4252 (Springer IF=3.9) ISSN: 1618-2650
- 11. Archana Singh, Paresh Singh, Nazia Tarannum, J Singh and Meenakshi Singh. "Synthesis, characterization and structural analysis of poly[N-chloranil-1-(2 aminoethyl)piperazinium dichloridel". Nav Gavesana 3(1) (2012) 9-16. (ISSN -0976-9455)
- 12. Archana Singh, Paresh Singh, <u>Nazia Tarannum</u>, J Singh and Meenakshi Singh. "Synthesis, characterization and photophysical behaviour of (2,5-bis-(tris(2-hydroxy ethyl)-ammonium-(3-6-dichlorocyclohexa-2,5-diene-1,4 diol) dichloride". **Nav Gavesana** 3(2) (2012) 57-64. (ISSN -0976-9455)
- 13. Tuhina Tiwari, Nazia Tarannum, Maninder Kumar and Neelam Srivastava. "Ion Transport Properties of NaPF₆ & NaCl doped Poly(N phenylene N'imino pentyl) imminium propanesulfonate."

 Ionics 20 (10) (2014) 1435-1443 doi: 10.1007/s11581-014-1097-0 (Springer IF =1.67) ISSN: 0947-7047
- 14. Meenakshi Singh, <u>Nazia Tarannum</u> a n d Abhishek Kumar "Selective recognition of fenbufen by surface imprinted silica with iniferter technique." **J Porous Mater** 21 (5) (2014) 677-684 doi: 10.1007/s10934-014-9814-7 (Springer IF=1.40) ISSN: 1573-4854

- 15. <u>Nazia Tarannum</u> and Meenakshi Singh. "Facile eco-friendly synthesis of 3,4,6,7-tetrahydro 3,3,6,6-tetramethyl-2H-xanthene 1,8(5H,9H-dione, crystal and theoretical study." **Crystallography Reports** 59 (7) (2014) 987-992 (Springer IF=0.50) ISSN: 1562-689X
- 16. Ambreesh Kumar, Nazia Tarannum, Ranjan K. Singh and Meenakshi Singh. "Mesalmine Targeted Water-Compatible Molecularly Imprinted Polymer-Silver Nanoparticles with Surface-Enhanced Raman Spectroscopic (SERS) and Voltammetric Detection." Sensor Lett 13 (2015) 1–8. (American Scientific Publisher IF=0.60) ISSN: 1546-1971, h index- 34, Date of publication: 01 January 2016, https://doi.org/10.1166/sl.2016.3576
- 17. Rupali Rastogi, Nazia Tarannum and Richard Butcher. "A facile approach towards synthesis, characterization, single crystal structure and DFT study of 5-bromosalicylalcohol" Crystallography Reports 61(2), (2016) 234-238 (Springer IF=0.50) ISSN: 1562-689X, Date of publication: 15 April 2016, h index- 36
- 18. <u>Nazia Tarannum</u>, Ranu Agrawal and Rakesh Kumar Soni. "Synthesis and molecular docking of terephthalic dihydrazide from poly(ethylene terepthalate) for antimicrobial activity and biochemical changes" **Der Pharma Chemica** 8(1) (2016) 137-145 (Scholar Library IF=0.48) ISSN: 0975-413X, h index 31 Date of publication Jan 2016
- 19. Ranu Agrawal, <u>Nazia Tarannum</u>, Swapnil Mishra and Rakesh Kumar Soni. "Synthesis, Antimicrobial Activity and Molecular Modelling of Aminolysed Derivative of Poly(ethylene terephthalate)" **Der Pharma Chemica** 8(5) (2016) 132-139 (Scholar Library IF=0.48) ISSN: 0975-413X, h index-31, http://derpharmachemica.com/archive.html. Date of publication March 2016
- 20. Nazia Tarannum, M.Ayaz Ahmad, Alveera Khan, N. Sarikavakli and Alveera Khan. "Soft Computing Technique in Nano-Technology to Improve the Thermo-Mechanical properties for Aluminium-Silicon Alloy." 4th International research and practice conference NANOTECHNOLOGY and NANOMATERIALS NANO-2016 August 24 27 (2016), Ivan Franko National University of Lviv, Lviv, Ukraine DOI: 10.13140/RG.2.1.4194.2647
- 21. Rupali Rastogi, Srasti Gupta, Nazia Tarannum, Ranu Agrawal and Richard Butcher. "Synthesis, Spectral Characterization and Evaluation of Antimicrobial Activity of *O,O'*-alkanediyl *S-(N-phthalimidomethyl)* dithiophosphates and Zinc bis(*O,O'*-alkanediyl) dithiophosphates" **Phosphorous, Sulfur, Silicon, & Related Elements** 192(3) (2017) 300-306 doi: 0.1080/10426507.2016.1237949 (Taylor & Francis IF=1.068) ISSN: 1563-5325, Date of publication: 04 March 2017, h index 42
- 22. <u>Nazia Tarannum</u> and Madhu Mohan Varishetty. "Synthesis of Organic Sulfobetaine based Polymer Gel Electrolyte for Dye-Sensitized Solar Cell Application" **Polym Adv Tech** 8 (11) (2017) 1504-1509

