

CURRICULUM VITAE

Divya Pratap Singh

Dr. Divya Pratap Singh

Assistant Professor & Assistant Registrar
Department of Applied Science and Humanities
Rajkiya Engineering College, Devgoan, Azamgarh
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Academic Profile:

❖ Ph.D.	Banaras Hindu University, Varanasi	2014
❖ CSIR-JRF-NET	CSIR, New Delhi	2009
❖ M. Sc.	Veer Bahadur Singh Purvanchal University, Jaunpur	2006
❖ B. Sc.	Veer Bahadur Singh Purvanchal University, Jaunpur	2004
❖ Intermediate	U P Board, Allahabad (U P Inter College, Varanasi)	2001
❖ High School	U P Board, Allahabad (U P Inter College, Varanasi)	1999

Academic Positions Held:

Position	University/Institution	Duration
❖ Assistant Professor	Rajkiya Engineering College, Devgoan, Azamgarh	08.12.201– Till date
❖ Post-Doctoral Fellow	School of Material Science and Technology, IIT (BHU), Varanasi	16.11.2017– 07.12.2017
❖ Guest Faculty	Department of Chemistry, University of Allahabad, Allahabad	09.09.2015– 15.11.2017
❖ Teaching Assistance	Department of Chemistry, Banaras Hindu University, Varanasi	01.08.2012– 30.04.2014

Administrative Positions Held in College:

Position	University/Institution	Duration
❖ Assistant Registrar	Rajkiya Engineering College, Devgoan, Azamgarh	17.05.2018– Till date
❖ Additional Controller of Examination	Rajkiya Engineering College, Devgoan, Azamgarh	23.03.2018– Till date
❖ In-charge Guest House	Rajkiya Engineering College, Devgoan, Azamgarh	18.12.2017– Till date
❖ Member of Proctorial Board	Rajkiya Engineering College, Devgoan, Azamgarh	30.12.2017– Till date
❖ Member of Anti-Ragging Cell	Rajkiya Engineering College, Devgoan, Azamgarh	30.12.2017– Till date

Teaching Experience: UG classes: 06 years; PG classes: 03 years.

Details of Courses Taught:

B. Sc., M. Sc.	Group Theory, Molecular Catalysis, Coordination & Organometallic Chemistry, Basic Chemistry
B. Tech.	Engineering Chemistry

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-C.S. Lewis

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Research Interests: Synthetic Inorganic & Organometallic Chemistry, Catalytic Property of Metal complexes, Sensing, Bio-inorganic, Coordination and Transition Metal Chemistry.

Experimental techniques awareness: Extensive experience in small and large scale, multistep organometallic transformations Expertise in structure determination and analysis by various spectral techniques (Infra-red, Nuclear Magnetic Resonance [^1H , ^{13}C , ^{31}P], UV-Vis, Mass Spectroscopy, Cyclic Voltammetry.

Basic knowledge of Computer and Software program(s) related to structure solution (SHELX-97, SIR-2004, PLUTON, WinGx, ORTEP, Mercury, enCIFer, Diamond) and experienced in structure determination with single crystal X-ray crystallography, experienced in DFT calculations of complexes using Gaussian 03 & Gaussian 09.

Other activities: Life member of The Indian Science Congress Association (L28950).

References:

Prof. V. P. Singh	Prof. R. Prakash	Prof. J. Singh
Department of Chemistry Institute of Science Banaras Hindu University Varanasi-221005 E-mail: singvp@yahoo.co.in	School of Material Science and Technology Indian Institute of Technology (BHU), Varanasi-221005 E-mail: rajivprakash12@yahoo.com	Department of Chemistry Faculty of Science University of Allahabad Allahabad -211002 E-mail: dr.jdsau@gmail.com

