BIO-DATA

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Dr. Devendra Pratap Rao completed his graduation and post-graduation studies in Chemistry at D.D.U. University, Gorakhpur, U. P., India. He was awarded a PhD. Degree in chemistry from J.P. University Chapara, Bihar, India. He was appointed as a project fellow at the National Physical Laboratory, New Delhi, India, in 1999. He has completed twenty-one (21) years working as a Lecturer, Assistant Professor, Associate Professor and Professor. **He was sponsored by UGC New Delhi to visit Shenzhen, China in Nov. 2011 and Athens, Greece in July 2014**. **The University of Central America honored him with a Doctor of Science (D.Sc.) award in September 2024.** He was awarded by NET, GATE in 2001 by CSIR-UGC.

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Google Scholar ID : https://scholar.google.com/citations?user=kTIZj3IAAAAJ&hl=en
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CAREER			
From	**To**	**Post**	**Institute**
01/11/2021	Till date	Professor	D.A-V. (P.G.) College, Kanpur, U.P.
17/03/2018	30/10/2021	Associate Professor	D.A-V. (P.G.) College, Kanpur, U.P.
21/07/2006	16/03/2018	Assistant Professor	D.A-V. (P.G.) College, Kanpur, U.P.
17/03/2006	20/07/2006	Assistant Professor	S.H.K. P.G. College, Basti, U.P.
20/03/2003	16/03/2006	Lecturer	Govt. J. Inter College, Gorakhpur U.P.
1999	1999	Project Associate	N.P.L. New Delhi

LIST OF PUBLICATIONS	
1	Coordination engineering of transition metal doped in B2CN3 electrocatalyst to enhance efficient carbon dioxide reduction reaction W.H. Hassan, A. Kumar, G.V.S. Prasad, B. Juneja, M.S. Merza, A.A. Almehizia, **D.P. Rao*,** Chou-Yi Hsuh *Sustainable Chemistry and Pharmacy*, ISSN 2352-5541, 44(2025), 101951, 2025, **IF: 5.5**, Indexing: SCIE, **Q1** DOI: https://doi.org/10.1016/j.scp.2025.101951 **Web of Science, Scopus (Elsevier)**
2	An insight into the therapeutic impact of quinoxaline derivatives: Recent advances in biological activities (2020–2024) Aly M. Waseem, R.M. Elmagzoub, M.M.M. Abdelgadir, A.A. Bahir, N.S. Abd EL-Gawaad, A.S. Abdel-Samea, **D.P. Rao***, K. Kossenas, S. Brase, H. Hashem

