Curriculum vitae

Prof. Vivek Sheel

Personal Details

Address: Professor, Department of Chemistry & Chemical Sciences, School of Physical & Material Sciences, Central University of Himachal Pradesh, Dharamshala, Academic Block Shahpur, Distt. Kangra, Himachal Pradesh, India.

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Citizenship: India

Professional Qualifications

M.Sc. : Department of Chemistry, Guru Nanak Dev University, Amritsar in the year 2005.

Ph.D. : Department of Chemistry, UGC Sponsored Centre for Advanced Studies-I, Guru Nanak Dev University, Amritsar in the year 2012.

Employment History

Dr. Vivek Sheel is currently working as Professor in the Department of Chemistry & Chemical Sciences. He obtained M.Sc. from Department of Chemistry, Guru Nanak Dev University, Amritsar (Punjab), and Ph.D. in Sciences (Chemistry) from Department of Chemistry, UGC Sponsored Centre for Advanced Studies-I, Guru Nanak Dev University, Amritsar (Punjab). He joined Maharishi Markandeshwar University, Mullana, Haryana in 2012, and worked there till October 2019. In his guidance, one PhD degree is completed, and forty one Masters Students have been awarded degrees till date. His current research topics include synthesis, characterization and application of Nanostructures and studies of their self-assembly behaviour, anticancer properties of transition metal Nanostructures, nanostructures analysis using high resolution microscopy, photocatalysis, water treatment & investigations of systems.

Personal Distinctions

1. 48th Position in Himachal Pradesh Board of School Education, Dharamshala in the year 1997.
2. Merit Certificate in B.Sc. I Year for standing 1st in English & 3rd in Chemistry in the year 2001.
3. Participated in the inter-college Physics Quiz in B.Sc. II year in the year 2002.
4. GNDU Campus Placement in Ranbaxy Pharmaceutical in M. Sc. IV semester in the year 2005.
5. Awarded Project Fellow in University Grants Commission Scheme in the year 2008.
6. Appreciation Certificate by National Children's Science Congress in the year 2013.

Seminars and Invited Conference Presentations

SHORT TERM COURSE / FACULTY DEVELOPMENT PROGRAMME (FDP) ATTENDED: (08)

1. Two weeks FDP on "Advanced Research Methodology" at Ramanujan College, University of Delhi, from 20th August to 3rd September 2021.
2. Four weeks Faculty Induction Programme (FIP-04) at GNDU, Amritsar, from 2nd March to 29th March 2021.

3. One week FDP on "Molecular Manufacturing" at Central University Punjab, AICTE Training and Learning (ATAL) Academy, from 23rd November to 27th November 2020.
4. One week FDP on "Transforming Education with Industry 4.0" at Department of CSE & IT, Jaypee University of Informational Technology, Solan, from15th June to 20th June 2020.
5. One week FDP on "Research Methodology" at MMU, Mullana (Haryana), from 9th January to 13th January 2017.
6. Two weeks FDP on "Business Startup and Social Enterpreneurship" at MMU, Mullana (Haryana), from 19th September to 30th September 2016.
7. One week STC on "Advances in Material Characterization Techniques" at IITR, Roorkee (Uttarakhand), from 30th May to 3rd June 2016.
8. One week STC on "Nanotechnology: Basics and Applications in Chemical Engineering" at IITR, Roorkee (Uttarakhand), from 22nd June to 26th June 2015.

PAPERS PRESENTED IN INTERNATIONAL CONFERENCES: (03)

1. Bioconjugated Gold Nanoparticles and Their Application in Protein Film Formation. "International Conference on Emerging Trends in Engineering and Science Technology"- Feb. 2018, MMEC, Mullana, India.
2. Bovine Serum Albumin Driven Interfacial Growth of Selenium – Gold/Silver Hybrid Nanoparticles. "International Conference on Advances in Condensed and Nano Materials" - Feb. 2011, Department of Physics, Panjab University, Chandigarh, India.
3. Aqueous Phase Shape Controlled Bovine Serum Albumin Assisted Synthesis and Characterization of Lead Selenide and Cadmium Selenide Nanoparticles. "Professor Ram Chand Paul International Conference on Emerging Trends in Chemistry"- Feb. 2011, Department of Chemistry & Centre of Advanced Studies in Chemistry, Panjab University, Chandigarh, India.

