



DR. DEEPAK SINHA

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ONLINE ACADEMIC / RESEARCH PROFILES

Platform	Profile Link
Google Scholar	scholar.google.com/citations?user=OKTWVcEAAAAJ
ResearchGate	researchgate.net/profile/Deepak-Sinha-7
LinkedIn	linkedin.com/in/drdeepaksinha

EDUCATIONAL QUALIFICATIONS & JOURNEY

Year	Qualification	Institution / Details
2005	Doctorate in Chemistry	Guru Ghasidas University, Bilaspur (C.G.) Thesis: "Analysis of Chemicals Present in Soil, Water, Plant and Aquatic Animals with Special Reference to Industrial Effluents and Pollutational Effects in Bilaspur District (C.G.)"
1996	Master of Science (Inorganic Chemistry) — 70.2%	School of Studies in Chemistry, Pt. Ravi Shankar Shukla University, Raipur, C.G. First Position in the University Merit List
1994	Bachelor of Science (Chemistry, Botany, Zoology) — 68.1%	GOVT. JNM PG College of Science & Arts, Bemetara, C.G. Pt. Ravi Shankar Shukla University, Raipur
1991	Higher Sec. School Certificate Exam (Physics, Chemistry, Biology) — 83.7%	Board of Secondary Education, M.P., Bhopal 11th Position in PCB Group, Madhya Pradesh State Merit List

Academic & Competitive Milestones

Examination / Purpose	Year	Result / Rank
GATE Examination — conducted by IIT Chennai	1997	108th All India Rank (AIR)
MP SLET — Eligibility of Lectureship in Chemistry	1999	11th Rank – in MP
Joint CSIR-UGC NET — Eligibility of Lectureship in Chemistry	2001	Qualified
CGPSC Recruitment Examination for Assistant Professor, Chemistry	2009	4th Rank – in CG

WORK EXPERIENCE

- Assistant Professor of Chemistry (Current Position), Department of Chemistry, Govt. Nagarjuna Post Graduate College of Science, G.E. Road, Raipur (C.G.) — 11-01-2013 to present.
- Senior Faculty of Chemistry, Sinha's Chemistry Classes (own institute), Rajnandgaon (C.G.) — coaching for PMT/PET, AIPMT, AIIMS, etc. (01-07-1997 to 31-12-2000).
- Assistant Professor of Chemistry (UGC Teacher Fellowship vacancy), Department of Chemistry, Govt. Naveen Girls College, Purani Basti, Raipur (C.G.) (24-01-2001 to 23-01-2002).
- Senior Visiting Faculty of Chemistry, Sachdeva New PT College, Raipur/Bhilai — coaching for IIT-JEE, PMT/PET, AIIMS, AIPMT, AIEEE, etc. (01-07-2002 to 31-03-2007).
- Senior Faculty of Chemistry, Chemistry-Zone (own institute), Raipur — coaching for IIT-JEE, PMT/PET, AIIMS, NET, SET, GATE, etc. (01-04-2007 to 31-12-2012).

CURRENT RESEARCH INTERESTS & EXPERTISE

- Environmental Impact Assessment (EIA), environmental monitoring and impact evaluation.
- Ambient air quality, air pollution, PM2.5/PM10, aerosol chemistry and air-quality monitoring.
- Air and water quality assessment and environmental analytical chemistry.
- Environmental nanotechnology, chemical sensing and heavy-metal detection.
- Biopesticides and plant-derived bioactive compounds for environmental applications.
- Chemistry teaching and laboratory training, with emphasis on building strong conceptual understanding and practical/experimental skills among undergraduate and postgraduate students.

PATENT

Paper Colorimetry Based Device for Dimethoate Detection in Food Samples

Design No. 474507-001, dated 23 September 2025 — Patent Office, Government of India. Published in The Patent Office Journal No. 51/2025, dated 19 December 2025.

Inventors: Dr. Kamlesh Shrivastava; Dr. Sanyukta Patel; Dr. Deepak Sinha; Dr. Tarun Kumar Patle; Dr. Tushar Kant; Ms. Tikeshwari; Ms. Kusum Lata Khunte.

AWARDS & RECOGNITION

Year	Recognition	Basis / Description	Level
2013	CITAC Best Paper Award	Cooperation in International Traceability in Analytical Chemistry (CITAC), Paris, France — for "Traceability Issue in PM2.5 and PM10 Measurements", MAPAN, 28(3), 153–166 (2013).	International
2019	Global Awards for Excellence in Research	Category "Higher Education Institution Professors", awarded by Auropath Trust, Puducherry; received from the Hon'ble Chief Minister of Chhattisgarh.	National

GOVERNMENT ENVIRONMENTAL COMMITTEES — SEAC & SEIAAA

Service on statutory expert committees under the Ministry of Environment, Forest and Climate Change, Government of India.

Tenure	Committee / Role	Official Reference
04-Feb-2015 to 03-Feb-2018	State Level Expert Appraisal Committee (SEAC), Chhattisgarh	Notification No. 292; Gazette of India Part II, Section 3(ii), dated 05-02-2015
29-Jun-2018 to 28-Sep-2021	State Level Expert Appraisal Committee (SEAC), Chhattisgarh	Notification No. 2421; Gazette of India Part II, Section 3(ii), dated 29-06-2018
23-Nov-2021 to 22-Nov-2024	State Level Environment Impact Assessment Authority (SEIAAA), Chhattisgarh	Notification No. 4894; Gazette of India Part II, Section 3(ii), dated 23-11-2021

