

PUBLICATIONS BY FACULTY MEMBERS

ACADEMIC SESSION: 2022-2023

BIO-CHEMISTRY

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| Research Papers | <ol style="list-style-type: none">1. Sourav Pan, Richa Upadhyay, Sunita Singh, Man Singh (2022). Synthesis, characterization, and functionalization of super adhesive melamine formaldehyde polyvinylpyrrolidone resins doped with metallic and graphene oxide nanoparticles for better industrial applications, <i>Journal of Applied Polymer Sciences</i>, 139, 1-32 (Online ISSN: 1097-4628).2. Man Singh, Vijay Kumar Srivastava, Sunita Singh and Ch Ramakrishna (2022). Survismetry for Survistronics Enlarging Potential of Surfaces for Industrial Applications, <i>Trends in Textile Engineering & Fashion Technology</i>, 7 (4), 880-882. (DOI:10.31031/TTEFT.2022.07.0006682578-0271).3. Dhembala C, Yadav U, Kundu S and Sundd M. (2022) Lipoate protein ligase B primarily recognizes the C8-phosphopantetheine arm of its donor substrate and weakly binds the acyl carrier protein. <i>Journal of Biological Chemistry</i> (https://doi.org/10.1016/j.jbc.2022.102203) (Joint First author). |
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BOTANY

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| Research Papers | <ol style="list-style-type: none">1. Mal Anuradha & Devender Singh Meena (2022). <i>Phyllanthus Emblica: A Herbal Remedy for Healthy Life</i>. <i>ECS Transactions</i> 107.1, 3199.2. Mal Anuradha & Prabhavathi (2022). Nutraceutical properties of <i>Vinca rosea</i>. <i>Biomedicine</i> 42, no. 3, 427-433. |
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3. Seema Talwar, Kiran Bamel, Prabhavathi & Anuradha Mal (2022). Effect of High Temperature on Reproductive Phases of Plants- A Review. *Nature Environment & Pollution Technology*. (ISSN: 2395-3454; Online; 0972-6268 print) 21(4) 1887-1892 <https://doi.org/10.46488/NEPT.2022.v21i04.043>.
4. Prabhavathi, Anuradha Mal & Kiran Bamel (2022). Turmeric: a spice with medicinal properties. *Journal of Economic and Taxonomic Botany* (ISSN 0250-9768) 46 (3-4).
5. Prabhavathi, Kiran Bamel, Anuradha Mal & Roopali Pandey, (2022). Role of osmoprotectants: transgenic approach for different stresses. *Research Journal of Biotechnology* (p-ISSN 0973-6263) 17 (7): 156-163.
6. Prabhavathi, Roopali Pandey, Anuradha Mal & Kiran Bamel. (2022). Osmoprotectants: Protective role under various stresses in plants. *International Journal of Botany Studies* (ISSN: 2455-541X), 7(2): 108-118.
7. Pragya, P., Sharma, K. K., Kumar, S., Manisha, M., Singh, D., Kumar, V. & Singh, B. (2022). Enhanced production and immobilization of phytase from *Aspergillus oryzae*: a safe and ideal food supplement for improving nutrition. *Letters in Applied Microbiology*, 76, 2, February 2023, ovac077, <https://doi.org/10.1093/lambio/ovac077>.
8. Kumar, V., Gupta, S. & Jolli. V. (2022). Influence of Vehicular Frequency on Air Quality of Delhi, India. *Ecological Chemistry and Engineering S*, 29 (4) 477-485. <https://doi.org/10.2478/eces-2022-0034>.
9. Singh, K., Arora, S., Khuman, A., Aggarwal, A., Kumar, V., & Chaudhary, B. (2022). Comparative phylogenomic analysis of 5'cis-regulatory elements (CREs) of miR160 gene family in diploid and allopolyploid cotton (*Gossypium*) species. *Gene Reports*, 101721. <https://doi.org/10.1016/j.genrep.2022.101721>.
10. Aggarwal, A., Arora, S., Khuman, A., Singh, K., Kumar, V., & Chaudhary, B. (2022). Comparative evolutionary dynamics of the

5'cis-regulatory elements (CREs) of miR167 genes in diploid and allopolyploid cotton species. *Plant Gene*, 32, 100380. <https://doi.org/10.1016/j.plgene.2022.100380>.