INTERNATIONAL CONFERENCES/SEMINAR ATTENDED: (04)

1. International Webinar on "Role of Science and Technology to Combat Covid-19"- July 2020, Hans Raj Mahila Maha Vidyalaya Jalandhar, Punjab, India.
2. International Webinar on "Production of Radionuclides and their applications in Medical Imaging & Therapy"- June 2020, Department of Chemistry, Choudhary Bansi Lal University, Bhiwani, Haryana, India.
3. International Seminar on "Recent Advances in Chemical & Biological Sciences"- Feb. 2017, Department of Chemistry, MMEC, MM University, Mullana, Haryana, India.
4. International Symposium on "Molecular Aspects of Brain Aging and Neurological Disorders and Annual Meeting of Society for Neurochemistry"- Nov. 2008, Department of Biotechnology, Guru Nanak Dev University, Amritsar, Punjab, India.

PAPERS PRESENTED IN NATIONAL CONFERENCES: (12)

1. A Green Approach for Synthesis of Iron Oxide Nanoparticles using Flower Extract of Rhododendron Arboretum and its Characterization. "National Conference on Materials & Devices (NCMD-2020) "- December 2020, Department of Physics, Teerthankar Mahaveer University, Moradabad, Uttar Pradesh.
2. Women Empowerment in Digital India. "National Conference on Women Empowerment & Gender equality in Digital India"- November 2017, MM College of Pharmacy, M. M. U., Mullana (Ambala), Haryana.
3. Chromium Oxide Nanoparticles and Characterizations."National Symposium on Advances in Chemical Sciences"- March 2017, Department of Chemistry, Guru Nanak Dev University, Amritsar, Punjab.

4. A Review on Synthesis and Characterization of ZnO Nanoparticles. "National Conference on Recent Advances in Chemical Sciences"- November 2016, Department of Chemistry, M. M. U., Mullana (Ambala), Haryana.
5. An introduction to Biomolecule Directed Nanomaterials. "National Conference on Biofuels & Bioenergy''- June 2015, Department of Chemistry, CoES, University of Petroleum & Energy Studies, Dehradun, Uttrakhand.
6. Synthesis, Characterization & Catalytic Activity of ZnO NPs. "Recent Advances in Chemical and Environmental Sciences" – Jan. 2015, Department of Chemistry, Multani Mal Modi College, Patiala, Punjab.
7. Photochemical Study and Antibacterial Activities of Bark Extract of *Bauhinia Variegate*. "National Conference on Recent Trends in Chemical & Environmental Sciences" – Feb**.** 2014**,** Department of Chemistry, Arni University, Kathgarh (Indora), Kangra, Himachal Pradesh.
8. A Simple and Effective Method of the Synthesis of Nano-sized $ZnFe_2O_4$ Particles. "Recent Advances in Chemical and Evironmental Sciences" – Jan. 2013, Department of Chemistry, Multani Mal Modi College, Patiala, Punjab.
9. Protein Films of Zein Conjugated Gold Nanoparticles: A Synthetic Route from Bioconjugated Nanoparticles to Biodegradable Protein Films. "National Symposium on Chemistry in 21st Century" – Dec. 2011, Department of Chemistry, Guru Nanak Dev University, Amritsar, Punjab.
10. Preparation and Comparision of Lead Selenide and Cadmium Selenide Nanoparticles by Using Bovine Serum Albumin as Capping Agent. "National Seminar on Applications of Nanoscience and Nanotechnology'' – Dec. 2010, BBK DAV College for women, Amritsar, Punjab.
11. Biomineralization of BSA-Chalcogenide Bioconjugate Nano- and Microcrystals. "Professor Ram Chand Paul VI National Annual Symposium on Emerging Areas in Chemical Sciences'' – March, 2010, Department of Chemistry & Centre of Advanced Studies in Chemistry, Panjab University, Chandigarh.
12. Aqueous Phase Bovine Serum Albumin Controlled Synthesis and Characterization of BSA Chalcogenide Bioconjugate Nano and Microcrystals. "National Conference on Nanomaterials: Synthesis & Applications" – Feb. 2009, Department of Chemistry, DAV PG College, Jallandhar, Punjab.