DOCTORAL PHD GUIDANCE

Students Awarded PhD

- Dr. (Ms.) Jaya Dammani — "A Study of Online and Offline Measurements of PM10 and PM2.5 in an Urban City, Raipur" — PhD awarded under Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh (Awarded 07-09-2019; Notification No. Conf./PhD/2019/3325 dated 13-09-2019).
- Ms. Monika Jain — "Physico-Chemical Studies on Micellar Solubilization of Diuretic Drugs by Conductivity & Surface Tension Measurements" — PhD awarded under Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh (Awarded 11-03-2022; Notification No. Conf./PhD/2022/3583 dated 17-03-2022).
- Ms. Sanyukta Patel — "Development of Nanoparticles as Chemical Sensing Probes for Analysis of Environmental Samples" — PhD awarded under Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh (Awarded 09-05-2022; Notification No. Conf./PhD/2022/3609 dated 04-06-2022).
- Ms. Reena Jamunkar — "Extraction and Identification of Some Pesticidal Active Compounds from Plants of Chhattisgarh Region" — PhD awarded under Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh (Awarded 03-01-2025; Notification No. Conf./PhD/2024/3975 dated 07-01-2025).

Current PhD Scholar

- Ms. Alka Patle — "Optimization of Analytical Parameters for Analysis of Some Selected Heavy Metals Using Functionalized Nanoparticles" — Registered under RDC, Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh (11-11-2019).

RESEARCH PROJECTS

- Principal Investigator — "Long-term Measurement of PM_{2.5} and PM₁₀ Mass Concentration: Variations and Impact Evaluation", funded by Chhattisgarh Environment Conservation Board (Dec 2015 – Dec 2017); Total funding: Rs. 4.0 Lakhs.
- Team Member — "Quality Checks of the Data and Instruments Working at Air Quality Monitoring Stations in Raipur City", funded by Chhattisgarh Environment Conservation Board (CECB) to CSIR-National Physical Laboratory (Dec 2016 – March 2018); Total funding: Rs. 29.4 Lakhs.

BOOKS & BOOK CHAPTERS — INTERNATIONAL

S.N o.	Title	Publisher	Year	ISBN / Authors hip
1	Magnetic Nanostructure: Environmental and Agricultural Applications — Chapter 13: Application of Magnetic Nanoparticles for Removal of Pesticides from Environmental Samples Prior to Instrumental Analysis	Springer	2019	978-3-030-16438-6 (Print); 978-3-030-16439-3 (eBook) <i>Co-Author</i>
2	Experimental Environmental Chemistry	LP INC Academic Press, NC, USA	2024	978-1-300-74130-5 <i>Co-Author</i>

BOOKS & BOOK CHAPTERS — NATIONAL (TEXTBOOKS)

Undergraduate and senior-secondary Chemistry textbooks prescribed under CBSE/NCERT, NEP-2020 and university syllabi.

S.N o.	Title	Publisher	Year	ISBN / Authors hip
1	Prabodh Chemistry, Class XII (as per CBSE/NCERT Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2018 (First); 2019 (Revised)	978-93-82519-27-0 <i>First Author</i>
2	Rasayan Pathya Pustak, Class XII (as per CBSE/NCERT Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2018 (First); 2019 (Revised)	978-93-81516-38-6 <i>Co-Author</i>
3	Prabodh Saral Rasayan Digdarsika — Class XII NCERT Solutions	Prabodh & Co. Pvt. Ltd., Raipur	2018 (First); 2019 (Revised)	978-93-81516-20-1 <i>Co-Author</i>
4	Prabodh Saral Rasayan Digdarsika — Class XI NCERT Solutions	Prabodh & Co. Pvt. Ltd., Raipur	2017 (First)	978-93-85681-87-5 <i>Co-Author</i>
5	Prabodh Chemistry, Class XI (as per CBSE/NCERT Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2017 (First); 2019 (Revised)	978-93-82519-46-1 <i>Co-Author</i>
6	Rasayan Pathya Pustak, Class XI (as per CBSE/NCERT Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2017 (First); 2019 (Revised)	978-93-81516-37-9 <i>Co-Author</i>
7	Rasayan Text-Book, Class XI (as per M.P. Board of Secondary Education)	Prabodh & Co. Pvt. Ltd., Raipur	2013 (First); 2014 (Revised)	978-93-81516-58-4 <i>Single Author</i>

S.N o.	Title	Publisher	Year	ISBN / Authors hip
8	Rasayan Text-Book, Class XII (as per M.P. Board of Secondary Education)	Prabodh & Co. Pvt. Ltd., Raipur	2014 (First); 2015 (Revised)	978-93-81516-57-7 <i>Single Author</i>
9	Prabodh Rasayan, B.Sc. Part-1 (as per New UGC Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2018 (First); 2019 (Revised)	978-81-924547-8-8 <i>First Author</i>
10	Prabodh Rasayan, B.Sc. Part-2 (as per New UGC Syllabus)	Prabodh & Co. Pvt. Ltd., Raipur	2022 (First); 2023 (Revised)	978-81-962005-8-9 <i>First Author</i>
11	Prabodh Rasayan, 1st Semester (as per NEP 2020, Four-Year B.Sc. Degree)	Prabodh & Co. Pvt. Ltd., Raipur	2024 (First)	978-81-976862-7-6 <i>First Author</i>
12	Prabodh Rasayan, 2nd Semester (as per NEP 2020, Four-Year B.Sc. Degree)	Prabodh & Co. Pvt. Ltd., Raipur	2024 (First)	978-93-49212-83-1 <i>Co-Author</i>
13	Prabodh Rasayan, 3rd Semester (as per NEP 2020, Four-Year B.Sc. Degree)	Prabodh & Co. Pvt. Ltd., Raipur	2025 (First)	978-93-49212-58-9 <i>Second Author</i>