Publications: Total 16, Published 13, Communicated 03

- [Synthesis, characterization and physico-chemical studies on symmetrical Schiff base acetylthiophene malonyldihydrazone and their transition metal\(II\) complexes](#)
Divya Pratap Singh, Ashish Kumar Singh and V. P. Singh, *J. Mol. Struct.*, **2018**, (Communicated)
- [A FRET and PET based fluorescent molecular switch for the detection of \$\text{Fe}^{3+}\$ and cascade sensing of \$\text{F}^-\$ in pure aqueous medium with bioimaging studies](#)
Romi Dwivedi, Divya P. Singh, Ashish K. Singh, Brijesh S. Chauhan, S. Srikrishna, Anoop K. Panday, Lokman H. Choudhury, Vinod P. Singh, *ACS Appl. Mater. Interfaces*, **2018**, (Communicated)
- [Aroyl hydrazone with large stokes shift: a fluorescent tag for imaging \$\text{Cu}^{2+}\$ in pure aqueous media and in vivo studies](#)
Romi Dwivedi, Divya Pratap Singh, Ashish Kumar Singh, Brijesh Singh Chauhan, S. Srikrishna, Saumya Singh, Vinod Prasad Singh, *Sens. Actuators B*, **2018**, (Communicated)
- [Intracellular application and logic gate behavior of a 'turn off-on-off' type probe for selective detection of \$\text{Al}^{3+}\$ and \$\text{F}^-\$ ions in pure aqueous medium](#)

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- Romi Dwivedi, **Divya Pratap Singh**, Brijesh Singh Chauhan, S. Srikrishna, Anoop Kumar Panday, Lokman H. Choudhury, Vinod Prasad Singh, *Sens. Actuators B*, **2018**, **258**: 881–894. DOI: [10.1016/j.snb.2017.11.173](https://doi.org/10.1016/j.snb.2017.11.173)
5. A dihydrazone based “turn-on” fluorescent probe for selective determination of Al³⁺ ions in aqueous ethanol
Divya Pratap Singh, Romi Dwivedi, Ashish Kumar Singh, Biplob Koch, Priya Singh and Vinod Prasad Singh, *Sens. Actuators B*, **2017**, **238**: 128–137. DOI: [10.1016/j.snb.2016.07.043](https://doi.org/10.1016/j.snb.2016.07.043)
6. A binuclear Cu(I) complex as novel catalyst towards direct synthesis of N-2-aryl-substituted-1,2,3-triazoles from chalcones
Divya Pratap Singh, Bharat Kumar Allam, Rahul Singh, Krishna Nand Singh and Vinod Prasad Singh, *RSC Adv.*, **2016**, **6**: 15518–15524. Highlighted in *ChemInform* Volume 47, Issue 25, Date: June 02, 2016. DOI: [10.1039/c5ra27907k](https://doi.org/10.1039/c5ra27907k)
7. Synthesis, structural investigations and corrosion inhibition studies on Mn(II), Co(II), Ni(II), Cu(II) and Zn(II) complexes with 2-amino-benzoic acid (phenyl-pyridin-2-yl-methylene)-hydrazide
Pooja Singh, **Divya Pratap Singh**, Karishma Tiwari, Monika Mishra, Ashish K. Singh, Vinod P. Singh, *RSC Adv.*, **2015**, **5**: 45217–45230. DOI: [10.1039/c4ra11929k](https://doi.org/10.1039/c4ra11929k)
8. Binuclear Cu(I) complex of (N¹E,N²E)-N¹,N²-bis(phenyl(pyridin-2-yl)methylene) oxalohydrazide: synthesis, crystal structure and catalytic activity for the synthesis of 1,2,3-triazoles
Divya Pratap Singh, Bharat Kumar Allam, Krishna Nand Singh and Vinod Prasad Singh, *J. mol. Catal. A: chem.*, **2015**, **398**: 158–163. DOI: [10.1016/j.molcata.2014.12.003](https://doi.org/10.1016/j.molcata.2014.12.003)
9. A dihydrazone based fluorescent probe for selective determination of Al³⁺ ions
Divya Pratap Singh, Vinod P. Singh, *J. Lumin.*, **2014**, **155**: 7–14. DOI: [10.1016/j.jlumin.2014.06.017](https://doi.org/10.1016/j.jlumin.2014.06.017)
10. Synthesis, spectral and single crystal X-ray diffraction studies on Mn(II), Ni(II), Cu(II) and Zn(II) complexes with 2-hydroxy-benzoic acid (phenyl-pyridin-2-yl-methylene)-hydrazide
Pooja Singh, **Divya Pratap Singh**, Vinod P. Singh, *Polyhedron*, **2014**, **81**: 56–65. DOI: [10.1016/j.poly.2014.05.066](https://doi.org/10.1016/j.poly.2014.05.066)
11. A binuclear Mn(II) complex as an efficient catalyst for transamidation of carboxamides with amines
Divya Pratap Singh, Bharat Kumar Allam, Krishna Nand Singh and Vinod Prasad Singh, *RSC Adv.*, **2014**, **4**: 1155–1158. Highlighted in *ChemInform* Volume 45, Issue 41, Date: October 15, 2014. DOI: [10.1039/c3ra45176c](https://doi.org/10.1039/c3ra45176c)
12. Synthesis, spectroscopic (electronic, IR, NMR and ESR) and theoretical studies of transition metal complexes with some unsymmetrical Schiff bases