NATIONAL CONFERENCES / WORKSHOPS ATTENDED: (14)

1. Webinar on "Intellectual Property Rights (IPR) & Ethics'', October 2020, Department of Zoology, S.S.M. College Dinanagar, Punjab.
2. Webinar on " Quality Assessment of Online Education During Covid-19 Pandemic'', September 2020, Pt. L.M.S. Govt. P.G. College, Rishikesh, Dehradun, Uttrakhand.
3. Webinar on "Catalysis for Environmental Remediation (CER-2020)'', June 2020, Department of Chemistry, Sardar Vallabhbhai Patel Arts & Science College, Ainpur, Tal. Raver, Dist. Jalgaon Maharashtra.
4. Webinar on "Basic Author Workshop Research Article Writing & Reference Managing using Mendeley'', June 2020, Faculty of Science, Annamalai University in collaboration with Elsevier, Tamil Nadu.
5. Webinar on "Smart Materials for Future Applications'', June 2020, Department of Physics, Teerthankar Mahaveer University, Moradabad, Uttar Pradesh.
6. Webinar on "Anti-carcinogenic effect of selected Medicinal plants against ovarian cancer'', June 2020, DAV College Jalandhar, Punjab.
7. Online Conference on "Environmental Pollutants and Cancer'', May 2020, School of Life Sciences, Central University of Himachal Pradesh.

8. Webinar on "Genome-wide changes under microgravity", May 2020, School of Life Sciences, Central University of Himachal Pradesh.
9. One Day Workshop "Anvances in Computer Aided Drug Design & Discovery", August 2016, M. M. College of Pharmacy & Department of Chemistry, M. M. U. Mullana, Haryana.
10. Mendeley for Researchers, February 2016, Department of Chemistry, M. M. U., Mullana, Haryana.
11. Annual Convention of Chemists 2014, December 2014, Kurukshetra University, Kurukshetra, Haryana.
12. Safety in Chemistry Laboratory, November 2014, Department of Chemistry, M. M. U., Mullana, Haryana.
13. One Day Seminar ''AAS Instrumentation and Unique Patented Technologies'', April 2013, Perkin Elmer & M. M. College of Pharmacy, Mullana, Haryana.
14. One Day Workshop "Analytical Techniques for Research in Pharmacy'', December 2012, M. M. College of Pharmacy, M. M. U. Mullana, Haryana.

Professional Contributions

1. **Life Member** of Him Science Congress Association (HSCA), India.
2. **Industrial Training** of 1 month in **Dr. Reddy's Lab. Limited**, Hyderabad, Andhra Pradesh (**June, 2004**), India.
3. **Quality Control Officer** in **Ranbaxy Lab. Limited**, Ropar, Punjab (**July, 2005- April, 2008**), India.
4. **National Conference** (NCFCS-2022, **Organizing Committee Member**), Departmnet of Chemistry & Chemical Sciences, CUHP, Shahpur Parisar.
5. Member of **Organizing Committee**, One Day Workshop on Commemoration of Radhanath Sikdar as a Mathematician and Freedom Fighter, 2022, CUHP, Dharamshala.
6. **All India Inter University Power Lifting (Women) Championship** (Transport Committee Member), 2023, CUHP, Dharamshala.
7. Member of **Organizing Committee, Five Days Workshop cum Exhibition, Plasma Science & Technology**, 2023, CUHP, Shahpur Parisar.
8. **Organising Seceretry** , **National Conference FCBS – 2024**, Departmnet of Chemistry & Chemical Sciences, CUHP, Shahpur Parisar.
9. **All India Inter Zonal Weight Lifting (Women) Championship** 2025 (Venue Management Committee Member), CUHP, Dharamshala.
10. **Resourse Person** for Refresher Course on 21th December, 2024, (Synthesis, Characterization Techniques and Applications of Nanomaterials) UGC-Malaviya Mission Teacher Training Centres (MMTTCs), Central University of Jammu (J&K).