SELECTED / TOP RESEARCH PUBLICATIONS

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
1	Ultrasound-assisted extraction and RP-HPLC quantification of β-caryophyllene in plant essential oils: Separation efficiency and insecticidal activity <i>Jamunkar R.; Sinha D.; Shrivastava K.; Patle T.; Kumar A.; Tandey K.; Singh T.</i>	<i>Journal of Molecular Structure</i>	1335 – 141882 – 2025 https://doi.org/10.1016/j.molstruc.2025.141882	WoS, Scopus, UGC Care List II Impact Factor: 4.7 Corresponding Author
2	Phytochemical Screening and Quantification of Ellagic Acid in <i>Clistanthus collinus</i> using RP-HPLC-DAD Method and its Insecticidal Activity against Stored Grain Pests <i>Jamunkar R.; Sinha D.; Patel S.; Jena V.; Patel T.</i>	<i>Asian Journal of Chemistry</i>	36 (9) 2203-2211 – 2024 https://doi.org/10.14233/ajchem.2024.32166	Scopus, UGC Care List II Impact Factor: 6.0 Co-Author
3	UV-Visible Spectroscopic Analysis of Citrate-Capped Silver Nanoparticles <i>Patle A.; Sinha D.; Patle T. K.; Bhardwaj S. K.</i>	<i>Nanotechnology Perceptions</i>	20, No. S16, 4719-4734 – 2024 ISSN 1660-6795 (www.nano-ntp.com)	Scopus Co-Author
4	A portable smartphone-assisted digital image fluorimetry for analysis of methiocarb pesticide in vegetables: Nitrogen-doped carbon quantum dots as a sensing probe <i>Patel S.; Shrivastava K.; Sinha D.; Karbhal I.; Patle T.; Monisha; Tikeshwari</i>	<i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i>	299/ 122-824 – 2023 https://doi.org/10.1016/j.saa.2023.122824	WoS, Scopus, UGC Care List II Impact Factor: 4.3 Corresponding Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI- Link	Indexing / IF / Role
5	Analytical approaches on some selected toxic heavy metals in the environment and their socio-environmental impacts: A meticulous review <i>Patle A.; Kurrey R.; Deb M. K.; Patle T.; Sinha D.; Shrivastava K.</i>	<i>Journal of the Indian Chemical Society</i>	2022 https://doi.org/10.1016/j.jics.2022.100545	WoS, Scopus, UGC Care List II Impact Factor: 3.2 Corresponding Author
6	Smartphone-integrated printed-paper sensor designed for on-site determination of dimethoate pesticide in food samples <i>Patel S.; Shrivastava K.; Sinha D.; Monisha; Patle T. K.; Yadav S.; Thakur S. K.; Deb M. K.; Parvez S.</i>	<i>Food Chemistry</i>	383/132449 – 2022 https://doi.org/10.1016/j.foodchem.2022.132449	WoS, Scopus, UGC Care List II Impact Factor: 8.5 Corresponding Author
7	Recent Development in Nanomaterials fabricated paper-based colorimetric and fluorescent sensors: A review <i>Patel S.; Jamunkar R.; Sinha D.; Monisha; Patle T.; Kant T.; Dewangan K.; Shrivastava K.</i>	<i>Trends in Environmental Analytical Chemistry</i>	31/e00136 – 2021 https://doi.org/10.1016/j.teac.2021.e00136	WoS, Scopus, UGC Care List II Impact Factor: 11.1 Corresponding Author
8	An example of green surfactant systems based on inherently biodegradable IL-derived amphiphilic oximes <i>Pandya S.J.; Kapitanov I.V.; Usmani Z.; Sahu R.; Singh D.; Gathergood N.; Ghosh K.K.; Karpichev Y.</i>	<i>Journal of Molecular Liquids</i>	305/112857 – 2020 https://doi.org/10.1016/j.molliq.2020.112857	WoS, Scopus, UGC Care List II Impact Factor: 5.3 Co-Author
9	Colorimetric and smartphone-integrated paper device for on-site determination of arsenic (III) using sucrose modified gold nanoparticles as a nanoprobe <i>Shrivastava K.; Patel S.; Singh D.; Thakur S.S.; Patle T.K.; Kant T.; Dewangan K.</i>	<i>Microchimica Acta</i>	187:173 – 2020 https://doi.org/10.1007/s00604-020-4129-7	WoS, Scopus, UGC Care List II Impact Factor: 5.4 Corresponding Author
10	Smartphone coupled with paper-based chemical sensor for on-site determination of iron (III) in environmental and biological samples <i>Shrivastava K.; Monisha; Kant T.; Karbhal I.; Kurrey R.; Sahu B.; Sinha D.; Patra G.K.; Deb M.K.; Parvez S.</i>	<i>Analytical and Bioanalytical Chemistry</i>	412(7) – 1573-1583 – 2020 https://doi.org/10.1007/s00216-019-02385-x	WoS, Scopus, UGC Care List II Impact Factor: 3.8 Co-Author
11	Citrate-capped gold nanoparticles as a sensing probe for determination of cetyltrimethylammonium surfactant using FTIR spectroscopy and colorimetry <i>Kurrey R.; Deb M.K.; Shrivastava K.; Khalkho B.R.; Nirmalkar J.; Sinha D.; Jha S.</i>	<i>Analytical and Bioanalytical Chemistry</i>	2019 https://doi.org/10.1007/s00216-019-02067-8	WoS, Scopus, UGC Care List II Impact Factor: 3.8 Co-Author
12	Concentration estimation of different gaseous pollutants of Raipur city <i>Dammani J.; Jena V.K.; Sinha D.</i>	<i>Rasayan Journal of Chemistry</i>	12(3) – 1446-1454 – 2019 http://dx.doi.org/10.31788/RJC.2019.1235298	Scopus, UGC Care List II Corresponding Author
13	Experimental and theoretical approaches for the selective detection of thymine in real samples using gold nanoparticles as a biochemical sensor <i>Shrivastava K.; Nirmalkar N.; Thakur S.S.; Kurrey R.; Sinha D.; Shankar R.</i>	<i>RSC Advances</i>	8 – 24328-24337 – 2018 https://doi.org/10.1039/C8RA02627K	WoS, Scopus, UGC Care List II Impact Factor: 3.9 Co-Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
14	Nighttime particle growth observed during spring in New Delhi: Evidences for the aqueous phase oxidation of SO₂ Sarangi B.; Aggarwal S.G.; Kunwar B.; Kumar S.; Kaur K.; Sinha D.; Tiwari S.; Kawamura K.	Atmospheric Environment	188 – 82-96 – 2018 https://doi.org/10.1016/j.atmosenv.2018.06.018	WoS, Scopus, UGC Care List II Impact Factor: 4.2 Co-Author
15	A Case Study on the Seasonal and Spatial Variations in PM₁₀ and PM_{2.5} in an Urban Environment of Raipur City Sinha D.; Dammani J.	Indian Journal of Environmental Protection	38(11) – 914-919 – 2018 https://www.e-ijep.co.in/38-11-914-919/	Scopus, UGC Care List II First & Corresponding Author