- doi:10.1002/pat.4028 (InterWiley IF=1.89) ISSN: 1099-1581, Date of publication:28 Feb 2017, h index-82
- 23. Mohammad Shahnawaz Khan, Saba Parveen and Nazia Tarannum. "A Systematic Review on the Synthesis and Biological Activity of Hydrazide Derivatives" Hygeia::J Drugs Med 9(1) (2017) 61-79 (Hygeia: India) ISSN:2229-3590, DOI:10.15254/H.J.D.Med.9.2017.165 h index Date of Publication 17 July 2017
- 24. <u>Nazia Tarannum</u>, Ranu Agrawal, Rani Yadav, Anjali and Rakesh Kumar Soni. "Assessment of Heavy Metal Contamination Zones of Biota of Western Uttar Pradesh Terrain, India using Atomic Absorption Spectroscopy." **Int J Env Tech Manag** 20 (1/2) (2017) 1-9 (Inderscience US) IF=0.75 ISSN: 1466-2132, http://dx.doi.org/10.1504/IJETM.2017.086420, Date of publication: January 2017, h index-21
- 25. Ranu Agrawal, Nazia Tarannum, Mukesh Chourasia and Rakesh Kumar Soni "Chemical Degradation of Poly(ethylene terephthalate) for Potential Antimicrobial Activity Evaluation and Molecular Docking Study." J Polym & Env 26(2) (2018) 819-829 Doi:10.1007/s10924-017-0987-4 (Springer IF=1.962) ISSN: 1572-8900 Date of publication: 24 March 2017, h index -74
- 26. Meenu Teotia, Nazia Tarannum, Rakesh Kumar Soni. "Depolymerization of PET Waste for Facile Synthesis of a Series of Potentially Applicable Amides: Their Characterization, and DFT Study" J Appl Polym Sci. 134 (31) (2017) 4153-4163 (InterWiley Science IF=1.4) ISSN: 1097-4628, h index 166 https://doi.org/10.1002/app.45153, Date of publication: 13 April 2017
- 27. Nazia Tarannum, Meenakshi Shingh and Anil Kumar Yadav. "Antibacterial activity, thermal stability and ab-initio study of copolymer containing sulfobetaine and carboxybetaine groups." Mater Res Express 4 (10) (2017) 105304. (IOP Science IF=1.08) ISSN: 2053-1591, Date of publication: October 2017, h index 35, https://ui.adsabs.harvard.edu/link gateway/2017MRE.....4j5304T/doi:10.1088/2053-1591/aa8a18
- 28. <u>Nazia Tarannum</u>, Ranu Agrawal, Shivani Rana, Priyanka Gupta, Amit Upadhyay and Rakesh Kumar Soni. "Estabilishing Relationship Between Maternal Socio-demographic Characteristics and Lead in Umbilical Cord Blood Serum" **Research in Pharmacy and Health Sciences** 4 (1) (2018) 404-410 e-ISSN: 2455-5258. Date of publication: 01 December 2017, h index-
- 29. Nazia Tarannum, Mukti Verma and Moni Verma. "Synthesis and Antifungal Study of Mixed Ligand Complex of Ni(II) with Dibasic Tridentate Schiff Base as Primary and Naphthoic Acid as Coligand" Asian J Chem 30 (5) (2018) 1003-1006 DOI: 10.14233/ajchem.2018.21109 ISSN :0975-427X(IF=0.15) Date of publication: 01 May 2018, h index 34