Doctoral Thesis Supervision

1. Title: Innovative Synthetic Methods of Metal Oxide Nanoparticles, Their Characterization and Applications. Year of Award: **2022**.

Patent (02)

1. "**Textile Waste water Treatment System using Biodegradation Technology Based on Microbial Consortia**." **Dr. Vivek Sheel**, Sachin Upmanyu, Dr. Munish Sharma, Dr. Manish Kumar, Dr. Ashun Chaudhary, Dr. Rakesh Kumar, Sunil

Kumar, Pradeep Kumar. Application No. 451126-001 Cbr No. 205188 Cbr Date: **11/03/2025** (Filed).

2. **Biodegradation Reactor for the Removal of Acid Orange 7 Dye from Industrial Wastewater through Microbial Decompostion**. Dr. Raman Kumar, Sonu Sharma, Monu Sharma, Dr. Vivek Sheel, Kusham Lata, Dr. Rakesh Kumar. Design No. 6462276, Grant date 11-08-2025.

Publications (46)

1. ***"Biomineralization of BSA-Chalcogenide Bioconjugate Nano- and Microcrystals."*** M. S. Bakshi, **Vivek Sheel Jaswal**, G. Kaur, T. W. Simpson, P. K. Banipal, T. S. Banipal, F. Possmayer, N. O. Petersen, **2009**, 113, 9121-9127.
   Published in: Journal of Physical Chemistry C, **Impact Factor = 4.177**
2. ***"Solution Phase Interactions Controlled Ordered Arrangement of Gold Nanoparticles in Dried State."*** M. S. Bakshi, **Vivek Sheel Jaswal**, F. Possmayer, N. O. Petersen, **2010**, 10, 1747-1756.
   Published in: Journal of Nanoscience and Nanotechnology, **Impact Factor =1.354**
3. ***"Bovine Serum Albumin Driven Interfacial Growth of Selenium–Gold/Silver Hybrid Nanomaterials."*** **Vivek Sheel Jaswal**, P. K. Banipal, A. Kaura, M. S. Bakshi, , **2011**, 11, 3824-3833.
   Published in: Journal of Nanoscience and Nanotechnology, **Impact Factor= 1.354**
4. ***"Mossbauer Studies on Thermal Decomposition of Rubidium bis(citrate)ferrate(III) Precursor Prepared by Precursor Method."*** M. Gupta, M. Gupta, **Vivek Sheel Jaswal**, B. S. Randhawa, **2013**, 104, 73-76.
   Published in: Journal of Analytical and Applied Pyrolysis, **Impact Factor= 6.437**
5. ***"Synthesis, Characterization and Magnetic Studies of α-Fe2O3 nanoparticles."*** A. K. Arora, M. Sharma, **Vivek Sheel Jaswal**, P. Kumar, **2014**, Article ID 474909, 7 pages.
   Published in: Journal of Nanotechnology
6. ***"Synthesis and Characterization of Chromium Oxide Nanoparticles."*** **Vivek Sheel Jaswal**, A. K. Arora, J. Singh, M. Kinger, V. D. Gupta, , **2014**, 30(2), 559-566.
   Published in: Oriental Journal of Chemistry
7. ***"Reaction of various heteroaryl hydrazines with 3-cinnamoyl-4-hydroxy-6-methylpyran-2-ones: Synthesis of some novel pyrazolines and their iodine(III) mediated conversion to corresponding pyrazoles."*** M. Kinger, V. D. Gupta, J. Singh, A. K. Arora, **Vivek Sheel Jaswal**, **2014**, 26(23), 8084-8086.
   Published in: Asian Journal of Chemistry
8. ***"Synthesis and Characterization of ZnO Nanoparticles."*** A. K. Arora, S. Devi, **Vivek Sheel Jaswal**, J. Singh, M. Kinger, V. D. Gupta, **2014**, 30(04), 1671-1679.
   Published in: Oriental Journal of Chemistry
9. ***"Activated Arachis hypogea With Enhanced Multi Metal Sorption Capacity from Synthetic and Electroplating Industrial Wastewater: Batch and Column Mode."*** J. Singh, A. Ali, V. D. Gupta, A. K. Arora, M. Kinger, **Vivek Sheel Jaswal**, , **2014**, 4 (02), 79-90.
   Published in: Current Trends in Biotechnology and Chemical Research