11. B. Chaudhary, V. Kumar (2022). Emerging Technological Frameworks for the Sustainable Agriculture and Environmental Management. *Sustainable Horizons* (3) 100026, ISSN 2772-7378. <https://doi.org/10.1016/j.horiz.2022.100026>.
12. Ramlal A, Nautiyal A, Baweja P, Kumar Mahto R, Mehta S, Pujari Mallikarunja B, Vijayan R, Saluja S, Kumar V, Kumar Dhiman S, Lal SK, Raju D and Rajendran A (2022). Harnessing heterosis and male sterility in soybean [*Glycine max* (L.) Merrill]: A critical revisit. *Front. Plant Sci.* 13:981768. <https://doi.org/10.3389/fpls.2022.981768>.
13. Khuman, A., Kumar, V., & Chaudhary, B. (2022). Evolutionary expansion and expression dynamics of cytokinin-catabolizing CKX gene family in the modern amphidiploid mustard (*Brassica* sp.). *3 Biotech*, 12 (9), 1-24. <https://doi.org/10.1007/s13205-022-03294-0>.
14. Singh, D., Dhiman, S. K., Kumar, V., Babu, R., Shree, K., Priyadarshani, A., & Saluja, S. (2022). Crop Residue Burning and Its Relationship between Health, Agriculture Value Addition, and Regional Finance. *Atmosphere*, 13(9), 1405. <https://doi.org/10.3390/atmos13091405>.
15. Neetu Kumari, Kiran Bamel, Prabhavathi, Roopali Pandey & Seema Talwar (2022). Corona Virus and Mucormycosis: Indications and Treatment Methodology of Dark Growth in COVID-19 Patients. *South Asian Journal of Experimental Biology* (eISSN:2230-9799), 12(1): 64-72.
16. Seema Talwar, Kiran Bamel & Prabhavathi (2022). Impact of Elevated Temperature and Carbon dioxide on Seed Physiology and Yield. *Plant Science Today* (Early Access). <https://doi.org/10.14719/pst.2059>.
17. Kiran Bamel, Neetu Rani, Jitender Singh Bamel, Sara Gahlot, Rishta Nandini Singh & Sumit Kumar Pathak (2022). Current

Approaches and Future Perspectives in Methods for Crop Yield Estimation, *Bulletin of Environment, Pharmacology and Life Sciences* (ISSN 0970-3586), special issue (1):243-247.

18. Kiran Bamel & Rajendra Gupta (2022). Juglone promotes shooting and inhibits rooting in leaf explants of in vitro raised tomato (*Solanum lycopersicum* var. Pusa Ruby) seedlings, *In Vitro Cellular and Developmental Biology: Plant* (ISSN 1054-5476 (print) 1475-2689 (web) <https://doi.org/10.1007/s11627-022-10277-6>).
19. Kiran Bamel & Nupur Mondal (2022) In vitro culture and in silico analysis depict the presence of acetylcholine receptor (AChR) in *Solanum lycopersicum* L., *In Vitro Cellular and Developmental Biology: Plant* (ISSN 1054-5476 print 1475-2689 web) <http://doi.org/10.1007/s11627-022-10324-2>.
20. Talwar S, Mondal N, K Gaurav, Mathur P & Bhardwaj S (2022). Antifungal Activity of Clove, Neem and Peppermint Oils against *Fusarium graminearum*. *Research Journal of Agricultural Science*; 13(4): 962–965. ISSN: 0976-1675 (P), ISSN: 2249-4538 (E).
21. Nupur Mondal, Divya Mohanty, Seema Talwar, Jyoti Sharma & Nainesh Unhelkar (2022). Plant Biodiversity Conservation using Biotechnological Tools. *International Journal of Biotechnology and Biomedical Sciences*, 8 (1):1-6. ISSN: 2454-4582.
22. Gayacharan, Swarup Parida, Nupur Mondal, Rashmi Yadav, H. Vishwakarma and JC Rana (2023). Mining legume germplasm for genetic gains: An Indian perspective. *Frontiers in Genetics*. <https://doi.org/10.3389/fgene.2023.996828>.
23. Chaudhary, J. K., Saini, D., Chaudhary, P. K., Maurya, A., Verma, G. K., Gupta, A. K.,... & Mirza-Shariff, A. A. (2022). Exploring the immunomodulatory aspect of mesenchymal stem cells for treatment of severe coronavirus disease 19. *Cells*, 11(14), 2175.