- 30. O.D. Hendrickson, I. E.A. Zvereva, A. Shanin, A.V. Zherdev, N. Tarannum, B.B. Dzantiev. Highlysensitive Immunochromatographic Detection of Antibiotic Ciprofloxacin in Milk. App Biochem Microbiology, 54(6), 670-676 (2018) (Springer) (IF=0.886) DOI: https://doi.org/10.1134/S000368381806008X ISSN: 1608-3024 Date of publication: 19 December 2018, h index 42
- 31. Nazia Tarannum, Mukti Verma, Suman Rani and Moni Verma. "Synthesis and Analysis of Stereochemical and Biological Studies of mono-nitrophenol Complexes with Benzofurathio Semicarbazide Ligand" Asian J Chem 30 (8) (2018) 1863-1867 ISSN :0975-427X(IF=0.15) DOI: http://dx.doi.org/10.14233/ajchem.2018.21353 Date of publication: 01 August 2018, h index 34
- 32. Nazia Tarannum, Rizwan Khan and Prashant Singh. "Preparation and Application of Modified Chitosan based Carbobetaine Gel System for Treatment of Acephate Contaminated Water." Asian J Chem 31(1) (2019) 121-127 ISSN :0975-427X (IF=0.15) DOI: https://doi.org/10.14233/ajchem.2019.21596 Date of publication: 30 November 2018
- 33. Nazia Tarannum, Mukti Verma and Moni Verma. "Synthesis, Electronic Spectral Study and Antifungal Evaluation of Mixed Ligand Complex of Dibasic Tridentate Schiff Base and Naphthoic Acid with Transition Metal Ions" Asian J Chem 31 (5) (2019) 1041-1044 (IF=0.15) ISSN :0975-427X(IF=0.15) DOI: http://dx.doi.org/10.14233/ajchem.2019.21735 Date of publication: 28 March 2019
- 34. Mohammad Nadeem Akhtar, Janisaar Akhtar and <u>Nazia Tarannum</u> "Physiochemical Characterization and Dematerialization of Coal Class F Flyash Residues From Thermal Power Plant"

 Civil Engineering J 5 (5) (2019) 1041-1051 ISSN: 2476-3055 (IF=1.446) DOI: https://doi.org/10.28991/cej-2019-03091310 Date of publication: 22 May 2019
- **35.** Meenu Teotia, <u>Nazia Tarannum</u>, Mohit Chauhan, Rakesh Kumar Soni. "Structure-based rational design, synthesis, crystal structure, DFT and molecular docking of 1,4 benzene dicarboxamide isomers with application as hardeners" **New J Chem** 43 (21)(2019) 7972-7983 ISSN:1144-0546 (Royal Society of Chemistry IF=3.5) DOI: 10.1039/C9NJ01560D Date of publication: 22 April 2019
- 36. <u>Nazia Tarannum</u> and Sandeep Goud "Evaluation and Pattern Recognition of PEDOT: PSS Composite Based Chemiresistor to Assess Fruit Ripeness" **Sensor Letters** 17 (2019) 516-522 (American Scientific Publisher IF=0.60) ISSN: 1546-1971 DOI: https://doi.org/10.1166/sl.2019.4109 Date of publication: 01 July 2019
- 37. Nazia Tarannum, Ashwath Narayana, Sannaki Uday Kumar and S V Lokesh "High Performance

- Room Temperature Ethanol Detection Using OFETs Based on Polymer and Low cost SnO₂ Nanoparticles Synthesized from *Aegle Marmelos* Fruit" **Sensor Letters** 17 (2019) 581-586 (American Scientific Publisher IF=0.60) ISSN: 1546-1971 DOI: doi:10.1166/sl.2019.4113 Date of publication: 01 August 2019
- 38. Nazia Tarannum, Olga D. Hendrickson, Shahzadi Khatoon, Anatoly V. Zherdev and Boris B. Dzantiev "Molecularly Imprinted Polymers as Receptors for Assays of Antibiotics" Critical Reviews in Anal Chem 50 291-310 (2019) (Taylor & Francis) IF=3.217 DOI: https://doi.org/10.1080/10408347.2019.1626697 ISSN: 1040-8347 Date of publication: 03 July 2020
- 39. Nazia Tarannum and Rizwan Khan. "Development of low cost adsorbent from recycled polyethylene terephthalate for the treatment of acephate contaminated water" J Indian Chem Society 96 (8) (2019) 1103-1108 (Elseveir IF=0.15) ISSN: 194522 http://indianchemicalsociety.com/portal/uploads/journal/10%20-%20Aug%2019.pdf Date of publication: 01 August 2019
- 40. <u>Nazia Tarannum</u>, Divya and Yogendra Kumar Gautam. "Facile Green Synthesis and Applications of Silver Nanoparticles: A State-of-the Art Review" **RSC Advances** 9 (2019) **9**, 34926 34948 doi: 10.1039/c9ra04164h (RSC) IF= 3.049 ISSN: 2046-2069 Date of publication: 29 October 2019
- 41. Nazia Tarannum, Mohammad Shahnawaz Khan, Ranu Agrawal, Mohammad Ubaidullah and Imtiyaz Hassan. "Design, Synthesis and Validation of Anti-microbial derivatives: An efficient green approach" Heliyon 5 (10) (2019) e02615 (Elseveir IF=2.85) doi.org/10.1016/j.heliyon.2019.e02615 ISSN: 2405-8440 Date of publication: 01 October 2019
- 42. Mohd Ubaidullah, Jahangeer Ahmed, Abdullah M.Al-Enizi, AkshiTyagi, Shoyebmohamed F. Shaikh, Nazia Tarannum, Tokeer Ahmad "Metal organic precursor derived Ba1-xCaxZrO3 (0.05 ≤ x ≤ 0.20) nanoceramics for excellent capacitor applications" J King Saud Univ 32 (3) (2020) 1937-1943 (Elseveir) IF=3.24 doi.org/10.1016/j.jksus.2020.02.009 ISSN:2213-1558 Date of publication: 01 April 2020
- 43. Nazia Tarannum, Suhani and Deepak Kumar. "Synthesis, Characterization and Applications of Copolymer of β-Cyclodextrin: A Review" **J Polym Res** 27 (2020) 89-119 (Springer) IF=1.53 doi: 10.1007/s10965-020-02058-9 ISSN:1572-8935 Date of publication: 07 March 2020
- 44. Nazia Tarannum, Km. Pooja and Rizwan Khan. "Preparation And Applications of Hydrophobic Multicomponent Based Redispersible Polymer Powder: A Review" Construction and Building Materials 247 (2020) 118579 (Elseveir) IF=6.141 doi: 10.1016/j.conbuildmat.2020.118579 ISSN:0950-0618 Date of publication: 30 June 2020