16	Seasonal variations in mass concentration of PM₁₀ and PM_{2.5} at traffic intersection and residential sites in Raipur city Sinha D.; Dammani J.	Research Journal of Chemistry and Environment	22(1) – 25-31 – 2018 https://www.researchgate.net/publication/322338361	Scopus, UGC Care List II First & Corresponding Author
17	Size-segregated sugar composition of transported dust aerosols from middle-east over Delhi during March 2012 Kumar S.; Aggarwal S.G.; Fu P.Q.; Kang M.; Sarangi B.; Kotnala R.K.; Sinha D.	Atmospheric Research	189 – 24-32 – 2017 https://doi.org/10.1016/j.atmosres.2017.01.012	WoS, Scopus, UGC Care List II Impact Factor: 4.5 Co-Author
18	Label-free selective detection of Ampicillin drug in human urine samples using silver nanoparticles as a colorimetric sensing probe Shrivastava K.; Sahu J.; Pathik M.; Sinha D.	New Journal of Chemistry	41 – 6685-6692 – 2017 https://doi.org/10.1039/C7NJ00448F	WoS, Scopus, UGC Care List II Impact Factor: 2.7 Co-Author
19	Aerosol effective density measurement using scanning mobility particle sizer and quartz crystal microbalance with the estimation of involved uncertainty Sarangi B.; Aggarwal S.G.; Gupta P.K.; Sinha D.	Atmospheric Measurement Technique	9(3) – 859 – 2016 https://doi.org/10.5194/amt-9-859-2016	WoS, Scopus, UGC Care List II Impact Factor: 3.2 Co-Author
20	Traceability issue in PM_{2.5} and PM₁₀ measurements Aggarwal S.G.; Gupta P.K.; Sinha D.	MAPAN	28(3) – 153-166 – 2013 https://doi.org/10.1007/s12647-013-0073-x	WoS, Scopus, UGC Care List II Impact Factor: 1.0 Co-Author
21	Simple, Rapid and Sensitive UV-Visible Spectrophotometric Method for Determination of Anti-depressant Amitriptyline in Pharmaceutical Dosage Forms Soni P.; Sinha D.; Patel R.	Journal of Spectroscopy	Volume – 2013 https://doi.org/10.1155/2013/783457	WoS, Scopus, UGC Care List II Impact Factor: 1.7 Co-Author
22	Application of Silver Nanoparticles as a New Alternative Antiviral Agent for SARS-CoV-2: A Review Jamunkar R.; Shrivastava K.; Sinha D.; Patel S.; Monisha; Patle A.; Kumar A.; Banerjee S.	Current Nanoscience	18 – 465-477 – 2022 https://doi.org/10.2174/157341371766621118105415	WoS, Scopus, UGC Care List II Impact Factor: 1.4 Corresponding Author
23	The Effect of Temperature on the Critical Micelle Concentration and Micellar Solubilization of Poorly Water Soluble Drugs Jangde M.; Chatterjee S.K.; Jain M.; Ghosh S.; Jangde R.; Sinha D.	Biosciences Biotechnology Research Asia	19 (4) 1045-1050 – 2022 http://dx.doi.org/10.13005/bbra/3054	WoS, Scopus, UGC Care List II Impact Factor: 0.12 Co-Author
24	Biosorptive removal of mercury from farmland soil vicinity of industrial area Verma P.; Sinha D.; Chatterjee S.K.; Ghosh S.	Indian Journal of Environmental Protection.	42 (4) 490-497 – 2022 https://www.e-ijep.co.in/42-4-490-497/	Scopus, UGC Care List II Corresponding Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
25	Highly effective biosorptive removal of Chromium from industrial effluent of Rice mill of Central India Verma P.; Chatterjee S.K.; Ghosh S.; Sinha D.	<i>Rasayan Journal of Chemistry</i>	14(4) – 2739-2748 – 2021 http://dx.doi.org/10.31788/RJC.2021.1446335	Scopus, UGC Care List II Impact Factor: 5.0 Co-Author
26	Ground water quality assessment by multivariate factor analysis Jena V.K.; Sinha D.	<i>Research Journal of Chemistry and Environment</i>	21(8) – 21-25 – 2017 https://www.researchgate.net/publication/318947728	Scopus, UGC Care List II Corresponding Author
27	Role of MTHFR 667 C>T Polymorphism on blood homocystein and susceptibility to Hypertension Dwivedi M.K.; Sinha D.	<i>International Journal of Human Genetics</i>	17(3) – 118-125 – 2017 http://dx.doi.org/10.1080/09723757.2017.1383619	WoS, Scopus, UGC Care List II Impact Factor: 0.1 Co-Author
28	A case study on the comparison of PM2.5 mass concentration measured by Beta Attenuation Monitor and Gravimetric Method Sinha D.	<i>Indian Journal of Environmental Protection</i>	38(8) – 683-686 – 2018 https://www.e-ijep.co.in/38-8-643-686/	Scopus, UGC Care List II Single Author
29	Ambient Air Quality Status in an Industrial Area of Raipur City in the Year 2015 Patel A.; Rajput S.K.; Bapat K.N.; Sinha D.	<i>Journal of Applicable Chemistry</i>	7(3) – 647-653 – 2018 http://www.joac.info/ContentPaper/2018/22-20-3-23.pdf	Peer reviewed, Old UGC list Single Author
30	The Effect of Physical Activity on Blood Homocystein Concentration Sinha D.; Dwivedi M.K.	<i>International Journal of Current Microbiology and Applied Sciences</i>	6(9) – 1206-1216 – 2017 https://doi.org/10.20546/ijcmas.2017.609.146	Peer reviewed, Old UGC list Corresponding Author
31	Ciprofloxacin Hydrochloride Mediated Enhanced Solubilization and Stability by UV-Spectroscopy Jangde M.; Chatterjee S.K.; Ghosh S.; Sinha D.; Jangde R.	<i>Journal of Pharmaceutical Research International</i>	34(11B) 1-7 – 2022 10.9734/jpri/2022/v34i11B35535	Peer reviewed Co-Author
32	A Review on Extraction, Identification and Application of Pesticidal Active Phytoderived Metabolites Jamunkar R.; Sinha D.; Patle T.; Shrivastava K.	<i>Journal of Ravishankar University, Part-B</i>	37 (1) 152-187 – 2024 10.52228/JRUB.2024-37-1-10	Peer reviewed, University Journal Co-Author
33	Mass Concentration of PM2.5 During Diwali in Raipur Sinha D.; Dammani J.	<i>Indian Journal of Environmental Sciences</i>	22(1) – 50-53 – 2018 https://www.researchgate.net/publication/325204320	Peer reviewed, Old UGC List First & Corresponding Author
34	Soil Contamination in the Industrial Vicinity of Bemetara and Raipur District of Chhattisgarh, India Verma P.; Chatterjee S.K.; Ghosh S.; Sinha D.	<i>Journal of Ravishankar University-B</i>	33(1) – 58-64 – 2020 https://doi.org/10.52228/JRUB.2020-33-1-8	Peer reviewed, University Journal Co-Author
35	Physicochemical Analysis of Ground Water of Selected Areas of Raipur City Jena V.; Sinha D.	<i>Indian Journal of Scientific Research</i>	13(1) – 61-65 – 2017 https://www.researchgate.net/publication/325204010	Peer reviewed Corresponding Author