10. ***"Desalination of Cd2+ and Pb2+ from Paint Industrial Wastewater by Aspergillus niger Decomposed Citrus limetta Peel Powder."*** J. Singh, A. Ali, **Vivek Sheel Jaswal** V. Prakash, , **2015**, 12, 2523-2532.
    Published in: International Journal of Environmental Science and Technology
    Impact Factor =3.519
11. ***"Synthesis and Antiviral Activities of 2, 3- disubstituted Quanazoline Derivatives."*** V. D. Gupta, J. Singh, M. Kinger, A. K. Arora, **Vivek Sheel Jaswal**, Asian Journal of Chemistry, **2015**, 27(12), 4379-4382.
    Published in: Asian Journal of Chemistry
12. ***"Nanomaterials – An Introduction."*** **Vivek Sheel Jaswal**, A. K. Arora, **2016**, 3(1), 21-22.
    Published in: Integrated Research Advances
13. ***"Chemical Evolution and Origin of Life: A Review."*** A. K. Arora, **Vivek Sheel Jaswal**, K. Singh, R. Singh, **2016**, 3(1), 9-17.
    Published in: Chemical Biology Letters
14. ***"Applications of Metal/Mixed Metal Oxides as Photocatalyst: A Review."*** A. K. Arora, **Vivek Sheel Jaswal**, K. Singh, R. Singh, **2016**, 32(4), 2035-2042.
    Published in: Oriental Journal of Chemistry
15. ***"Metal/Mixed Metal Oxides and Their Applications as Adsorbents: A Review."*** A. K. Arora, **Vivek Sheel Jaswal**, K. Singh, R. Singh, **2017**, 14(4), 3215-3227.
    Published in: International Journal of Chemical Sciences
16. ***"Metal/Mixed Metal Oxides and their Applications as Catalyst: A Review."*** A. K. Arora, **Vivek Sheel Jaswal**, R. Bala, **2018**,11(6), 893-899.
    Published in: Asian Journal of Research in Chemistry
17. ***"Phosphodiesterase 4 (PDE4) Inhibition of 4,5,6,7- tetrahydro-1H – 1, 2 – diaxepin – 7- one Derivative Using Physicochemical Parameters."*** S. Kumar, V. Gupta, B. Shaik, V. K. Agrawal, **Vivek Sheel Jaswal** and A. Chaudhary, **2018**, 8(1&2), 28-36.
    Published in: Current Trends in Biotechnology and Chemical Research
18. ***"Synthesis of ZnO Nano Particles Using Natural and Synthetic Methods and Their Applications: Review."*** **Vivek Sheel Jaswal**, **2018**, 8(1 & 2) 42-46.
    Published in: Current Trends in Biotechnology and Chemical Research
19. ***"Ferulic Acid: A Promising Therapeutic Phytochemical and Recent Patents Advances."*** A. Chaudhary, **Vivek Sheel Jaswal**, S. Chaudhary, A. Sharma, V. Beniwal, H. S. Tuli, **2019**, 13 (2), 115-123.
    Published in: Recent Patent on Inflammation and Allergy Drug Discovery
20. ***"Zein film functionalized with gold nanoparticles and the factors affecting its mechanical properties."*** M. A. P. Yoosaf, A. Jayaprakash, S. Ghosh, **Vivek Sheel Jaswal**, K. Singh, S. Mandal, M. Shahid, M. Yadav, S. Das, P. Kumar, **2019**, 9 (43) 25184 - 25188.
    Published in: RSC Advances, **Impact Factor =4.036**
21. ***"Psoralen: A Biologically important coumarin with emerging applications."*** A. Thakur, R. Sharma, **Vivek Sheel Jaswal**, E. Nepovimova, A. Chaudhary, K. Kuca, **2020**, 20(18), 1838-1845.
    Published in: Mini Reviews in Medicinal Chemistry, **Impact Factor =3.737**