Divya Pratap Singh

- Vinod P. Singh, Shweta Singh, **Divya P. Singh**, K. Tiwari, Monika Mishra, *J. Mol. Struct.*, **2014**, 1058: 71–78. DOI: 10.1016/j.molstruc.2013.10.046
- 13. Synthesis, characterization and catalytic application of some novel binuclear transition metal complexes of bis-(2-acetylthiophene) oxaloyldihydrazone for C-N bond formation**
Divya Pratap Singh, Dushyant S. Raghuvanshi, K.N. Singh and Vinod P. Singh, *J. mol. Catal. A: chem.*, **2013**, 379: 21–29. DOI: 10.1016/j.molcata.2013.07.011
- 14. Synthesis, spectral and single crystal X-ray diffraction studies on Co(II), Ni(II), Cu(II) and Zn(II) complexes with *o*-amino acetophenone benzoyl hydrazone**
V.P. Singh, S. Singh, **D.P. Singh**, P. Singh, K. Tiwari, M. Mishra and R.J. Butcher, *Polyhedron*, **2013**, 56: 71–81. DOI: 10.1016/j.poly.2013.03.048
- 15. Synthesis, Thermal Studies and Spectral Characterization of Co(II), Ni(II), Cu(II) and Zn(II) Complexes with some Polymeric Diacetyl Acyldihydrazone Ligands**
Vinod Prasad Singh and **Divya Pratap Singh**, *Macromol. Res.*, **2013**, 21: 757–766. DOI: 10.1007/s13233-013-1084-8
- 16. Synthesis, characterization and biocidal activity of some transition metal(II) complexes with isatin salicylaldehyde acyldihydrazones**
Vinod P. Singh, Shweta Singh and **Divya P. Singh**, *J. Enz. Inhib. Med. Chem.*, **2012**, 27: 319–329. DOI: 10.3109/14756366.2011.588228

Seminar(s)/Symposium attended: (19)

1. 45th National Seminar on Crystallography (NSC 45), School of Material Science and Technology, IIT (BHU), Varanasi, July 09–12, **2017** (Participated)
2. A dihydrazone based “turn-on” fluorescent probe for selective determination of Al³⁺ ions in aqueous ethanol, **Divya Pratap Singh**, Indo-German Workshop on Recent Application of Carbohydrates in Chemistry and Biology (RACCB-2017), Department of Chemistry, IIT BHU, Varanasi and Department of Biomolecular Systems, Max-Planck Institute of Colloids and Interfaces, Berlin, Germany, Feb 14–16, **2017** (Oral Presented)
3. A dihydrazone based “turn-on” fluorescent probe for selective determination of Al³⁺ ions, **Divya Pratap Singh**, International Symposium on Kashi Katha–2016, IIT (BHU), Institute of Science (BHU) and IMS (BHU), Varanasi, Feb 06–07, **2016** (Oral Presented)
4. Synthesis, structural investigations and corrosion inhibition studies on some metal(II) complexes with acylhydrazone ligand, **Divya Pratap Singh**, InSPIRE–Varanasi, 2016, MCIIE, IIT (BHU), Department of Chemistry, Institute of Science, BHU in Collaboration with IIM–Ahmedabad and Indian Biogas Association, New Delhi, Jan 29–30, **2016** (Oral Presented)