ADDITIONAL RESEARCH PUBLICATIONS

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
36	Interaction of Sitagliptin with Sodium Dodecyl Sulphate (SDS): A Physicochemical study Sinha D.	<i>Asian Journal of Biochemical and Pharmaceutical Res</i>	8(2) – 20-23 – 2018 https://www.researchgate.net/publication/331933865	Peer reviewed, Old UGC list Single Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
37	Physico-Chemical analysis of drinking water quality of Bemetara town of Chhattisgarh state Sinha D.	<i>Int. Journal of Research and Analytical Reviews</i>	5(3) – 171-178 – 2018 https://www.researchgate.net/publication/331935528	Peer reviewed, Old UGC list Single Author
38	Assessment of Physico-chemical Properties of Pond Water in Bemetara Town of Chhattisgarh State Sinha D.	<i>Journal of Emerging Technologies and Innovative Research</i>	5(8) – 112-120 – 2018 http://www.jetir.org/papers/JETIRD006018.pdf	Peer reviewed, Old UGC list Single Author
39	Effect of Sitagliptin on micellization of Cetyl Trimethylammonium Bromide Sinha D.	<i>Int. Journal of Research and Analytical Reviews</i>	5(2) – 1612-1615 – 2018 https://www.researchgate.net/publication/331935457	Peer reviewed, Old UGC list Single Author
40	Biomass burning is a major source of particulate matter in Indian cities Sinha D.	<i>Journal of Applicable Chemistry</i>	3(3) – 1268-1271 – 2014 http://www.joac.info/ContentPaper/2014/2-42.pdf	Peer reviewed, Old UGC list Single Author
41	Seasonal variation of Physico-chemical properties of Arpa River in Chhattisgarh Sinha D.	<i>Journal of Applicable Chemistry</i>	2(5) – 1035-1048 – 2013 http://www.joac.info/ContentPaper/2013/4-2.pdf	Peer reviewed, Old UGC list Single Author
42	Cadmium Toxicity and Its Impact on Metabolic Activities in Fishes Sinha D.	<i>International Journal of Engineering Science Invention</i>	2(9) – 60-62 – 2013 https://ijesi.org/papers/Vol%202(9)/Version-2/I0292060062.pdf	Peer reviewed, Old UGC list Single Author
43	Periodic Water Quality Monitoring of Ground Water in Jashpur District (C.G.) India Sinha D.; Jain S.K.; Mishra A.K.; Dubey K.K.; Vaishnav M.M.	<i>Journal of Applicable Chemistry</i>	7(3) – 668-675 – 2018 http://www.joac.info/ContentPaper/2018/3-24-22-3-17.pdf	Peer reviewed, Old UGC list First Author
44	The impact of fly ash on photosynthetic activity and medicinal property of plants Sinha D.; Sharma S.; Dwivedi M.K.	<i>Int. J. Curr. Microbiol. App. Sci.</i>	2(8) – 382-388 – 2013 http://www.ijcmas.com/vol-2-8/Deepak%20Sinha,%20et%20al.pdf	Peer reviewed, Old UGC list First Author
45	The Interrelationship between Cd²⁺ and Pb²⁺ Water Pollution and Blood Pressure in Fishes in Chhattisgarh Region Sinha D.; Dwivedi M.K.; Sharma S.	<i>Asian Journal of Chemical and Environmental Research</i>	5(3-4) – 76-79 – 2012 https://www.ajcer.org/	Peer reviewed, Old UGC list First Author
46	Antifungal screening of some newly synthesized cinnamon hydroxamic acids Patel A.; Rajput S.K.; Bapat K.N.; Sinha D.; Mishra A.K.	<i>Journal of Applicable Chemistry</i>	8(6) – 2417-2422 – 2019 http://www.joac.info/ContentPaper/2019/16-8-6-22.pdf	Peer reviewed, Old UGC list Corresponding Author
47	Determination of Paracetamol in Industrial Effluent Samples by the Method followed by Spectrophotometer Agrawal V.; Chatterjee S.K.; Tiwari K.K.; Sinha D.	<i>Asian Journal of Biochemical and Pharmaceutical Res</i>	8(2) – 67-71 – 2018 https://www.researchgate.net/publication/331935272	Peer reviewed Corresponding Author
48	Aqueous Solubility Enhancement of Spiranolactone: Effect of Surfactant Jain M.; Chatterjee S.K.; Sinha D.	<i>International Journal for Research in Applied Science & Engineering Technology</i>	6(IV) – 2922-2926 – 2018 http://doi.org/10.22214/ijraset.2018.4487	Peer reviewed, Old UGC list Corresponding Author
49	Solubility Enhancement of Furosemide in Micellar Solution of Cetyl Trimethylammonium Bromide Jain M.; Chatterjee S.K.; Sinha D.	<i>European Journal of Biomedical and Pharmaceutical Sciences</i>	5(5) – 792-794 – 2018 https://www.ejbps.com/	Peer reviewed, Old UGC list Corresponding Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