22. ***"Quantum Parameters Based Study of Some Heterocycles Using DFT Method: A Comparative Theoretical Study."*** P. Rathi, R. Khanna, **Vivek Sheel Jaswal**, **2020**, 67(2), 213-217.
Published in: Journal of the Chinese Chemical Society, **Impact Factor =1.753**
23. ***"Synthesis and Biochemical Characterization of Iron Oxide Nanoparticles."*** R. Bala, A. Dixit, B. Pareek, J. Singh, A. Chaudhary, S. Arora, D. Singh, M. Gupta, **Vivek Sheel Jaswal***, **2021**, 37 (2), 148-152, **Published in:** Annals of Biology
24. ***"An Analysis of Green Synthesis of Manganese Oxide Nanoparticles Including Applications and Prospects as Anticancer Activity (MTT, ROS & MMP)."*** A. Dixit, R. Bala, B. Pareek, A. Chaudhary, S. Arora, D. Singh, **Vivek Sheel Jaswal***, **2021**, 6 (5), 1452-1456.
Published in: International Journal of Botany Studies.
25. ***"Green Synthesis and of Cadmium Oxide Nanoparticles with Various Plant Extracts and Their Use as an Anticancer Agent."*** A. Dixit, R. Bala, B. Pareek, A. Chaudhary, S. Arora, D. Singh, **Vivek Sheel Jaswal***, **2022**, 13(1), 1-13.
Published in: Biointerface Research in Applied Chemistry.
26. ***"Green Synthesis and Characterization of CuO NPs using Different Plants Extracts and Their Anticancer Activity."*** R. Bala, A. Dixit, B. Pareek, A. Chaudhary, S. Arora, D. Singh, **Vivek Sheel Jaswal***, **2022** .
Published in: Biointerface Research in Applied Chemistry.
27. ***"A synthesis, characterization and biological function of copper, nickel and iron nano-oxides with various plant extract."*** R. Bala, A. Dixit, B. Pareek, **Vivek Sheel Jaswal**, A. Chaudhary, V. Singh, and V. Sharma, 2393, 020009, **2022**.
Published in: AIP Conference Proceedings, **Impact Factor =0.4**
28. ***"Metal nanoparticles in cancer: from synthesis and metabolism to cellular interactions."*** H. S. Tuli, R. Joshi, G. Kaur, V. K. Garg, K. Sak, M. Varol, J. Kaur, S. A. Alharbi, T. A. Alahmadi, D. Aggarwal, K. Dhama, **Vivek Sheel Jaswal**, S. Mittal, G. Sethi, **2022**.
Published in: Journal of Nanostructure in Chemistry, **Impact Factor= 8.000**
29. ***"Mechanistic and analytical understanding of biological immobilization of chromium metal ions from waste-sites."*** D. Talukdar, T. Jasrotia, A. Umar, R. Kumar, R. Kumar, A. A. M. Alkhanjaf, A. A. Ibrahim, T. K. Mukherjee, **Vivek Sheel Jaswal**, M. S. Akhtar, 10, 107498, **2022**.
Published in: Journal of Environmental Chemical Engineering, **Impact Factor =7.968**
30. ***"In-vitro Cytotoxicity of Nickel Oxide Nanoparticles Against L-6 Cell-lines: MMP, MTT and ROS Studies."*** R. Bala, B. Pareek, A. Umar, S. Arora, D. Singh, A. Chaudhary, A. A. M. Alkhanjaf, A. A. Almadiy, H. Algadi, R. Kumar, **Vivek Sheel Jaswal***, S. Baskoutas, 215 (1), 114257, **2022**.
Published in: Environmental Research, **Impact Factor =8.431**
31. ***"A Sustainable Approach to The Degradation of Dyes by Fungal Species Isolated from Industrial Wastewaters: Performance, Parametric Optimization, Kinetics and Degradation Mechanism."*** R. Gul, P. Sharma, R. Kumar, A. Umar, A. A. Ibrahim, M. A. M. Alhamami, **Vivek Sheel Jaswal**, A. Dixit, M. Kumar, S. Baskoutas, **2022**.