CHEMISTRY

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| Research Papers | <ol style="list-style-type: none">1. Uma Narang, Renu Gautam, Kumar Karitkey Yadav, Soumee Bhattacharya, P. K. Sahu, Anil K. Aggarwal & Shive M. S. Chauhan (2022). Hydrogen bond controlled selfassembly of nanostructured triazine-functionalized new porphyrin molecules. <i>Chemical Papers</i> 76: 3759-3769.2. S. Sharma, M. Sharma, N. Dheer, S. K. Ujjain, P. Ahuja, G. Singh and R. Kanojia (2023). A Novel Leaf Extract of Sorghum Vulgare as an Eco-friendly Corrosion Inhibitor for Mild Steel Corrosion in 0.5 M H₂SO₄. <i>Portugaliae Electrochimica Acta</i> 41(4):273-287.3. Himadri Tanaya Das, Swapnamoy Dutta, Tamilarasan Elango Balaji, Nigamananda Das, Payaswini Das, Neelu Dheer, Rajni Kanojia, Preety Ahuja and Sanjeev Kumar Ujjain (2022). Recent Trends in Carbon Nanotube Electrodes for Flexible Supercapacitors: A Review of Smart Energy Storage Device Assembly and Performance. <i>Chemosensors</i> 10(6):223.4. Shashank Shekhar, Shreya Sharma, Jude A. Okolie, Amit Kumar, Bhasha Sharma, Mahendra Kumar Meena, Ajay Kumar Bhagi, Anjana Sarkar (2022). Synthesis, structural elucidation, biological screening, and density functional theory calculations of Cu(II), Ni(II), Mn(II), and Co(II) complexes of 20 Z-N-((Z)-2-(6-nitrobenzo[d]thiazol-2-ylimino)-1, 2-diphenylethylidene)-5-nitrobenzo[d]thiazol-2-amine Schiff base ligand. <i>Applied Organometallic Chemistry</i> 36:e6766.5. Deepika Singh, Lajpreet Kaur, Priya Singh, Anupama Datta, Mallika Pathak, Anjani K. Tiwari, Himanshu Ojha & Rahul Singhal (2023). Luminescence and in-silico studies of binding interactions of arylpiperazinyl-butylbenzoxazolone based synthetic compounds with bovine serum albumin. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> 437:114429.6. Sanjeev Kumar, Bhawna, Ritika Sharma, Akanksha Gupta, Kashyap Kumar Dubey, A.M. Khan, Rahul Singhal, Ravinder Kumar, Akhilesh Bharti, Prashant Singh, Ravi Kant & Vinod Kumar (2022). TiO₂ based Photocatalysis membranes: An efficient strategy for pharmaceutical mineralization. <i>Science of the Total Environment</i> 845:157221. |
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| | <ol style="list-style-type: none"> 7. Afreen J. Rahman, Himanshu Ojha, Akhilesh Pandey, Sandeep Kumar, Rahul Singhal, Anupama Datta, Brajendra K. Singh (2022). Kinetic, isotherm and thermodynamic adsorption studies of organophosphorus compound (phosmet) on reduced graphene oxide. <i>Diamond and Related Materials</i> 127:109191. 8. Lajpreet Kaur, Afreen J. Rahman, Anju Singh, Mallika Pathak, Anupama Datta, Rahul Singhal & Himanshu Ojha (2022). Binding studies for the interaction between hazardous organophosphorus compound phosmet and lysozyme: Spectroscopic and In-silico analyses. <i>Journal of Molecular Liquids</i> 355:118954. 9. Piyush Verma, Lajpreet Kaur, Priyanka Aswal, Anju Singh, Himanshu Ojha, Afreen Jahan Rahman, Rahul Singhal, Anjani K Tiwari & Mallika Pathak (2022). Luminescence studies of binding affinity of vildagliptin with bovine serum albumin. <i>Journal of Biomolecular Structure and Dynamics</i> 1-12. 10. Shilpa Jain et al. (2023) New Avenues for Organic Redox Materials as Sustainable Lithium-ion Battery Cathodes. <i>Organic Materials</i> 5: 21–34. 11. Bhasha Sharma (2022). Sustainable Polysaccharide Hydrogels based on Dynamic Schiff Base Linkages as versatile Building Blocks for Fabricating Advanced Functional Materials. <i>Journal of Polymers and the Environment</i>. 12. Bhasha Sharma, Shantanu Pandey, Nidhi Bijalwan, Neema Kushwaha, Siddanth Saxena & Susmitadey Sadhu (2022). Tuning mechanical properties of poly(vinyl alcohol) and its influence on different concentrations of epoxidized vegetable oils. <i>International Journal of Polymer Analysis and Characterization</i>, 27, 558-569. |
| <p>Chapters in a Book</p> | <ol style="list-style-type: none"> 1. Rahul Singhal (2022). Chapter “Protein kinase inhibitors from discovery to therapeutics” for book ‘Protein Kinase Inhibitors: From Discovery to Therapeutics’ published by Academic Press Rahul Singhal (2022) pp. 435-456. 2. Arora, R. (2022). Chapter “Antiviral potency of Chitosan, its derivatives and Nanocomposites” for book ‘Chitosan-based nanocomposite materials’ published by Springer, Singapore pp 273-289. ISBN: 978-981-19-5337-8, 978-981-19-5338-5. |