50	Studies on the Micellar Properties of Anionic Surfactant in the Absence and Presence of Spironolactone at Room Temperature <i>Jain M.; Chatterjee S.K.; Sinha D.</i>	<i>International Journal of Current Advanced Research</i>	7(4F) – 11685-11687 – 2018 http://dx.doi.org/10.24327/ijcar.2018.11687.2030	Peer reviewed, Old UGC list Corresponding Author
51	Effect of Spiranolactone on the micellar properties of non-ionic surfactant: Assessment by conductivity and surface tension methods <i>Jain M.; Chatterjee S.K.; Jangde M.; Sinha D.</i>	<i>Journal of Ravishankar University-B</i>	31(1) – 23-26 – 2018 https://doi.org/10.52228/JRUB.2018-31-1-4	Peer reviewed, University Journal Corresponding Author
52	Antibacterial Activity of Some Cinnamo Hydroxamic Acid and their Derivatives <i>Rajput S.K.; Bapat K.N.; Patel A.; Sinha D.</i>	<i>International Journal of Green and Herbal Chemistry</i>	Sec. A; 7(2) – 355-360 – 2018 http://doi.org/10.24214/IJGHC/GC/7/2/35560	Peer reviewed, Old UGC list Corresponding Author
53	Synthesis, Characterization and Antifungal Activity of p-CH₃ Benzyl and p-Cl Benzyl Cinnamo Hydroxamic Acids <i>Patel A.; Rajput S.K.; Bapat K.N.; Sinha D.</i>	<i>International Journal of Green and Herbal Chemistry</i>	Sec A – 7(3) – 489-499 – 2018 http://doi.org/10.24214/IJGHC/GC/7/3/48999	Peer reviewed, Old UGC list Corresponding Author
54	Effect of Cadmium on metabolism - A study from coal field area <i>Sinha D.; Pandey A.K.; Singh A.</i>	<i>Journal of Applicable Chemistry</i>	7(1) – 272-275 – 2018 http://www.joac.info/ContentPaper/2018/35.pdf	Peer reviewed, Old UGC list Corresponding Author
55	Quantification of Cr (VI) by Spectrophotometric and Atomic Absorption Technique in Industrial Effluent <i>Tiwari K.K.; Agrawal V.; Chatterjee S.K.; Sinha D.</i>	<i>Journal of Environmental Science, Computer Science and Engineering & Technology</i>	Sec. A; 7(2) – 279-287 – 2018 10.24214/jecet.A.7.2.27987	Peer reviewed, Old UGC list Corresponding Author
56	Quantification of Antimony by Spectrophotometric and Atomic Absorption Technique in Industrial Effluent <i>Agrawal V.; Tiwari K.K.; Chatterjee S.K.; Sinha D.</i>	<i>Asian Journal of Chemical and Environmental Research</i>	10 (1-4) – 67-72 – 2017 https://www.ajcer.org/	Peer reviewed, Old UGC list Corresponding Author
57	Conductometric Studies on the Thermal Effects on Micellar Solubilization of Acetazolamide - A Diuretic Drug <i>Jain M.; Chatterjee S.K.; Sinha D.</i>	<i>Journal of Ravishankar University-B</i>	30 (1&2) – 74-77 – 2017 https://doi.org/10.52228/JRUB.2017-30-1-9	Peer reviewed, University Journal Corresponding Author
58	Pd (II) Catalytic Oxidation of L-Histidine by Cerium (IV) in Acidic Medium by Spectrophotometry Method <i>Sahu G.; Ghosh S.; Sinha D.; Jena V. K.; Sharma P. C.</i>	<i>International Journal of Advance Research and Innovative Ideas in Education</i>	10(2) 1863-1873 – 2024 16.0415/IJARIIIE-22987	Peer reviewed Co-Author
59	Kinetic and Mechanism of Pd (II) Catalytic Oxidation of L-Proline by Cerium (IV) in Acidic Medium by Spectrophotometry <i>Sahu G.; Ghosh S.; Sinha D.; Jena V. K.; Patle S. K.</i>	<i>International Journal of research & analytical reviews</i>	11(1) – 59-76 – 2024 http://ijrar.org/viewfull.php?&p_id=IJRAR24A3328	Peer reviewed Co-Author
60	Quality Assessment of Soil in the Vicinity of Rice Mill and Sponge Iron Industry at Central India <i>Verma P.; Chatterjee S.K.; Ghosh S.; Sinha D.</i>	<i>Research Journal of Agricultural Sciences</i>	13 (3) 604-611 – 2022 http://rjas.org/	Peer reviewed Co-Author
61	Accumulation of translocation of heavy metals in Coriandrum Sativum <i>Matic N.; Jena V.; Sinha D.; Ghosh S.; Pandey A.</i>	<i>Journal of Applicable Chemistry</i>	8(2) – 850-855 – 2019 http://www.joac.info/ContentPaper/2019/2-47-8-2-45-37.pdf	Peer reviewed, Old UGC list Co-Author