	Results in Chemistry, ISSN 2211-7156, 13(2025), 101989, 2024, **IF: 2.5,** Indexing: ESCI, **Q2** DOI: https://doi.org/10.1016/j.rechem.2024.101989 **Web of Science, Scopus (Elsevier)**
3	Schiff Bases and their Possible Therapeutic Applications: A review Nidhi, Siddharam, **D.P. Rao*,** A.K. Gautam, A. Verma, Y. Gautam *Results in Chemistry*, ISSN 2211-7156, 13(2025), 2024, **IF: 2.5,** Indexing: ESCI, **Q2** DOI: https://doi.org/10.1016/j.rechem.2024.101941 **Web of Science, Scopus (Elsevier)**
4	In-situ engineering of 3D amorphous/crystalline NiFeP/NiMoP/NF composite for improved hydrogen evolution. B. Meia, Ali B.M. Ali, M. Al-Yasiri, A. Kumar, P. Sharma, M. Chahar, M. Ravi Kumar, S. Islam, **D.P. Rao*,** S.M. Irshad *International Journal of Hydrogen Energy*, ISSN 0360-3199, 97(2025), 130-139, 2024, **IF: 8.1**, Indexing: SCIE, **Q1** DOI: https://doi.org/10.1016/j.ijhydene.2024.11.425 **Web of Science, Scopus (Elsevier)**
5	1,4-Bis(pyridin-1-ium)benzene trifluoroacetate coordinated to chloropropyl functionalized SiO_2-nano-$NiFe_2O_4$ (BPBTCSF): as a novel and effectual mesoporous bi-functional magnetic catalyst for the synthesis pyrido[2,3-d:6,5-d']dipyrimidines. C.Y. Hsu, M.Y. Alshahrani, Y. Jadeja, E.F. Oghenemaro, D. Nathiya, P. Kaur, D. Aulakh, **D.P. Rao,** A.M.H. Wais, F.A. alzahra *Journal of Molecular Structure*, ISSN 0022-2860, 1323 (2025), 140671, 2024, **IF: 4.0**, Indexing: SCIE, **Q1** DOI: https://doi.org/10.1016/j.molstruc.2024.140671 **Web of Science, Scopus (Elsevier)**
6	In-silico designing and synthesis of small molecule potential inhibitors of Plasmodium falciparum plasmepsin I based on HEA and Piperazine moieties. A.K. Gautam, R. Boyina, A. Verma, S.G. Prasad, Y. Gautam, **D.P. Rao*** *Oriental Journal of Chemistry*, ISSN: 22315039, 40(5), 1460-1469, 2024 **IF 0.8** Indexing: SCIE DOI: http://dx.doi.org/10.13005/ojc/400529 **Web of Science, Scopus (Elsevier)**
7	Antibacterial effects of Mo(VI) macrocyclic compounds. S. Katiyar, Siddharam, **D.P. Rao*,** S.G. Prasad *Oriental Journal of Chemistry*, ISSN: 22315039, 40(5), 1356-1366, 2024 **IF 0.8** Indexing: SCIE DOI: http://dx.doi.org/10.13005/ojc/400518 **Web of Science, Scopus (Elsevier)**
8	Indole Derivatives: A versatile scaffold in modern drug discovery—An updated review on their multifaceted therapeutic applications (2020–2024) Xingyou Mo, **D.P. Rao**, K. Kaur, R. Hassan, A.S. Abdel-Samea, S.M. Farhan, S. Bräse, H. Hashem Molecules, ISSN: 1420-3049, 29, 4770, 2024 **IF: 4.2**, Indexing: SCIE, **Q1** DOI: https://doi.org/10.3390/molecules29194770 **Web of Science, Scopus (Elsevier)**
9	Synthesis, characterization, and photocatalytic activity of aluminum doped spinel ferrite nanoparticles for the photodegradation of Congo red. M. Yasar, A. Mujtaba, K. Fatima, M. Rubab, M. Usman, M.J. Khan, D.P. Rao, R.W. Sajjad Reaction Kinetics, Mechanisms and Catalysis, ISSN: 1878-5204, 137, 3463-3485, 2024 **IF 1.7,** Indexing: SCIE DOI: https://doi.org/10.1007/s11144-024-02714-x **Web of Science, Scopus (Elsevier)**
10	An Efficient and Green Strategy for the Synthesis of Graphene with Aqueous Polyphenol Extracts of Orchid Flower (Dendrobium Anosmum) for Charge Storage. I. Ruti, V. Kaliyaperuma, **D. P. Rao**, S. Kumar Materials Letters, ISSN: 0167-577X, 376, 137131, 2024 **IF 2.7**, Indexing: SCIE DOI: https://doi.org/10.1016/j.matlet.2024.137131 **Web of Science, Scopus (Elsevier)**
11	Saffron: A Comprehensive Review of It's Cancer-Preventive and Curative Properties in Different Types of Cancer