- 45. Nazia Tarannum, Sandeep G. Surya, Shahzadi Khatoon, Boris B. Dzantiev, Abdellatif Ait Lahcen, An T. H. Nguyen, Khaled N Salama "A chitosan gold nanoparticles molecularly imprinted polymer based ciprofloxacin sensor" **RSC Advances** 10 (2020) 12823-12832 (RSC) IF=3.45 doi: 10.1039/d0ra01838d ISSN:2046-2069 Date of publication: 31 March 2020
- 46. Nazia Tarannum, Shahzadi Khatoon and Boris B. Dzantiev. "Perspective and application of molecular imprinting approach for antibiotic detection in food and environmental samples: A critical review" Food Control 118 (2020) 107381 (Elseveir) IF= 4.248 doi: 10.1016/j.foodcont.2020.107381 ISSN:0956-7135 Date of publication: 01 December 2020
- 47. Ashwath Narayana, <u>Nazia Tarannum</u>, Mahaboob Subhani Shaik, B.N. Shobha, Sundar Raj M, S V Lokesh. "Synthesis of SnO₂ Nanoparticles using *Ficus religiosa* Leaf Extractand their Application in Fabrication of OFETs for Glucose Monitoring." **Adv Mater Res** 1159 (2020) 67-77 (Scientific.Net) DOI:10.1166/sl.2019.4113 ISSN: 1022-6680 Date of publication: 22 September 2020
- **48.** Nazia Tarannum and Chandrasekar Thiravidamani."Evaluation of DNA Intercalation Study and Biological Profile of a Series of Schiff base Metal(II) Complexes Derived from Amino Acid" Inorganic and Nano-metal Chemistry 51 (8) (2020) 1005-1016 (Taylor and Francis) IF=1.63 DOI: 10.1080/24701556.2020.1813770 ISSN: 2470-1564 Date of publication: 04 September 2020
- 49. Rupali Rastogi, Gokul, <u>Nazia Tarannum</u>, Swapnil Mishra, Anugya Rastogi and R.J. Butcher "Study based on docking of antimicrobial activity and fluorescence behavior of ammonium salt of diisopropyl dithiophosphate, *O,O'*-diisopropanediyl *S-(N-*phthalimido methyl) and zinc diisopropyl dithiophosphates" **Phosphorous, Sulphur and Silicon and the Related Elements** 196 (5) 501-512 (2020) (Taylor & Francis IF=1.068) ISSN: 1563-5325 DOI: 10.1080/10426507.2020.1860983 Date of publication: 10 December 2020
- 50. Mohammad Nadeem Akhtara, Zainah Ibrahima, N. Muhamad Bunnori, Mohammed Jameel, <u>Nazia Tarannum</u>, J.N. Akhtar. "Performance of sustainable sand concrete at ambient and elevated temperature" Cons & Build Mater 280, 122404 (2021) (Elseveir) Accepted IF=4.046 https://doi.org/10.1016/j.conbuildmat.2021.122404 ISSN: 0950-0618 Date of publication: 19 April 2021
- **51.** <u>Nazia Tarannum</u> and Km Pooja. "Recent trends and applications in the research and development activities of redispersible powder: a vision of twenty-first century" **Polymer Bulletin** (2021) (Springer-Nature) ISSN:1436-2449 IF=2.014 Doi: 10.1007/s00289-021-03928-y
- 52. <u>Nazia Tarannum</u>, Rizwan Khan, Shoiba Ansari, Ranu Aggarwal, Mohd Ubaidullah, Abdulla A.Al-Kahtani "Chemical Depolymerization of Recycled PET to Oxadiazole and Hydrazone Derivatives:

- Synthesis, Characterization, Molecular Docking and DFT study". **Journal of King Saud University** 34 (1) 101739 (2021) (Elseveir) ISSN: 1018-3647 IF=4.011 Doi: 10.1016/j.jksus.2021
- 53. Nazia Tarannum, Deepak Kumar, Sandeep G. Surya, Pierre Dramou "Point of Care Detection Assay Based on Biomarker Imprinted Polymer For Different Cancers: A State of Art Review" Polymer Bulletin (2022) (Springer-Nature) ISSN:1436-2449 IF=2.014 Doi: 10.1007/s00289-022-04085-6
- 54. <u>Nazia Tarannum</u>, Deepak Kumar Nitin "β-cyclodextrin based Nanocomposite Derivatives: State of the Art in Synthesis, Characterization and Application in Molecular Recognition" Chemistry Select (2022) (Wiley-VCH) ISSN: 2365-6549 IF=2.109 in Press

Book/ Book Chapters Published (14):

- 1. <u>Nazia Tarannum</u> and Meenakshi Singh. **An applied approach to carbo and sulfo analogues of Polybetaine system.** (2013) Lambert Academic Publishing Germany. (ISBN 978-3-659-31797-2)
- 2. <u>Nazia Tarannum</u> and Pierre Dramou. <u>Molecularly Imprinted Catalysts: Synthesis and Applications.</u> In: "Molecularly Imprinted Polymers for Biomimetic Catalysts" (2015) Chapter 11, 225-246 Elseveir, Netherland UK (ISBN: 9780128013014) Date of publication: 30 September 2015
- 3. <u>Nazia Tarannum</u> and Meenu Teotia. Renewable Energy Resources: Challenges and Advancement. In: "Energy Conservation and Environment Protection (ECEP)" (2016) Chapter 1, 1-20 International Research Publication House, New Delhi India (ISBN: 987-93-84443-54-2) Date of publication: 13 October 2016
- **4.** <u>Nazia Tarannum</u> and Meenakshi Singh. Graphene Based Polymer Composites and their Receptor Specific Tailored Molecular Imprinted. In "Advances in Multifunctional Materials" (2016) Chapter 4, 59-87, Ideal Book Publishers and Distributors, New Delhi, India (ISBN: 978-81 929869-4-4) Date of publication: 26 Feb 2016
- 5. <u>Nazia Tarannum</u> and Ranu Agrawal. Bioremediation Technology as a Tool for Management of Heavy Metal Pollution. In "Life Science: Recent Innovation and Research" (2016) Chapter 19, 383-400 International Research Publishers and Distributors, New Delhi, India (ISBN:987-93-84443-53-5) Date of publication: 14 October 2016
- 6. Meenakshi Singh and <u>Nazia Tarannum</u>. "Polyzwiterions: a viable approach for drug delivery beyond pegylated materials" Engineering of Biomaterials for drug delivery systems. 1st Edition. Beyond Polyethylene Glycol, Ed: Anil Kumar Parambath; Woodhead Publishing 2018 (Elsevier) 2018, 17-66, ISBN: 9780081017500
- 7. <u>Nazia Tarannum</u>, Meenakshi Singh and Ranjit Hawaldar. "Pesticides as Occupational Hazard: facts and Figures" In "Handbook of Research on the Adverse Effects of Pesticide Pollution in Aquatic Ecosystems" (2018) Chapter 12, IGI Global Publisher, 201-214 ISBN10: 1522561110 DOI: 10.4018/978-1-5225-6111-8
- 8. <u>Nazia Tarannum</u> and Ranu Agrawal. Biophysical Chemistry (2020) Manakin Press, New Delhi. In Press ISBN 978-9-389-29658-7
- 9. <u>Nazia Tarannum</u> and Mohammad Akhtar. "Flyash As a Resource Material in Construction Industry: A Clean Approach to Environment Management" In "Construction and Building Materials" (2018) ISBN 978-953-51-7877-4 (IntechOpen)DOI: 10.5772/intechopen.82078

- 10. <u>Nazia Tarannum</u> and Rizwan Khan. "Cost effective green material for the removal of pesticides from aqueous medium" In "Green Materials for Wastewater Treatment" (2019) Chapter 5 Springer ISBN 978-3-030-17723-2 doi: 10.1007/978-3-030-17724-9 5
- 11. <u>Nazia Tarannum</u> and Ranjit Hawaldar. "Microbiology as an Occupational Hazard: Risk and Challenges" In Medical Microbiology Book, (2021) Chapter 8, De Gruyter Publisher ISBN 978-3-11-051764-4
- 12. NaziaTarannum, Deepak Kumar, Shahjadi Khatoon and Meenakshi Singh. "Efficient Removal of Template as a Limitation of Molecular Imprinted Polymer" (2021) Elseveir
- 13. <u>Nazia Tarannum</u>, Nikhil Kumar and Km Pooja. "Zero waste as an approach to develop a clean and sustainable society" in "Handbook of Smart Materials, Technologies and Devices" (2021) Springer ISBN: 978-3-030-84204-8
- 14. <u>Nazia Tarannum</u> and Deepak Kumar. "Pyridine: Risk management, environment and health hazard" Chapter 37 (2021) Elseveir