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| | <p>3. Arora, R. (2022). Chapter “Biomedical application of Chitosan-based nanocomposites as antifungal agents” for book ‘Chitosan-based nanocomposite materials’ published by Springer, Singapore pp 251-271. ISBN: 978-981-19-5337-8, 978-981-19-5338-5.</p> |
| Books | <p>1. N. G. Giri (2023). Practical Book-Forensic Chemistry and Toxicology. ISBN:9788189128982</p> |

COMPUTER SCIENCE

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| Research Papers | <p>1. Krishan Kant Singh Gautam, Rajendra Kumar (2022). IoT and object identification enabled Smart Home Security System” International Journal of Mechanical Engineering. Vol. 7 (Special Issue 3, Jan.-Feb. 2022). ISSN: 0974-5823 pp. 16-23.</p> <p>2. Krishan Kant Singh Gautam, Rajendra Kumar <i>et.al</i> (2022). Machine Learning Algorithms for 5G and Internet-of-Thing (IoT) Networks 2022 IEEE Sponsored Second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022) held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, 21-22, April 2022. ISSN 978-1-6654-1120-2/22, DOI: 10.1109/ICAECT54875.2022.9808005.</p> <p>3. Krishan Kant Singh Gautam & Rajendra Kumar (2022). Security Awareness Model for Artificial Intelligence and Internet of Things. International Journal on Recent and Innovation Trends in Computing and Communication, vol. 10, no. 12, Dec. 2022, pp. 203-10, https://ijritcc.org/index.php/ijritcc/article/view/5936.</p> |
| Patent | <p>1. Krishan Kant Singh Gautam, Rajendra Kumar, Rakesh Yadav (2022). A System for Detecting Threats in IOT Networks And Method Thereof. Application Number: 202141061667. Publication Date (4/02/2022).</p> |

ENVIRONMENTAL STUDIES

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| Research Papers | <ol style="list-style-type: none">1. Kumar, V., Gupta, S., & Jolli, V. (2022). Influence of Vehicular Frequency on Air Quality of Delhi, India. Ecological Chemistry and Engineering S, 29(4), 477-485. |
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HINDI