	Y. Gautam, M. Srivastav, P. Mishra, M. Singh, H. Kausar, **D. P. Rao,** A. Srivastav, L. Kumari, R.P.S. Chauhan, N. Verma *Oriental Journal of Chemistry*, ISSN: 22315039, 40(3), 646-659, 2024 **IF 0.8** Indexing: SCIE DOI: http://dx.doi.org/10.13005/ojc/400303 **Web of Science, Scopus (Elsevier)**
12	Adsorptive removal of cadmium electroplating wastewater using hybrid composite of thiol-grafted seed gum of Tamarindus indica and Teff hay biocarbon. **D. P. Rao**, V.D. Krishnasamy, M. Selvaraju*, V.P. Sundramurthy, S.R. Kandavalli, M.S. Chitra, N. Sivasamy, P. Thirumoorthy *Zeitschrift für Physikalische Chemie*, (International Journal of Research in Physical Chemistry and Chemical Physics), ISSN: 2196-7156, ------, 2024, **IF 3.0**, Indexing: SCIE DOI: https://doi.org/10.1515/zpch-2024-0715 **Web of Science, Scopus (Elsevier)**
13	Correlation coefficient for physico-chemical parameters to assess the quality of tannery effluents at Kanpur. R. Saxena, **D.P. Rao***, A.K. Gautam, M. Gautam, G.P. Gupta, S. Kumar, V. Saxena, C.P. Singh, V. Shankar, Y. Gautam *Letters in Applied NanoBioScience*, ISSN: 22846808, 13(1), 47, 1-12, 2024 DOI: https://doi.org/10.33263/LIANBS131.047 **Scopus (Elsevier)**
14	A review in curcuminoids: Chemistry, anticancer activity and future prospects P. Mishra, M. Srivastava, Y. Gautam, M. Singh, N. Verma, D. S. Kapkoti, S. P. Singh, A. K. Singh, **D. P. Rao** *Indian Drugs*, ISSN: 0019-462X, 61(5), 7-23, 2024 DOI: https://doi.org/10.53879/id.61.05.14041 **Scopus (Elsevier)**
15	Pure and doped graphene as a suitable material for the detection of hazardous gases. R. Zainul, A. T. Ahmed, M. Kaur, R. Sharma, L. H. Saleh, A.A. Mahmood, **D. P. Rao***, M. A. Hasan, S. Islam *Journal of Organometallic Chemistry*, ISSN: 0022-328X, 1014, 123196, 2024, **IF 2.3,** Indexing: SCIE DOI: https://doi.org/10.1016/j.jorganchem.2024.123196 **Web of Science, Scopus (Elsevier)**
16	Dioxomolybdenum (VI) compounds of macrocyclic Schiff base ligands: Preparation, characterization and antibacterial activity. S. Katiyar, **D. P. Rao*,** N. K. Verma, A. K. Gautam, A. Verma, C. P. Singh, Y. Gautam *Oriental Journal of Chemistry*, ISSN: 2231-5039, 40(1), 28-39, 2024 **IF 0.8** Indexing: SCIE DOI: http://dx.doi.org/10.13005/ojc/400104 **Web of Science, Scopus (Elsevier)**
17	Physico-chemical analyses to assess the quality of distillery effluents at Unnao. R. Saxena, **D.P. Rao***, A.K. Gautam, M. Gautam, G.P. Gupta, S. Kumar, V. Saxena, C.P. Singh, V. Shankar, Y. Gautam *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 14(2), 38, 1-12, 2024 DOI: https://doi.org/10.33263/BRIAC142.038 **Web of Science, Scopus (Elsevier)**
18	Aniline-naphthylamine copolymer integrated with aluminum terephthalate-based metal organic framework for efficient hydrogen evolution from seawater. Y. Jazaa, R. Abdulkareem, L.M.F. Fiallos, S.K. Saraswat, S. Abdullaev, R.M.T. Castillo, **D.P. Rao**, Z.H. Mahmoud, A.A. Rajhi *Journal of Materials Engineering and Performance*, ISSN 1059-9495, ---, 2023 **IF 2.3** Indexing: SCIE DOI: https://doi.org/10.1007/s11665-024-09175-2 **Web of Science, Scopus (Elsevier)**
19	Synthesis and Crystal Structure-Activity Studies and Possible Therapeutic Application of Diamine Conjugated Furil Schiff Base as Antibacterial Agent. S. Katiyar, **D.P. Rao***, N.K. Verma, A.K. Gautam, C.P. Singh, A. Verma, G.P. Gupta *Chemistry Africa*, ISSN: 25225758, 7(4), 1817-1828, 2024 **IF 2.6** Indexing: ESCI DOI: https://doi.org/10.1007/s42250-023-00868-0 **Web of Science, Scopus (Elsevier)**