Patent Granted

Nazia Tarannum and Rizwan Khan "AN INSTANT MIX WATER RESISTANT ADHESIVE AND A METHOD TO PREPARE THE SAME" Application No. 201911007321 Indian Patent Filed on 25 February 2019 Published on September 2020 Patent No 376739 (Patent Granted in 2021)

Symposia/Conferences attended

- 1. Participated in *National Symposium on Recent Advances in Toxicological Studies Molecular and Physiological Aspects*, during 27-28 February, 2008 at Banaras Hindu University, Varanasi, India.
- 2. Poster Presentation on paper entitled "Synthesis, characterization and swelling property of polycarboxybetaine gel." at *National Conference On Application of Material Science In The Service Of The Society,* during 12-13 September, 2009 at C.M.P Degree College, University of Allahabad, Allahabad, India.
- 3. Oral Presentation on paper entitled "Sulphobetaine and NaSCN: A new zwitterionic polymer electrolyte system." at 8th National Conference on Solid State Ionics: Materials for Novel Devices, during 7-9 December, 2009 at Dr. Hari Singh Gour Univ. Sagar, India.
- 4. Poster Presentation on paper etitled "Synthesis and application of L-aspartic acid imprinted polymer." at 3rd National Symposium on Analytical Sciences (NSAS) on Recent Advances in Analytical Sciences, during 12-14 April, 2010 at Himachal Pradesh Univ., Summer Hills, Shimla, India.
- 5. Poster Presentation of paper entitled "Synthesis, Characterization and photoluminescence study of polysulfobetaine polyelectrolyte based on Schiff base chemistry." at *National Symposium on Emerging Trends in Chemical Sciences*, during 19-20 February, 2011 at Banaras Hindu University, Varanasi, India.
- 6. Poster presentation of paper entitled "Computational investigation and synthesis of a zwitterionic imprinted material for selective recognition and detection of L-aspartic acid." at **Second International Symposium on Frontiers in Polymer Science (Elseveir)** during 29-31 May 2011, Centre de Congrès, Lyon, France.
- 7. Poster presentation of paper entitled "Selective Recognition and Detection of Zwitterionic Drug 'Baclofen' by Surface Molecular Imprinting Technique" at *Kathmandu Symposia on Advanced Materials (IUPAC)* during 9-12 May 2012, Tribhuvan University, Kathmandu, Nepal.
- 8. Participated in *16th CRSI National Symposium in Chemistry* during 7-9 February, 2014 at IIT Bombay, Mumbai India.
- 9. Participated in Workshop on *Role of Internal Quality Assurance Cell in enhancement of quality of Higher Education* on 23 March, 2015 at CCS University, Meerut, India.
- 10. Poster Presentation "Silver nanoparticle based water compatible molecular imprinted polymer for artificial recognition of mesalmine" at *Applied Nanoscience and Nanotechnology International Conference (PremC)* during 5-7 November 2015, Paris, France.
- 11. Nominated to participate and present paper "Molecular Imprinting: A potential Approach and Dynamic Technique to meet the challenges in diagnostics" in BRICS Young Scientist Forum (among 10 young scientists from India) at NIAS Banglore from 26 Sept-30 Sept 2016

- 12. Participated and presented paper "Development of An Artificial Biomarker For Ovarian Cancer Using Lysophosphatidic Acid Imprinted β-Cyclodextrin Polymer" in All India Young Scientists Convention at Periyar University, Salem, Tamil Nadu India from 18-22 Dec 2017
- 13. Paper presentation "Role of imprinted β-cyclodextrin based artificial biomarker" in International Conference on Advances in Analytical Sciences at CSIR-IIP Dehradun from 15-17 March 2018.