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| Research Papers | <ol style="list-style-type: none">1. Ruchira Dhibgra (2022). Yah mere liy nhi kahani : nai puarani pidi ke jivan mulyon ka sangharsh, Purvai Katha (U.K.) Dec 21, 2022, https://www.thepurvai.com/an-article-by-dr-ruchira-dhingra-4/2. Ruchira Dhibgra (2022). Band gali ka aakhiri makan or badalte jivan muly, Purvai Katha (U.K.) Nov 27, 2022https://www.thepurvai.com/an-article-by-dr-ruchira-dhingra-on-dharmveer-bharatisstory/3. Ruchira Dhibgra (2022). Kahanikar Dharamvir Bharati: Kathy or shilp, Purvai Katha (U.K.), Sep 25, 2022 ,https://www.thepurvai.com/an-article-on-dharmveer-bharti-by-dr-ruchira-dhingraa/4. Ruchira Dhibgra (2022). Prasad krit Kankal, Purvai Katha (U.K.) July 24, 2022.5. Tarun (2023). डिजिटल समय में किताबें ऑक्सीजन सीरीज हैं, JANKRITI volume 93 Jan 2023 ISSN 2454-27256. Tarun (2022). सलाम: दलित चेतना की पैरवी करती कहानियाँ Bahuri Nahi Awana' volume 19 January-June 2022 ISSN 2320-7604 |
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| Edited Books | <ol style="list-style-type: none"> 1. Dr. Arvinder Kaur (2023). Editor of 'Anubhamani' in two volume (2022-23). 2. Hindi Kahani Sanchayan, (Sah lekhak) (2022). K. L. Pachauri Prakashan, ISBN: 978-93-9131-8-61. 3. Tarun (2022). 'डायरी में बयां ज़ख्म को धूल में उड़ाती कविता' on the book of 'ज़ख्म पर धूल' (Authored by Malyaj) published in ugc care listed Journal 'Pustak Varta' Volume 87-90 ISSN ISSN: 2349-1809. |
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MATHEMATICS