20	Interaction of procarbazine drug and solvent effects on pristine and embedded-zinc oxide nanotube as a drug delivery vehicle: A DFT investigation. M.J. Saadh, R. Abdulkareem, O.Q.B. Allela, A. Kumar, A.H. Shather, **D.P. Rao***, L.P. Castelo, A.A. Omran, A. Elawady *Physica B: Condensed Matter*, ISSN: 09214526, 676, 415658, 2024, **IF 2.8** Indexing: SCIE DOI: https://doi.org/10.1016/j.physb.2023.415658
21	Evaluating ammonia sensors based on two-dimensional pure and silicon decorated biphenylene using DFT calculations. M.J. Saadh, S.A. Jasim, M.G. Veloz, A. Kumar, S.M. Mekkey, M.A. Guadalupe, M. Nora, **D.P. Rao***, Y. Elmasry *Inorganic Chemistry Communications*, ISSN 1387-7003, 160, 111918, 2024 **IF 3.8** Indexing: SCIE DOI: https://doi.org/10.1016/j.inoche.2023.111918 **Web of Science, Scopus (Elsevier)**
22	Thermolysis and their kinetics of Cu(II) perchlorate complex with isopropylamine and water. A. Sing, C.P. Singh, A.K. Srivastava, **D.P. Rao** *European Chemical Bulletin*, ISSN: 20635346, 12(sp. 13), 1166-1173, 2023 DOI: https://www.eurchembull.com/uploads/paper/c2abfa0c31c9ebcacb8d98f455e40833.pdf **Scopus (Elsevier)**
23	Progressing nanotechnology to improve targeted cancer treatment: overcoming hurdles in its clinical implementation. M. Chehelgerdi, M. Chehelgerdi, O.Q.B. Allela, R.D.C. Pecho, N. Jayasankar, **D.P. Rao**, T. Thamaraikani, M. Vasanthan, P. Viktor, N. Lakshmaiya, M.J. Saadh, A. Amajd, M.A. Abo-Zaid, R.Y. Castillo-Acobo, A.H. Ismail, Ali H. Amin, R. Akhavan-Sigari *Molecular Cancer*, ISSN 1476-4598, 22(169), 2023 **IF 37.3** Indexing: SCIE DOI: https://doi.org/10.1186/s12943-023-01865-0 **Web of Science, Scopus (Elsevier)**
24	Design and evaluation of the chemical functionalized BxCyNz (x=z=1, y=2) nanotube as an anticancer drug delivery vehicle. M.J. Saadh, H.A. Mohammad, R.S. Alazragi, S.F. Jawad, A.H. Shather, **D.P. Rao**, A.J.A. Saheb, S. Sharma, Z.T. Abed *Inorganic Chemistry Communications*, ISSN 1387-7003, 157, 111321, 2023 **IF 3.8** Indexing: SCIE DOI: https://doi.org/10.1016/j.inoche.2023.111321 **Web of Science, Scopus (Elsevier)**
25	Half-sandwich arene metal complexes bearing ferrocenyl-pyridine azine Schiff Base: Anticancer, antibacterial, DNA binding and in vitro cytotoxicity studies. Sheetal, **D.P. Rao*,** Vikky Singh, Sarita Srivastava, Sanjay Kumar, Ranvir Singh *Chemistry Africa*, ISSN: 25225758, 6(6), 2983-2993, 2023 **IF 2.6** Indexing: ESCI DOI: https://doi.org/10.1007/s42250-023-00706-3 **Web of Science, Scopus (Elsevier)**
26	Synthesis of mesoionic 1-aryl-4-(phenyl/p-chlorophenyl)imidazo[2,1-b]thiazol-4-ones and study of their monoamine oxidase, succinate dehydrogenase inhibitory, anti-convulsant and anti-bacterial activity. S.K. Srivastava, **D.P. Rao***, S.P. Singh *Letters in Applied NanoBioScience*, ISSN: 22846808, 12(3), 90, 2022 DOI: https://doi.org/10.33263/LIANBS123.090 **Scopus (Elsevier)**
27	Central Nervous System Activity of 1-aryl-2(thiomethylene benzimidazol-2-yl)-4-(phenyl/p-chlorophenyl)- imidazoles and 1-aryl-2-sulphono-[benzimidazol-2-yl]-methyl-4-(phenyl/p-chlorophenyl)-imidazoles. S.K. Srivastava, S.P. Singh, **D.P. Rao*** *Letters in Applied NanoBioScience*, ISSN: 22846808, 12(3), 73, 2022 DOI: https://doi.org/10.33263/LIANBS123.073 **Scopus (Elsevier)**
28	Synthesis, crystal structure and kinetics of thermolysis of cobalt perchlorate complex with hexamethylenetetramine. C.P. Singh, A. Singh, C.G. Daniliuc, B. Kumar, G. Singh, **D.P. Rao*** *Indian Journal of Chemistry A*, ISSN: 03764710, 60A, 676-681, 2021, **IF 0.412** Indexing: SCIE