Published in: Environmental Research, **Impact Factor =8.431**

32. ***"In-vitro Cytotoxicity of Nickel Oxide Nanoparticles Against L-6 Cell-lines: MMP, MTTandROSStudies."***Renu Bala, Bhawna Pareek, Ahmad Umar, Saroj Arora, Davin der Singh, Ashun Chaudhary, AbdulrabAhmedM. Alkhanjaf, AbdulrhmanA. Almadiy , Hassan Algadi, Raman Kumar, **Vivek Sheel Jaswal**. 215, 114257, **2022**.
    Published in: Environmental Research, Impact factor =7.7
33. ***"A Sustainable Approach to The Degradation of Dyes by Fungal Species Isolated from Industrial Wastewaters: Performance, Parametric Optimization, Kinetics and DegradationMechanism."***Roshan Gul , Priyanka Sharma, Raman Kumar, Ahmad U mar, AhmedA. Ibrahim, MohseA.M. Alhamami, **VivekSheel Jaswal**, Manish Kumar, Ashutosh Dixit, Sotirios Baskoutas. 216(1), 114407, **2023**.
    Published in: Environmental Research, Impact factor =7.7
34. ***"Phloretin, as a potent anticancer compound: from chemistry to cellular interactions."*** Hardeep Singh Tuli, Prangya Rath, Abhishek Chauhan, Seema Ramniwas, Kanupriya Vashishth, Mehmet Varol, **Vivek Sheel Jaswal**, Shafiul Haque, Katrin Sak. 27, 24, 8819, **2022**.
    Published in: Molecules, Impact factor =4.2
35. ***"Structural, dielectric and conductive properties of Ag substituted (La0. 80Sr0. 20) 1-xAgxMnO3 {x=0.15and0.20} cathode material for SOFCs."***
    Surinder Paul, Manokamna, Vikas Duggal, **VivekSheel Jaswal**, Rajesh Kumar. **2023**. **Published in: Material today: Proceedings.**
36. ***"Metal nanoparticles in cancer: From synthesis and metabolism to cellular interactions."*** Hardeep Singh Tuli, Ruchira Joshi, Ginpreet Kaur, Vivek Kumar Garg, Katrin Sak, Mehmet Varol, Jagjit Kaur, Sulaiman Ali Alharbi, Tahani Awad Alahmadi, Diwakar Aggarwal, Kuldeep Dhama, **Vivek Sheel Jaswal**, Sonam Mittal & Gautam Sethi. 13(3), 321-348, **2023**.
    Published in: Journal of Nanostructure in Chemistry, Impact factor =8.6
37. ***"Temperature dependent volumetric, viscometric and conductance studies of barium chloride in aqueous solution of citric acid: an insight into molecular interactions."***
    Manish Kumar, Shashi Kant, Deepika Kaushal , Abhishek Thakur , **Vivek Sheel Jaswal**, Dharmvir Singh , Sunil Kumar and Vinay Chauhan. 237(6), 765-776, **2023**.
    Published in: **Zeitschrift für Physikalische Chemie**, **Impact factor =3.0**
38. ***"Base metals (Ni, Cu, Zn, Fe) oxide nanomaterials mediated photo/sono-catalytic removal of emerging pharmaceutical contaminants from wastewater."***
    Savita Soni, Anjali Kumari, Sonika Kumari, Ajay Sharma, **Vivek Sheel**, Shashi Kant Bhatia, Anil Kumar Sharma. 12(6), 114683, **2024**.
    Published in: Journal of Environmental Chemical Engineering, Impact factor =7.4
39. ***"Green Synthesis of Titanium dioxide Nanoparticles by utilizing Marchantia polymorpha and their Application in Methylene Blue Dye Removal."*** Anu Dadwal, Pooja Kumari, Tabassum Nike, Vinay Chauhan, Rajender Kumar, Deepika Kaushal, **Vivek Sheel Jaswal**, Aditi Koundal & Manish Kumar**.** 154(8), 4228-4241, **2024**.