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| Research Papers | <ol style="list-style-type: none"> 1. Priyanka, K. (2022). Hybrid Estimators of Population Mean in presence of Non-response and Correlated Measurement Errors. Communications in Statistics - Simulation and Computation, DOI: https://doi.org/10.1080/03610918.2022.2155310 2. Priyanka, K. (2022). Analyzing the Behavior of General Class of Estimators of Population Mean in Presence of Correlated Measurement Errors. Communications in Statistics - Theory and Methods, DOI: 10.1080/03610926.2022.2122842 3. Priyanka, K. and Trisandhya, P. (2022). Advances in Estimation by the Item Sum Technique in Two Move Successive Sampling. To appear in Statistics in Transition-new Series. 4. Poonam Garg, Surbhi Madan, Ritu Arora, Dhiraj Kumar Singh (2022). Covid-19 cases in Morocco: A comparative analysis, Results in Nonlinear Analysis, 5 (2022) No. 3, 337–346. ISSN No. 2636-7556. https://www.scopus.com/sourceid/21101033829 5. Poonam Garg, Ritu Arora, Surbhi Madan and Dhiraj Kumar Singh (2022). Estimation of Parameters and Stability Analysis of Coronavirus Pandemic. Advances in Differential Equations |
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| | <p>and Control Processes, Volume 28, Pages 119-134. ISSN: 0974-3243.</p> <p>6. Surbhi Madan, Poonam Garg, Ritu Arora and Esha Garg (2022). On Correction of Repeated Burst Errors in Multiple Blocks, <i>Advances and Applications in Discrete Mathematics</i>, Volume 33, 2022, Pages 45-71. ISSN: 0974-1658.</p> <p>7. Ritu Arora, Surbhi Madan, Poonam Garg, and Esha Garg (2022). Multi-block two repeated fixed burst error correcting linear codes, <i>Ratio Mathematica</i>, 43, PP 131-150, Doi 10.23755/rm.v42i0.792. ISSN: 1592-7415. e-ISSN: 2282-8214.</p> <p>8. Dhiraj Kumar Singh, Shveta Grover, Surbhi Madan (2023). On Some Pexider Type Sum Form Functional Equations. <i>Montes Taurus J. Pure Appl. Math.</i> 4 (3), 270–281, 2022. ISSN: 2687-4814.</p> <p>9. Kiran, B., Neetu, R., Sara, G., Rishta, N. S., Sumit, K. P., Abhinav, S., Nandini, S. and Jitender, S. B. (2022). Current Approaches and Future Perspectives in Methods for Crop Yield Estimation, <i>Bulletin of Environment, Pharmacology and Life Sciences</i>, Special Issue (1) 2022: pp 243-247. ISSN: 2277-1808.</p> <p>10. Uttam K. Sinha & Lalit K. Vashisht (2023). On Matrix-Valued Gabor Bessel Sequences and Dual Frames Over Locally Compact Abelian Groups in <i>Khayyam J. Math.</i>, no. 1, 89-101 DOI: 10.22034/KJM.2022.354990.2625.</p> <p>11. Sushil Yadav, Mukesh Kumar and Rajiv Aggarwal (2022). Analysis of resonant curve in the earth-moon system under the effect of resistive force and earth's equatorial ellipticity. <i>Applications and Applied Mathematics: An International Journal (AAM)</i> Vol. 17, Issue 1, PP. 186-211.</p> <p>12. Sushil Yadav, Mukesh Kumar & Virendra Kumar (2022). Analysis of resonant curve and phase portrait due to earth's equatorial ellipticity in the earth-moon system using perturbation technique. <i>Journal of Dynamical System and Geometric Theories</i>, Vol. 20, No. 2, pp. 275-298.</p> <p>13. Sushil Yadav, Mukesh Kumar, Vinay Kumar & Pravata Kumar Behera (2022). Stability analysis of lagrangian points of geo-synchronous satellite including the resistive force and earth's equatorial ellipticity. <i>New Astronomy</i> 97: 101887.</p> |
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| | <p>14. Sushil Yadav, Mukesh Kumar & Bhavneet Kaur (2022). Resonant curve due to perturbations in geo-synchronous satellite including the earth's equatorial ellipticity and resistive force. <i>Astronomy Reports</i>, Vol. 66, No. 8, pp. 736–753.</p> <p>15. K. M. Sahu, Soni, N. Kumar and A. Aggarwal (2022). σ-Convergence of Fourier series & its Conjugate series 2022 5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh, India, IEEE Explore pp. 1- 6, doi:10.1109/IMPACT55510.2022.10029267. https://ieeexplore.ieee.org/document/10029267.</p> <p>16. Soni, N. Kumar, Y. K. Sharma, V. Kumar & A. Aggarwal (2022). Generalization of Fourier Transformation of Scaling Function using Riesz basis on $L_2(K)$ 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), IEEE Explore, pp. 1-5, doi: 10.1109/ICRITO56286.2022.9965138. https://ieeexplore.ieee.org/document/9965138</p> <p>17. Soni, N. Kumar, V. Kumar & A. Aggarwal (2022). Biorthogonality Collection of Finite System of Functions in Multiresolution Analysis on $L_2(K)$ 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), IEEE Explore, pp.1-5, doi: 10.1109/ICRITO56286.2022.9964791. https://ieeexplore.ieee.org/document/9964791</p> <p>18. Anita Singla, V. Kumar, P. Goyal & Soni (2022). Similarity Measures in Fuzzy Rough Sets and their Applications in Corporate Sector ‘ ‘ Advance Engineering Science, Volume 54, https://advancedengineeringscience.com/article/607.html</p> |
| <p>Chapters in a Book</p> | <p>1. Neetu, R. and Savita, G. (2023). A Brief Description of Root Finding Iterative Techniques in Multi-disciplinary Edited Book titled “Exuberant Research” SSG Publication, (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-06-9.</p> <p>2. Neetu, R. and Savita, G. (2022). Essence of ‘Aryabhatiya’, A Composition by the Great Indian Mathematician ‘Aryabhatta’ in Multi-disciplinary Edited Book titled “Majestic Research”; SSG Publication (Registered with Department of Higher Education,</p> |