	DOI: https://doi.org/10.56042/ijca.v60i5.40587 **Web of Science, Scopus (Elsevier)**
29	*Cis*-Dioxomolybdenum (VI) complexes with N-donor macrocyclic ligands. R.K. Gautam, C.P. Singh, **D.P. Rao*** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 12(1), 1352-1364, 2022 DOI: https://doi.org/10.33263/BRIAC121.13521364 **Web of Science, Scopus (Elsevier)**
30	Synthesis, crystal structure and thermolysis of cadmium perchlorate complex with hexamethylenetetramine. C.P. Singh, A. Singh, Nibha, C.G. Daniliuc, G. Singh, **D.P. Rao*** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 11(3), 10895-10905, 2021 DOI: https://doi.org/10.33263/BRIAC113.1089510905 **Web of Science, Scopus (Elsevier)**
31	Molybdenum(VI) complexes with Schiff base containing N-hetero atom. C.P. Singh, H.S. Yadav, **D.P. Rao*** *Letters in Applied NanoBioScience*, ISSN: 22846808, 10(1), 1816-1824, 2021 DOI: https://doi.org/10.33263/LIANBS101.18161824 **Scopus (Elsevier)**
32	Synthesis and studies of some cis-MoO_2(VI) complexes with nitrogen donor macrocyclic ligands. R.K. Gautam, C.P. Singh, R. Saxena, **D.P. Rao*** *European Chemical Bulletin*, ISSN: 20635346, 8(12), 387-393, 2019 DOI: http://dx.doi.org/10.17628/ecb.2019.8.387-393 **Scopus (Elsevier)**
33	A review on versatile applications of novel Schiff bases and their metal complexes. **D.P. Rao** *Letters in Applied NanoBioScience*, ISSN: 22846808, 8(4), 675-681, 2019 DOI: https://doi.org/10.33263/LIANBS84.675681 **Scopus (Elsevier)**
34	New insights into the chemistry of cis-dioxomolybdenum(VI) Schiff base complexes with macrocyclic ligands. R.K. Gautam, C.P. Singh, D. Kumar, **D.P. Rao*** *Chemical Science Transactions*, ISSN: 22783458, 8(4), 467-476, 2019 DOI: https://doi.org/10.7598/cst2019.1594
35	Synthesis and antibacterial activity of novel molybdenum complexes with macrocyclic Schiff base derived fromfuranylethanedione. R.K. Gautam, C.P. Singh, R. Saxena, **D.P. Rao*** *Asian Journal of Chemistry*, ISSN: 09707077, 31(11), 2607-2612, 2019 DOI: https://doi.org/10.14233/ajchem.2019.22242 **Scopus (Elsevier)**
36	Thermal decomposition and their kinetics of mercury(II) perchlorate complex with 4-aminopyridine and water. C.P. Singh, A. Singh, **D.P. Rao*** *Letters in Applied NanoBioScience*, ISSN: 22846808, 8(3), 649-653, 2019 DOI: https://doi.org/10.33263/LIANBS83.649653 **Scopus (Elsevier)**
37	New Insights into the Chemistry of oxovanadium(IV) Schiff base complexes with nitrogen donor. A.K. Yadava, H.S. Yadav, **D.P. Rao*** *Journal of Science*, ISSN: 22773290, 5(11), 1086-1090, 2015
38	Synthesis and spectral studies of oxovanadium(IV) Schiff base complexes derived from 1,1'-oxalyldiimidazole and aromatic amines. A.K. Yadava, H.S. Yadav, R. Saxena, **D.P. Rao*** *European Chemical Bulletin*, ISSN: 20635346, 4 (7), 356-359, 2015 DOI: https://doi.org/10.17628/ECB.2015.4.356 **Scopus (Elsevier)**
39	Synthesis, characterization and antibacterial evaluation of five MoO_2(VI) complexes coordinated by Schiff derivatives. **D.P. Rao** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 4 (4), 793-797, 2014

	https://publons.com/wos-op/publon/56118938/ **Web of Science, Scopus (Elsevier)**
40	Enhancement of seed germination and plant growth of wheat, maize, peanut and garlic using multiwalled carbon nanotubes. **D.P. Rao***, A. Srivastava *European Chemical Bulletin*, ISSN: 20635346, 3(5), 502-504, 2014 DOI: https://doi.org/10.17628/ECB.2014.3.502 **Scopus (Elsevier)**
41	*cis*-Dioxomolybdenum(VI) complexes with symmetrical tetradentate Schiff bases and their antibacterial activity. **D.P. Rao***, H.S. Yadav, A. Srivastava *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 4(1), 678-684, 2014 https://publons.com/wos-op/publon/56118929/ **Web of Science, Scopus (Elsevier)**
42	New insights into the chemistry of dioxomolybdenum(VI) complexes with Schiff base. **D.P. Rao** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 4(1), 671-677, 2014 https://publons.com/wos-op/publon/56118930/ **Web of Science, Scopus (Elsevier)**
43	Physico-Chemical analysis and pollution level of one of the distillery effluents in-Unnao, India. A.P. Singh, R. Saxena, **D.P. Rao*** *European Chemical Bulletin*, ISSN: 20635346, 2(12), 1060-1064, 2013 DOI: https://eurchembull.com/uploads/paper/39752895117f3ae39949f75a17c7704d.pdf **Scopus (Elsevier)**
44	New insights into the chemistry of *cis*-dioxomolybdenum (VI) complexes with symmetrical tetradentate Schiff bases and their antibacterial activity. **D.P. Rao** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 3(4), 606-612, 2013 https://publons.com/wos-op/publon/56118934/ **Web of Science, Scopus (Elsevier)**
45	*In-situ* synthesis and antibacterial activity of novel macrocyclic complexes of *cis*-dioxomolybdenum(VI). **D.P. Rao***, H.S. Yadav *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 3(2), 533-540, 2013 https://publons.com/wos-op/publon/56118932/ **Web of Science, Scopus (Elsevier)**
46	Assessment of tannery effluent: a case study of Kanpur in India. A.P. Singh, **D.P. Rao*** *European Chemical Bulletin*, ISSN: 20635346, 2 (7), 461-464, 2013 DOI: https://doi.org/10.17628/ECB.2013.2.461 **Scopus (Elsevier)**
47	Synthesis and spectral characterization of some novel macrocyclic complexes of oxovanadium(IV) with 1,1'-oxalyldiimidazole. A.K. Yadava, H.S. Yadav, **D.P. Rao*** *European Chemical Bulletin*, ISSN: 20635346, 2(5), 255-258, 2013 DOI: https://doi.org/10.17628/ECB.2013.2.255 **Scopus (Elsevier)**
48	New insights into the chemistry of oxovanadium(IV) complexes with tetradentate macrocyclic ligands. S. Singh, H.S. Yadav, A.K. Yadava, **D.P. Rao*** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 3 (1), 484-490, 2013 https://publons.com/wos-op/publon/56118935/ **Web of Science, Scopus (Elsevier)**