Workshop Attended

- 1. Participated in *Symposium & Workshop Statistical Methods in Computational Biology* during 28-29 December, 2007 at Banaras Hindu University, Varanasi, India.
- 2. Participated in *BHU Summer School of Computing* during 07-19 April, 2008 at Banaras Hindu University, Varanasi, India.
- 3. Participated in *National Symposium workshop on X-Ray Crystallography* during 08-09 March, 2010 at Banaras Hindu University, Varanasi, India.
- 4. Participated in *Workshop of Single Crystal XRD (UGC Networking Program)* during 21 November-4 December, 2010 at Hyderabad Central University, Hyderabad, A.P. India.
- 5. Participated in the Workshop on *Electronic Structure Calculations and Applications* during 26-27 March, 2011 at Mahila Mahavidyalaya, Physics Department, Banaras Hindu University, Varanasi, India.
- 6. *Certified Course (DAAD) for Preliminary German Language* from Oct 2013 to March 2014 at IIT Bombay, Powai, Mumbai, India.
- 7. Completed **Certified Course on "Schematic Analysis of NDPS" organized** by GFSU Gujrat India from 01 July -15 July 2014.
- 8. Participated in Workshop on Instrumentation Techniques in Forensic Sciences from 20 Aug-22 Aug 2014
- 9. Participated in the workshop on *Fundamentals of HPLC* with Lab solution workstation from 17 -18 March, 2016 at SAIP, New Delhi, India
- 10. Participated in Workshop on *Role of Internal Quality Assurance Cell in enhancement of quality of Higher Education* on 23 March, 2015 at CCS University, Meerut, India.
- 11. Participated in Workshop on *Exposure of analytical instruments to undergraduate students* on 5-6 May, 2017 at Department of Chemistry, CCS University, Meerut, India.
- 12. Participated in Workshop on *Radioactivity and Radioanalytical techniques* on 25-27 September 2017 at Department of Chemistry, CCS University, Meerut, India.
- 13. Participated in Workshop on *Leadership skills organized by ICT Academy, Chennai and CCS University Meerut* on 21 July, 2018 at CCS University, Meerut, India.
- 14. Participated in Workshop on *Electroanalytical Techniques* on 15-17 January, 2019 at Department of Chemistry, CCS University, Meerut, India.

Orientation/Refresher Courses

- 1. Orientation Course completed at Jamia Millia Islamia University, New Delhi from 19 July-16 August, 2016.
- 2. Refresher Course completed at Jamia Millia Islamia University, New Delhi from 26 Sept-17

- October, 2018.
- 3. Refresher Course completed at Ramanujan College, University of Delhi, New Delhi from 22 Jan- 05 Feb, 2022 on the topic Advanced Research Methodology

Invited Lectures:

- 1. Delivered Invited Lecture entitled "Chemical Recycling of Poly(ethylene terephthalate) to New High Value Molecule" at Faculty Development Programme on "Municipal Soild Waste Management" on 09 Dec, 2016 at Department of Chemical Engineering, M.J.P Rohilkhand University, Bareilly, Uttar Pradesh, India
- 2. Delivered Keynote Invited Lecture entitled "Ecofriendly Depolymerization of Poly(ethylene terephthalate) to Potentially Applicable Compounds" in "National Conference on Biodegradation of Wildlife, Environment and Biodiversity" (B-WEB-2017) 19 Mar, 2017 at Gandhi Faiz-E-Aam P.G. College, Shahjahanpur, Uttar Pradesh, India
- 3. Delivered Invited Lecture entitled "Hands on ChemDraw Tools" at "Analytical Instruments Workshop for Undergraduate Students" on 05 May, 2017 at Department of Chemistry, C.C.S University, Meerut, Uttar Pradesh, India
- 4. Delivered Invited Lecture entitled "Hands on Chem-Draw Tools" on 11 Nov, 2017 at Department of Chemistry, SSV College, Hapur, Uttar Pradesh, India sponsored by Commission for Scientific & Technical Terminology.
- 5. Delivered lectures in Pre PhD coursework classes from 2017 onward in CCSU Meerut
- **6.** Delivered Keynote Invited Lecture entitled "*Molecular Imprinting*: A Potential Technique to Meet the Challenges in Molecular Recognition" on 24 May 2018 at "International Forum :Biotechnology Current State and Future Development: Life Sciences" from 23-25 May 2018, Moscow, Russia.
- 7. Delivered Invited Lecture entitled "Basics in Absorption Spectroscopy UV and IR" at Department of Chemistry, NAS Degree College, Meerut on 29 August, 2018.
- 8. Delivered Invited Lecture entitled "Evaluation and Pattern Recognition of PEDOT: PSS Composite Based Chemiresistor to Assess Fruit Ripeness" at An International Conference on Materials for Energy Applications on 07 Dec, 2018, SS Jain Subodh College Jaipur
- 9. Delievered a lecture/training entitled "Hands on Laboratory in Synthesis and Characterization of Nanoparticles" from 16-21 December 2019 at Department of Chemistry, Chaudhary Charan Singh University, Meerut in One week Workshop on Introduction, Synthesis and Characterization of Nanomaterials.

Workshop/Conferences Organized

- Worked as a Joint Secretary in organizing the Workshop on *Technology Development and Transfer to Industry- Challenges & Opportunities* Organized by Industry Consultancy Cell on 31 March, 2015 at Chaudhary Charan Singh Univ., Meerut, India.
- Workshop on Chem-Draw software was organized and conducted for M.Sc students on 20/5/15 and 20/5/2016 at Department of Chemistry, Chaudhary Charan Singh Univ., Meerut, India.
- Worked as a Co-coordinator in organizing the One Week Workshop on *Introduction, Synthesis and Characterization of Nanomaterials* organized by Centre for International Cooperation, Ch. Charan Singh University, Meerut, Uttar Pradesh, India and Central Connecticut State University, New Britain, Connecticut, USA from 16-21 Dec 2019 at Department of Physics and Chemistry, CCS University, Meerut
- Worked as Subnodal officer in organizing Science Week Festival sponsored by Vigyan Prasar,

GOI, from 22-28 February, 2022 at Chaudhary Charan Singh University, Meerut.