Published in: Catalysis Letters, Impact factor =2.5

40. ***"Recent advances in metal (M= Ni/Fe/Cu/Zn) oxide nanomaterials-mediated removal of dyes from wastewater."***
    Savita Soni, Anjali Kumari, Saurabh Sharma, Ajay Sharma, **Vivek Sheel**, Ramesh Th akur, Shashi Kant Bhatia, Anil Kumar Sharma. 166(2), 105565, **2024**.
    Published in: Journal of the Taiwan Institute of Chemical Engineers, Impact factor =5.5
41. ***"Layered double hydroxides based composite materials and their applications in foodpackaging."***Sonika Kumari, Savita Soni, Ajay Sharma, Satish Kumar, Varruchi Sharma, **Vivek Sheel Jaswal**, Shashi Kant Bhatia, Anil Kumar Sharma. 247, 107216, **2024**.
    Published in: Applied Clay Science, Impact factor =5.3
42. ***"Isolation, Screening, and characterization of azo dye degrading bacterial isolates: Isolation, Screening, and characterization of azo dye degrading bacterial isolates."*** Monu Sharma, Sonu, **Vivek Sheel**, Raman Kumar **(2024)** (Accepted)**.**
    Accepted in: International Journal of Computational and Experimental Science and Engineering.
43. ***"Isolation, screening, and characterization of Cu and Ni-tolerant fungal isolates from the contaminated sites: Isolation, screening, and characterization of Cu and Ni-tolerant fungal isolates from the contaminated sites".*** Monu Sharma, Sonu, **Vivek Sheel**, Raman Kumar **(2025)** (Accepted)**.**
    Accepted in: International Journal of Computational and Experimental Science and Engineering.
44. **Recent trends in fabrication of oxides/sulfide of vanadium, molybdenum and their graphene based nanocomposite for energy applications,** Ashif Choudhary, Manish Kumar, Ajay Sharma, Raman Kumar, **Vivek Sheel**, 114972, **2025**.
    Published in: Inorganic Chemistry Communications, Impact factor =5.4
45. **''Enhanced Supercapacitor Performance using Graphene based Bismuth-Niobium Nanocomposites: A Review".** Garima, Ashif Choudhary, Manish Kumar, Ajay Sharma, Raman Kumar, **Vivek Sheel**. 131311, **2025.**
    Published in: Materials Chemistry and Physics**, Impact factor =4.7**
46. **"Microbial Strategies for the Removal of Hexavalent Chromium from Wastewater: Recent Advances and Future Prospects",** Monu Sharma, Sonu, **Vivek Sheel**, Raman Kumar **(2025)** (Accepted)**.**
    Accepted in: Water, Air, & Soil Pollution, **Impact factor =3.0**

Book Chapters (6)

1. ***"Analytical Techniques for the Identification and Quantification of Flavonoids"*** in book ''Current Aspects of Flavonoids : Their Role in Cancer Treatment'' (Editor : Hardeep Singh Tuli), Chapter 2, Springer Nature **2019**, ISBN 978-981-13-5873-9, 9-22.
2. ***"ZnO Nanoparticles with Promising Anti-microbial and Antiproliferation Synergestic Properties"*** CAC Vol 84: Analysis, Fate and Toxicity of Engineered Nanomaterils in Plants, Chapter 9, Elsevier **2020**, ISSN 0166-526X, 251-258.

3. ***"Synthesis, Characterization, and Application of Metal Oxide Nanoparticles"*** in Nanotherapeutics in Cancer: Materials, Diagnostics and Clinical Applications, Chapter 2, Jenny Stanford Publishing Pvt. Ltd., **2022**, ISBN 978-981-4968-41-6, 23-39.
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