49	Synthesis, structure and characterization of oxovanadium(IV) Schiff base complexes with tetradentate macrocyclic ligands. A.K. Yadava, H.S. Yadav, U.S. Yadava, **D.P. Rao*** *Biointerface Research in Applied Chemistry*, ISSN: 20695837, 2(5), 424-431, 2012 **Web of Science, Scopus (Elsevier)**
50	New insights into the chemistry of oxovanadium(IV) complexes with N_4 coordinating ligands. A.K. Yadava, H.S. Yadav, U. S. Yadava, **D.P. Rao*** *ISRN Inorganic Chemistry*, ISSN: 2314470X, ID 871640, 5 Pages, 2013 DOI: https://doi.org/10.1155/2013/871640
51	Synthesis of oxovanadium(IV) complexes with tetraaza coordinating ligands. S. Singh, H.S. Yadav, A.K. Yadava, **D.P. Rao*** *Journal of Chemistry*, ISSN: 20909071, ID 947325, 5 Pages, 2013, **IF 3.241** Indexing: SCIE DOI: http://dx.doi.org/10.1155/2013/947325 **Web of Science, Scopus (Elsevier)**
52	Synthesis and characterization of *cis*-dioxomolybdenum(VI) complexes having furil as precursor molecule. **D.P. Rao*,** H.S. Yadav, A.K. Yadava, S. Singh, U.S. Yadav *Journal of the Serbian Chemical Society*, ISSN: 03525139, 77 (9), 1-10, 2012, **IF 1.100** Indexing: SCIE DOI: https://doi.org/10.2298/JSC111110020R **Web of Science, Scopus (Elsevier)**
53	Synthesis and characterization of some novel Schiff base complexes of oxovanadium(IV) cation. A.K. Yadava, H.S. Yadav, U.S. Yadav, **D.P. Rao*** *Journal of Chemistry*, ISSN: 20909071, ID 689518, 5 Pages, 2013, **IF 3.241** Indexing: SCIE DOI: http://dx.doi.org/10.1155/2013/689518 **Web of Science, Scopus (Elsevier)**
54	Synthesis and structural characterization of novel square pyramidal oxovanadium(IV) complexes with lignds having N and O- donor atoms. A.K. Yadava, H.S. Yadav, U.S. Yadav, **D.P. Rao*** *Turkish Journal of Chemistry*, ISSN: 13000527, 36 (4), 624-630, 2012, **IF 1.4** Indexing: SCIE DOI: https://doi.org/10.3906/kim-1201-54 **Web of Science, Scopus (Elsevier)**
55	Synthesis and characterization of oxovanadium(IV) macrocyclic complexes with ligands derived by condensation of furil with 1,4-diaminobenzene or 3,4-diaminopyridine and their reactions with β-diketones. S. Singh, H.S. Yadav, A. K. Yadava, **D.P. Rao*** *International Journal of ChemTech Research*, ISSN: 09744290, 3(4), 1863-1869, 2011 DOI: http://www.scopus.com/inward/record.url?eid=2-s2.0-84055191972&partnerID=MN8TOARS **Scopus (Elsevier)**
56	Syntheses and spectroscopic studies on macrocyclic complexes of dioxomolybdenum(VI) with furil as precursor. **D.P. Rao***, H.S. Yadav, A.K. Yadava, S. Singh, U.S. Yadav *E-Journal of Chemistry*, ISSN: 09734945, 9(2), 497-503, 2012, **IF 3.241** Indexing: SCIE Journal of Chemistry, vol. 9, Article ID 205123, 7 pages, 2012. DOI: https://doi.org/10.1155/2012/205123 **Web of Science, Scopus (Elsevier)**
57	Synthesis and characterization of oxovanadium(IV) complexes with tetradentate Schiff-base ligands having thenil as precursor molecule. S. Singh, **D.P. Rao***, A.K. Yadava, H.S. Yadav *Current Research in Chemistry*, ISSN: 19965052, 3(2), 106-113, 2011 DOI: https://doi.org/10.3923/crc.2011.106.113
58	In-situ preparation of macrocyclic complexes of dioxomolybdenum(VI) involving heterocyclic precursor. **D.P. Rao***, H.S. Yadav, A.K. Yadava, S. Singh, U. S. Yadav *Journal of Coordination Chemistry*, ISSN: 00958972, 64(2), 293-299, 2011, **IF 1.9** Indexing: SCIE