S.N o.	Title & Authors	Journal	Vol. – Pgs. – Yr. / DOI-Link	Indexing / IF / Role
62	Recent development on the understanding of aerosol nucleation and growth Sarangi B.; Sinha D.; Patel P.; Aggarwal S.G.	<i>Indian Journal of Air Pollution Control</i>	16(2) – 61-75 – 2017 https://www.researchgate.net/publication/321025948	Peer reviewed Co-Author
63	Postmonsoon evaluation of surface water with reference to statistical parameters of Korba district, Chhattisgarh, India Vaishnav M.M.; Janjyala R.; Krishnamurthy S.; Sinha D.	<i>Indian Journal of Scientific Research</i>	13(2) – 68-74 – 2017 https://www.ijsr.in/upload/1298467327chapter13.pdf	Peer reviewed, Old UGC list Co-Author

CONFERENCE / SEMINAR PAPERS PRESENTED

18 papers presented at International and National conferences, seminars and symposia (2001–2019).

S.N o.	Title of Paper Presented	Conference / Seminar	Date	Level
1	Assessment of toxic elements like Pb²⁺, Cd²⁺ and Al³⁺ in the Arpa river, Bilaspur (C.G.)	<i>All India Level Seminar on Recent Advances in Chemistry Research</i> Dept. of Chemistry, Govt. Art's Com. & Sc. College, Kota, Bilaspur (C.G.)	18-20 Nov 2001	National
2	Impact of coal mining activity on different aquatic systems of Kusbunda area, Korba	<i>National Seminar on Chemistry in our Lives</i> Dept. of Chemistry, Govt. E. Raghvendra Rao P.G. Science College, Bilaspur (C.G.)	1-2 Feb 2013	National
3	Physical activity and blood homocysteine concentration	<i>National Conference on Microbial Diversity: Exploration, Conservation & Application</i> Dept. of Botany, Govt. E. Raghvendra Rao P.G. Science College, Bilaspur (C.G.)	16-17 Feb 2013	National
4	The effect of heavy metal water pollution on blood glucose of fishes	<i>National Conference VIMARSH</i> Dept. of Applied Chemistry, Chouksey Engineering College, Bilaspur (C.G.)	12-13 Sep 2013	National
5	The zinc pollution in water and its effect on blood zinc concentration in humans — a study from C.G. State	<i>National Conference VIMARSH</i> Dept. of Applied Chemistry, Chouksey Engineering College, Bilaspur (C.G.)	12-13 Sep 2013	National
6	Effect of toxic metal water pollution on humans in Central India	<i>National Seminar on Recent Advances in Meteorology, Climatology & Environment</i> C.G. COST & Bhilai Institute of Technology, Raipur (C.G.)	25 Oct 2013	National
7	Effects of Cd²⁺ and Pb²⁺ on metabolic activities of some plants	<i>National Conference on Innovative Trends in Computer Science & Information Technology (ITCSIT)</i> Central College of Engineering & Management, Raipur (C.G.)	8-9 Feb 2014	National
8	Association of MTHFR 677T polymorphism to hyperhomocysteinemia and susceptibility for stroke	<i>National Conference on Integrative Genomics</i> Dept. of Biochemistry, Shri Shankaracharya Mahavidyalaya, Bhilai	11-12 Feb 2014	National
9	The association of IL-1 beta with pneumonia	<i>1st International Seminar on Utilization of Non-Conventional Energy Sources for Sustainable Development of Rural Areas</i> Parthivi College of Engineering & Management, Bhilai-3	21-22 Mar 2015	International
10	Analytical assessment of GW & SW sources of BALCO industrial area, Korba (C.G.)	<i>International Conference on Recent Trends in Science and Engineering (ICRTSE-2016)</i> Dept. of Physics & Chemistry, Govt. V.Y.T.P.G. Autonomous College, Durg, with IRD India, Bhubaneswar	15-16 Jan 2016	International
11	Status of Air Quality in Raipur in the Year 2015	<i>2nd International Seminar on Utilization of Non-Conventional Energy Sources for Sustainable Development of Rural Areas</i> Parthivi College of Engineering & Management, Bhilai-3	17-18 Mar 2016	International