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| | <p>Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-01-4.</p> <p>3. Amita, H. and Neetu, R. (July 2022). A Few Glimpses of Mathematics in Sports in Multi-disciplinary Edited Book titled “Research Chakra”; SSG Publication (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-00-7.</p> |
| <p>Books Edited</p> | <p>1. Neetu, R. (2023). An Editor of a Multi-disciplinary Edited Book titled “Exuberant Research”; SSG Publication (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-06-9.</p> <p>2. Neetu, R. (2022). An Editor of a Multi-disciplinary Edited Book titled “Majestic Research”; SSG Publication (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-01-4.</p> <p>3. Neetu, R. (2022). An Editor of a Multidisciplinary Edited Book titled “Research Chakra”; SSG Publication (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-00-7.</p> <p>4. Neetu, R. (2022). An Editor of a Multi-disciplinary Edited Book titled “Treasure of Research”; SSG Publication (Registered with Department of Higher Education, Ministry of Human Resource Development, Government of India), Mumbai, Maharashtra, India, ISBN:978-93-91773-13-7.</p> |

PHYSICS

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| Research Papers | <ol style="list-style-type: none">1. Jyoti Rajput, Ashok Kumar Pramanik, Pramod Kumar, Shiv Shankar Gaur, Ravindra Singh & Niti Kant (2022). Comparative study of electron acceleration by linearly and circularly polarized Hermite-cosh-Gaussian laser pulse in a vacuum. Journal of Optics, Nov. 2022, https://doi.org/10.1007/s12596-022-01000-02. Preetika Dhawan, Anupama Saini, Sahil Goel, Nidhi Tyagi & Harsh Yadav (2022) A systematic study of the third-order nonlinear optical co-crystal of bis-((diisopropyl) ammonium) dichromate: X-ray, Hirshfeld surface, Optical, and Mechanical analysis. Journal of Molecular Structure, 1270, 133869 |
| Books | <ol style="list-style-type: none">1. Dr. Mamta, Dr. Bharti (2023). Electrical Network Circuits. <i>Published by Akash Books</i> 4278/3, Ansari Road, Daryaganj, New Delhi-110 002, ISBN: 978-81-953682-0-4 |

POLITICAL SCIENCE

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| Research Papers | <ol style="list-style-type: none">1. Bishnu Satpathy (2022). The Journey of Democracy: An Indian Narrative in India Calling, Centre for Bharat Studies, Research Institute for Languages and Cultures of Asia, Mahidol University Vol. XII (Special Issue) ISSN 1906-9758 PP-39-41.2. Bishnu Satpathy (2022). Revisiting Human Rights from a Gender Perspective in CHETANA International Journal of Education Vol-2 ISSN: 2455- 8729(E)/2231-3613 (P) PP-30-41. |
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| | 3. Bishnu Satpathy (2022). Justice: A Long Journey from Plato to Amartya Sen in CHETANA International Journal of Education Vol-2 ISSN: 2455-8729(E)/2231-3613 (P) PP-7-20. |
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SANSKRIT

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| Research Papers | <ol style="list-style-type: none"> 1. Rajneesh (2022). हिंदू संस्कारों में प्रतिबिंबित सांस्कृतिक तत्व । IJARESM International Journal of All Research Education & Scientific Methods, ISSN: 2455-6211. 2. Rajneesh (2022). वैदिक साहित्य में सूर्य का देवत्व । ER Publications ISSN: 2320-8708. |
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ZOOLOGY