	DOI: https://doi.org/10.1080/00958972.2010.544037 **Web of Science, Scopus (Elsevier)**
59	Role of nanoparticles in drug delivery. **D.P. Rao*,** S.K. Srivastav, C. Prasad, R. Saxena, S. Asthana *International Journal of Nanotechnology and Applications*, ISSN: 0973631X, 4(1), 45-49, 2010
60	Toxic load of tannery industries situated in Kanpur. **D.P. Rao*,** R. Saxena, V. Saxena, A. Singh *International Journal of Applied Environmental Sciences*, ISSN: 09736077, 4(3), 327-335, 2009 DOI: http://www.scopus.com/inward/record.url?eid=2-s2.0-70449107421&partnerID=MN8TOARS **Scopus (Elsevier)**
61	Correlation studies of chemical characterization of distillery effluents. **D. P. Rao*,** R. Saxena, V. Saxena *International Journal of Applied Environmental Sciences*, ISSN: 09736077, 4(2), 161-168, 2009 DOI: http://www.scopus.com/inward/record.url?eid=2-s2.0-70449119654&partnerID=MN8TOARS **Scopus (Elsevier)**
62	Isolation & characterization of per-oxidases from the leaves of *Ricinus Communis*. P. Kumar, M. Kamle, J. Singh, **D. P. Rao*** *International Journal of Biochemistry and Biotechnology*, ISSN: 09732691, 4(4), 283-292, 2008

Book(s) published

S. No.	Book Title	Type of Authorship	ISSN/ ISBN No.	Publisher
1.	A text book of Spectroscopy, Total Pages 128, 2013	Single	978-81-8378-113-8	Sahitya Ratnalay, Kanpur
2.	Inorganic Chemistry: An Introduction, Total Pages 186, 2015	Single	978-81-8378-130-5	Sahitya Ratnalay, Kanpur
3.	Organic Chemistry: An Introduction, Total Pages 154, 2017	Single	978-81-8378-131-2	Sahitya Ratnalay, Kanpur
4.	DCEBCH-106 Spectroscopy, Total Pages 164, 2022	Editor	978-93-94487-48-2	Uttar Pradesh Rajarshi Tandon Open University

Book Chapter Published

S. No.	Title with page nos.	Book Title, editor & publisher	ISBN No.
1	Plant Growth Promoting Rhizobacteria (PGPR): Mechanism, role in crop improvements and sustainable agriculture. Page No. 386-397, 2017	Advances in PGPR Research, CAB International-2017, U.K.	9781786390325
2	Particulate Mate and its Impact on Plant Biochemical and Morphological Changes. Page No. 175-196, 2022	Advances in Plant Science, LAP LAMBERT Academic Publishing	9786205498545
3	Indoles: A Potential Drug Development Scaffold. Page No. 63-84, 2024	Multidisciplinary Approach and Applications of	9789394638815

Patents

Sl. No.	Title of Patent	Details of Patent
1.	An approach for modelling and rationalizing organometallic chemistry with computation	Indian Patent / Publication No. 202311023189 / Publication Type- Ordinary / Date of Filling- 29-03-2023 / Publication Date- 19-05-2023
2.	Distillation Apparatus	Indian Design / Design No. 382985-001 / Date of Filling- 04-04-2023 / Issue Date- 27-06-2023
3.	Distillation Apparatus	UK Design / Design No. 6285031 / Date of Filling- 23-05-2023 / Grant Date- 06-07-2023
4.	Digital Viscometer	UK Design / Design No. 6294265 / Date of Filling- 04-07-2023 / Grant Date- 11-07-2023
5.	Novel Drug Delivery System Technique	Indian Copyright / Class of Work: Literary/ Dramatic / Diary Number: 12269/2024-CO/L / Date of Filling- 20-04-2024 / ROC Number: L-150341/2024
6.	Nanotechnology Based Device for Removing Heavy Metals from Juice	Indian Design / Design No. 427711-001 / Date of Filling- 21-08-2024 / Issue Date- 28-11-2024
7.	Advanced Rotary Evaporator	UK Design / Design No. 6403095 / Date of Filling- 08-11-2024 / Grant Date- 07-01-2024
8.	Portable Nano Water Purifier Bottle	Indian Patent / Publication No. 202511003240 / Publication Type- Ordinary / Date of Filling- 14-01-2025 / Publication Date- 31-01-2025
9.	Biochemistry Analyser	UK Design / Design No. 6421943 / Date of Filling- 06-02-2025 / Grant Date- 20-02-2025