Projects Undergoing

- Working as a Principal Investigator in UGC-Start-Up grant project "Lysophosphatidic acid imprinted β-cyclodextrin polymer as an artificial biomarker for ovarian cancer" worth Rs 6.00.000/- from November 2016- November 2018
- Working as a Principal Investigator in DST-RFBR International Coperative Collaboration with Russia "Regularities of low molecular weight analytes detection by natural and synthetic receptors: Comparative analysis and application in the development of systems for antibiotics detection" worth Rs 13,68,640/- from November 2017- November 2019.
- Working as a Co-Investigator and Indian Collaborator in Indo-UK Project with Ulster University, UK under Global Challenges Research Fund (GCRF) Ulster University Pump-priming Application 2017 "Safe motherhood intervention app" worth Rs 20,00,000/- granted in October 2017-March 2018.
- Working as Co-investigator in a project sponsored by Department of Health and Research "Development of novel diagnostic modalities for the detection of pathogens causing urinary tract infections in young women using surface enhanced Raman spectroscopy approach" worth Rs 45,00,000/- granted in July 2019

List of Post-graduate Students Supervised

Name	Course/ Year	Topic	Supervisor/ Co-superviso	
Rizwan Khan	M.Sc Chemistry with specialization Polymer Science Technology 2014-2016	Synthesis of co-polymer from poly(ethylene terephthalate) waste and its application as an adsorbent for pesticide contaminated water	Supervisor	
Prashant Singh	M.Sc Chemistry with specialization Polymer Science Technology 2014-2016	Management of chitin waste to ecofriendly biosorbent for treatment of pesticide contaminated water	Supervisor	
Shoiba Ansari	M.Sc Chemistry with specialization Polymer Science Technology 2015-2017	Synthesis and characterization of some oxadiazole and hydrazone derivatives from PET waste	Supervisor	
Nivraj Kumar	M.Sc Biochemistry 2014-2016	Study of water soluble vitamin B12 by reverse phase high performance liquid chromatography	Co- Supervisor	
Deepanshu Uniyal	M.Sc Biochemistry 2014-2016	Analysis of Vitamin B12 in blood serum and standard samples using high pressure liquid chromatography	Co- Supervisor	
Nitin	M.Sc Chemistry with specialization Polymer Science Technology 2020-2022	Synthesis of polyurethane based polymer latex and its application in RD powder	Supervisor	

List of M.Phil Students Supervised

Name	Course/Year	Topic	Supervisor/C
Divya	M.Phil Chemistry 2018-2019	Green synthesis and characterization of chitosan based silver nanocomposite and its applications.	Supervisor
Km. Pooja	M.Phil Chemistry 2018-2019	Preparation and Applications Hydrophobic Multicomponent based Redispersible Polymer Powder	Supervisor
Suhani	M.Phil Chemistry 2018-2019	Synthesis, characterization applications of copolymer of cyclodextrin	Supervisor
Anurag Panwar	M.Phil Chemistry 2018-2019	Green Synthesis of Carbon Dots and its Application	Supervisor
Rizwan Khan	M.Phil Chemistry 2019-2020	Synthesis of multicomponent polymeric latex cement composite it's application in building construction materials	Supervisor
Nitin Kumar	M.Phil Chemistry 2019-2020	Development in the synthesis of cyclodextrin based nanocomposites its application in molecular recognition	Supervisor
Rajat Kumar	M.Phil Chemistry 2019-2020	Green Synthesis and Application of Gold Nanoparticle and Carbon based Polymer Composite	Supervisor

List of Ph.D Students Supervising

Name	Course/Year	Title	Supervisor
Shahzadi Khatoon	Ph.D 2018-	Development of 3-D chitosan	Supervisor
		bead-gold nanoparticle polymer composite	
		for the detection of antibiotics in milk	
		samples by molecular imprinting technique	
Deepak Kumar	Ph.D 2018-	Synthesis and characterization of	Supervisor
		molecularly imprinted β-cyclodextrin copolymer	
		and its application in artificial biomarking	
		of ovarian cancer	
Km. Pooja	Ph.D 2019-	Preparation and Applications of Hydrophe	Supervisor
		Multicomponent based Redispersible Polymer	
		Powder	
Rizwan Khan	PhD 2022-	Synthesis and Application of Multicomponent	Supervisor
		Roof Sealant Overlay from Polymeric Composite	
		Recycled Paint Latex	