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| Research Papers | <ol style="list-style-type: none"> 1. Sunita Gupta, Kulshreshtha, P. Gupta, S. Shaikh, R. Aggarwal, D.; Sharma, D. & Rahi, P. (2022). Foldscope Embedded Pedagogy in Stem Education: A Case Study of SDG4 Promotion in India. Sustainability, 13427. https://doi.org/10.3390/su142013427. 2. Sunita Gupta, Vijay Kumar, & Virat Jolly (2022). Influence of Vehicular Frequency on Air Quality of Delhi, India. ECOL CHEM ENG S. 2022;29(4):477-485. sciendo. DOI:10.2478/eces-2022-0034. 3. Chaudhary JK, Saini D, Chaudhary PK, Maurya A, Verma GK, Gupta AK, Roshan R, Vats TK, Garg N, Yadav D, Kant N (2022). Exploring the Immunomodulatory Aspect of Mesenchymal Stem Cells for Treatment of Severe Coronavirus Disease 19. Cells. 11(14):2175. https://doi.org/10.3390/cells11142175; PMID: 35883618; PMCID: PMC9322532. 4. M. N. D. Purohit, Deepika Yadav, N. Vyas (2022). Population Studies on Snails. The Scientific Temper Vol. 13, No. 2, pp 145- |
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5. Kant, N., Samanta, S., Panchal, I., Pandey, A., Ghatak, L., Rout, A., & Chaudhary, J. K. (2022). Genome-wide mutation/SNP analysis, biological characteristics, and Pan-India prevalence of SARS-CoV-2 Variants of Concern. *Chemical Biology Letters*, 9(2), 331. <https://pubs.thesciencein.org/journal/index.php/cbl/article/view/331> ISSN 2347–9825.
6. Dua, A., Nigam, A. (2022). Evolutionary Genetics. In: Kar, D., Sarkar, S. (eds) *Genetics Fundamentals Notes*. Springer, Singapore. https://doi.org/10.1007/978-981-16-7041-1_22 ISBN: 978-981-16-7040-4.
7. Nigam A, Mukherjee, Verma M (2022). Global Impact of Tuberculosis and HIV coinfection. *Microsphere Vol 2*: pp 12-18.
8. Sood, U., Dhingra, GG., Anand, S., Hira, P., Kumar, R., Kair, J., Verma, M., Singhvi, N., Lal, S. Rawat, C.D., Singh, V.K., Kaur, J., Verma, H., Tripathi, C, Singh, P., Dua, A. et al. (2022). Microbial Journey: Mount Everest to Mars. *Indian J Microbiol* <https://doi.org/10.1007/s12088-022-01029-6>.
9. Saxena, A., Dua, A., Talwar, C., Singh, M. & Lal, R. (2022). Environmental impact of the COVID-19 pandemic. *Biosphere 1*:1-70.
10. Dua, A., Nigam, A. (2022). Evolutionary Genetics. In: Kar, D., Sarkar, S. (eds) *Genetics Fundamentals Notes*. Springer, Singapore. https://doi.org/10.1007/978-981-16-7041-1_22 ISBN: 978-981-16-7040-4.
11. Nidhi Garg (2022). *Dot Blot Assay Essentials of Immunology: Laboratory Manual*. (A laboratory manual for students of biological and allied sciences) Chapter Eleven. Print date: 31 October 2022. ISBN-13: 978-8195805747
12. Nidhi Garg (2022). *Immunoblot Essentials of Immunology: Laboratory Manual*. (A laboratory manual for students of biological and allied sciences) Chapter Twelve. Print date: 31 October 2022. ISBN-13: 978-8195805747.
13. Namgial T, Singh AK, Singh NP, Francis A, Chattopadhyay D, Voloudakis A, & Chakraborty S (2023). Differential expression of

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| | genes during recovery of Nicotiana tabacum from tomato leaf curl Gujarat virus infection. |
| Books | 1. Chaudhary JK, Chaudhary PK, Maurya A (2022). National question book for Life Sciences; 2022; Prestige Publisher, New Delhi (ISBN:978-81-949428-9-4). |

Summary

| S. No. | Item | Total Number (2022-23) |
|---------------|--------------------|-------------------------------|
| 1. | Research Papers | 85 |
| 2. | Chapters in a Book | 06 |
| 3. | Books | 03 |
| 4. | Edited Books | 07 |
| 5. | Patent | 01 |
| Total | | 102 |