Research Projects

1. *Catalytic and industrial application of multivalent molybdenum complexes as a bonafide chelating complex* sponsored by CST UP Lucknow, 2023 (ongoing) Sanctioned Amount: 16.86 Lakh

2. Bonafide chelating complexes of multivalent molybdenum sponsored by CSJMU Kanpur, 2024 (ongoing) Sanctioned Amount: 60K

3. *New Insights into the Chemistry of Dioxomolybdenum(VI) Complexes with Macrocyclic Ligands* sponsored by DHE UP Prayagraj, 2021 (completed) Sanctioned Amount: 3.0 Lakh

4. *Physico-chemical Studies of Waste Water and Distillery effluents* sponsored by DHE UP Prayagraj, 2021 (completed) Sanctioned Amount: 3.0 Lakh

5. *Synthesis and Characterization of Dioxomolybdenum(VI) Complexes with Different Compounds involving Hetero Atoms and their Biological Importance* Sponsored by UGC New Delhi, 2011-2014 (completed) Sanctioned Amount: 2.26 Lakh

Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S. No	Name of Award	Awarding Agency	Year
1.	Travel Grant	UGC, New Delhi	2011
2.	Travel Grant	UGC, New Delhi	2014
3.	Bharat Ratna Abdul Kalam Gold Medal	GEPRA, New Delhi	2019
4.	Best Researcher	Scifax, New Delhi	2024
5.	Singhania Best Researcher Award	CSJMU Kanpur	2024
6.	D.Sc. Award	University of Central America	2024

Journal as Editor-in-Chief / Editorial Board Member

S. No.	Name of Journal	Role	Link
1.	GRS Journal of Multidisciplinary Research and Studies	Editor-in-Chief	https://grspublisher.com/journal-details/GRSJMRS
2.	International Journal of Chemical Research	Associate Editor	https://www.bioinfopublication.org/pages/journal.php?id=BPJ0000219&pg=editorial
3.	New Emerging Techniques in Pharmaceutics	Editorial Board Member	https://pharmaceutics.stripejournals.com/editorial-board/

Ph.D. Guidance:

Awarded : 02
Ongoing : 04

Organized Seminars

- Organized a National Seminar on *Ganga Pollution: Analysis and Remedies* sponsored by UGC New Delhi dated 07-08 Oct. 2016
- Organized a National Seminar on *Food Chemistry, Processed Food & Toxicology* sponsored by Management dated 25-26 Sept. 2019
- Organized a National Seminar on *Waste Management: Role of Chemistry* sponsored by U.P. D.H.E, Prayagraj dated 22-23 Jan. 2020

Paper presented in International Conferences Abroad	02
Paper presented in International Conferences	04
Paper presented in National Conferences	32
Invited Lectures in National Conferences	10

Reviewer of the following Journals:

1. Journal of Coordination Chemistry
2. Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry
3. Oriental Journal of Chemistry
3. Journal of Chemistry
4. Arabian Journal of Chemistry

Technical Editor of the following Journals:

1. Journal of Applied Sciences
2. Trends in Applied Sciences Research
3. Asian Journal of Applied Sciences
4. International Journal of Chemical Technology
5. Current Research in Chemistry
6. Associate Editor of International Journal of Chemical Research

MEMBERSHIP OF PROFESSIONAL BODIES				
S. No.	**Name / Nature of the Activity**	**Place**	**Duration**	**Organization Institution / University**
1	Life Membership	LM 072	19/09/2008	Vigyan Bharti
2	Life Membership	LM 757	08/09/2010	Association of Chemistry Teachers
3	Life Membership	L 16442	09/10/2010	Indian Science Congress
4	Life Membership	LM 498	07/02/2011	Society for Materials Chemistry
5	Life Membership	100257	09/04/2011	APCCBEES
6	Life Membership	85909D097	21/07/2017	Int. Journal of Chemical Research
CAREER ADVANCEMENT COURSES				
1	Orientation Programme		29th Aug.-25th Sept. 2009	ASC, DDU Gorakhpur University
2	Refresher cum Workshop		16-22 Aug. 2010	STEP-HBTI, Kanpur
3	Refresher Course		8-28 Nov. 2010	ASC, University of Allahabad
4	Short Term Course		9-15 Oct. 2014	ASC, DDU Gorakhpur University
5	Refresher Course		2-23 Feb. 2015	ASC, University of Lucknow
6	FDP		20-25 June 2016	UPTTI, Kanpur
7	Short Term Course		7-13 Oct. 2017	ASC, University of Lucknow

Others:

1. Mentor in **State Child Science Exhibition**, 2004, at Govt. Jubilee Inter College, Gorakhpur, U.P.
2. Mentor in **State Child Science Exhibition**, 2004, on Nov. 19-23, 2004, at M.S.I. Inter College, Gorakhpur, U.P.