S.N o.	Title of Paper Presented	Conference / Seminar	Date	Level
12	Air quality of Raipur city — a comparison between industrial and urban sites	<i>53rd Annual Convention of Chemists — Analytical & Environmental Chemistry Section</i> Indian Chemical Society, GITAM University, Visakhapatnam, Andhra Pradesh	27-29 Dec 2016	National
13	Estimation of PM_{2.5} concentration in Central India	<i>National Conference on Soil Quality and Public Health (SQPH), Sponsored by UGC-CRO Bhopal</i> Dept. of Chemistry, Govt. Digvijay Autonomous P.G. College, Rajnandgaon (C.G.)	17-18 Jan 2017	National
14	Study of air quality status in Urla & Siltara industrial area in Raipur city	<i>National Seminar on Advances in Environmental Science & Technology, Sponsored by UGC-CRO Bhopal</i> Dept. of Botany, Govt. Digvijay Autonomous P.G. College, Rajnandgaon (C.G.)	23-24 Jan 2017	National
15	Multivariate factor analysis and health risk assessment of fluoride in drinking water	<i>3rd International Seminar on Utilization of Non-Conventional Energy Sources for Sustainable Development of Rural Areas (ISNCESR'17)</i> Parthivi College of Engineering & Management, Bhilai-3	24-25 Mar 2017	International
16	Assessment of iron contamination interpretation in road dust by monitoring data analysis	<i>National Seminar on Current Development of Environmental Sciences in Chhattisgarh State</i> Chhattisgarh Environment Conservation Board, Raipur & Bhilai Education Trust, Bhilai	30 Nov - 1 Dec 2017	National
17	Seasonal variations in mass concentrations of PM₁₀ and PM_{2.5} at traffic intersection and residential sites in Raipur city	<i>22nd CRSI National Symposium in Chemistry</i> School of Studies in Chemistry, Pt. R.S.U., Raipur (C.G.)	2-4 Feb 2018	National
18	Concentration estimation of different gaseous pollutants of Raipur city from 2016-2018	<i>3rd National Conference on Advances in Environmental and Chemical Sciences, UGC-SAP (DRS-II)</i> School of Studies in Chemistry, Pt. R.S.U., Raipur (C.G.)	27-28 Mar 2019	National

SHORT-TERM COURSES / WORKSHOPS / SEMINARS ATTENDED

- One-week Short Term Course on Technical Launching on Environmental Issues, 26–30 June 2013, NIT Raipur (C.G.).
- National Workshop on Future Aspect: Forensic Science and Serology and Recent Advancement in Biological Science, 16–17 Dec 2013, Shri Shankaracharya Mahavidyalaya, Bhilai (C.G.).
- National Symposium on Distributed Computing and Network Communication, 30 Jan 2015, Govt. Nagarjuna P.G. College of Science, Raipur (C.G.).
- One-week Short Term Training Programme on Environment Challenges and Remedies, 25–29 May 2015, NIT Raipur (C.G.).
- RUSA Sponsored Workshop on Quality Education, 23 June 2015, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Governance, Leadership & Management, 24 June 2015, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Examination Reforms, 25 June 2015, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Strategies for Access, Equity and Excellence in Higher Education, 26 June 2015, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Career Guidance, 27 June 2015, Govt. N.P.G. College of Science, Raipur.
- National Seminar on Enhancement Strategies in Quality Education and Research, 27–28 Nov 2015, IQAC, Govt. Nagarjuna P.G. College of Science, Raipur.
- Visited CSIR–National Physical Laboratory, New Delhi, for discussions on PM_{2.5}/PM₁₀ sampling protocols and Raipur air-quality data, 2–5 Feb 2016.
- One-week Short Term Training Programme on Advances in Analytical Techniques in Chemistry and Material Science (AATCMS-2016), 08–12 Feb 2016, NIT Raipur.
- Pre-ADMET Workshop on Metrology in Chemistry: Ambient Air Quality Measurements, 23 Feb 2016, CSIR-NPL, New Delhi.
- 9th International Conference on Advances in Metrology (ADMET-2016), 24–26 Feb 2016, CSIR-NPL, New Delhi.
- RUSA Sponsored Workshop on Strategies for Extension and Quality Improvement in Higher Education, 20 June 2017, Govt. N.P.G. College of Science, Raipur.

- RUSA Sponsored Workshop on Road Map of Quality Enhancement, 21 June 2017, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Examination Reform, 22 June 2017, Govt. N.P.G. College of Science, Raipur.
- RUSA Sponsored Workshop on Semester System and CBCS Implementation, 23 June 2017, Govt. N.P.G. College of Science, Raipur.
- UGC-SAP (DRS-II) National Conference on Advances in Environmental & Chemical Sciences, 17–18 March 2017, School of Studies in Chemistry, Pt. R.S.U. Raipur.
- National Level Self-Sponsored Short Term Training Programme on Recent Trends in Material Science and Nano-Technology (MSNT-2017), 3–7 Oct 2017, NIT Raipur.
- 12th CRSI-RSC Symposium, 1 Feb 2018, Pt. Ravishankar Shukla University, Raipur.
- 56th Annual Convention of Chemists — International Conference on Recent Trends in Chemical Science, 14–16 Nov 2019, School of Studies in Chemistry, Pt. R.S.U. Raipur & Govt. N.P.G. College of Science, Raipur.

LONG-TERM COURSES / TRAINING PROGRAMMES ATTENDED

- Three-week Special Summer School Course (equivalent to Refresher Course), 08–28 July 2013, Academic Staff College, Pt. Ravishankar Shukla University, Raipur (C.G.).
- Four-week Orientation Course on Improving the Quality of Higher Education, 3–30 June 2016, Human Resource Development Centre, Pt. Ravishankar Shukla University, Raipur (C.G.).
- Two-week Refresher Course in Environmental Sciences (Interdisciplinary), 09–22 November 2021, Human Resource Development Centre, Goa University, Goa.

MEMBERSHIP OF ACADEMIC / CONFERENCE COMMITTEES

- Member, Governing Body, MATS University, Raipur (C.G.) — 18-11-2020 to 17-11-2023.
- Member, Academic Council / Board of Studies, Department of Applied Chemistry, Shri Shankaracharya Group of Institutions, Bhilai (C.G.) — 03-02-2021 to 02-02-2022.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- Life Member, Indian Chemical Society.
- Life Member, Indian Aerosol Science and Technology Association.
- Life Member, Metrology Society of India.