CURRICULUM VITAE

Divya Pratap Singh

5. National Symposium on “Nanomaterials & Sustainable Synthetic Strategies”, Department of Chemistry, Banaras Hindu University, Varanasi, March 21–22, **2015** (Participated)
6. Synthesis, characterization and electro-chemical studies on some metal(II) complexes of acyldihydrazone
Divya Pratap Singh and Vinod P. Singh, Indo–US Workshop on Electrocatalytic Materials for Fuel and Biofuel Cell (Indo–US ECM–2013), Department of Chemistry, Banaras Hindu University, Varanasi, Feb 26–28, **2013** (Poster Presented)
7. Structural investigations on bis-(semicarbazido)dihydrazine nickel(II) complex synthesized by using uracil and hydrazine hydrate, M. Mishra, K. Tiwari, **D.P. Singh**, S. R. Gupta, P. Singh and V. P. Singh 15th CRSI National Symposium in Chemistry, Department of Chemistry, Banaras Hindu University, Varanasi, Jan 31–Feb 03, **2013** (Poster Presented)
8. 7th CRSI-RSC Symposium in Chemistry, Department of Chemistry, Banaras Hindu University, Varanasi, Jan 31, **2013** (Participated)
9. International BHU Alumni Meet and Seminar on Mahamana’s Vision of National Building, Banaras Hindu University, Varanasi, Dec 23–24, **2012** (Participated)
10. Structural studies and anti–corrosion behavior of some metal(II) complexes of 2-acetylthiophene benzoylhydrazone, **Divya Pratap Singh** and V. P. Singh, National Conference on "Chemistry For Sustainable Development" (SusCon-2012), Department of Chemistry, GIS, GITAM University, Visakhapatnam, India, Oct 10-11, 2012 (Oral Presentation)
11. Science Academics’ Lecture Workshop, Molecular Spectroscopy: Theory, Instrumentation and Applications, Department of Chemistry, Banaras Hindu University, Varanasi, March 02–03, **2012** (Participated)
12. Synthesis, Characterization and Corrosion Inhibition Studies on Transition Metal (II) Complexes of 2-Acetylthiophene Benzoylhydrazone, Pooja Singh, Monika, Karishma Tiwari, **Divya Pratap Singh** and Vinod Prasad Singh, 14th CRSI National Symposium in Chemistry & 6th CRSI–RSC Symposium in Chemistry, NIIST, Thiruvananthapuram, Feb 02–05, **2012** (Poster Presented)
13. Structural studies on some transition metal complexes of *o*-amino acetophenone benzoyl hydrazone
Divya Pratap Singh and Vinod P. Singh, 3rd Asian Conference on Coordination Chemistry, New Delhi, India, October 17–20, **2011** (Poster Presented)
14. International Conference on Chemistry: Frontiers and Challenges, Department of Chemistry, Aligarh Muslim University, Aligarh, March 05–06, **2011** (Participated)
15. Synthesis, electronic, NMR and ESR spectral studies of transition metal complexes with some unsymmetrical Schiff bases, **Divya Pratap Singh**, Shweta Singh and Vinod Prasad Singh, National

CURRICULUM VITAE

Divya Pratap Singh

Symposium on “Emerging Trend in Chemical Science”, Department of Chemistry, Banaras Hindu University, Varanasi, Feb 19–20, **2011** (Poster Presented)

16. Synthesis, thermal studies and spectral characterization of cobalt(II), nickel(II), copper(II) and zinc(II) complexes with some polymeric diacetyl acyldihydrazone ligands, **Divya Pratap Singh** and Vinod Prasad Singh, 13th CRSI National Symposium in Chemistry & 5th CRSI-RSC Symposium in Chemistry, NISER, Bhubaneswar, Feb 04–06, **2011** (Poster Presented)
17. Synthesis, thermal studies and spectral characterization of cobalt(II), nickel(II), copper(II) and zinc(II) complexes with some polymeric diacetyl acyldihydrazone ligands, **Divya Pratap Singh** and Vinod Prasad Singh, International Symposium on Frontiers in Inorganic Chemistry (FIC–2010) IACS, Kolkata, December, 11–13, **2010** (Poster Presented)
18. National Symposium-cum-Workshop on X-Ray Crystallography, Department of Chemistry, Banaras Hindu University, Varanasi, March 08–09, **2010** (Participated)
19. ESR spectral studies on copper(II) complexes with some acylhydrazines and hydrazones, **Divya Pratap Singh** and Vinod Prasad Singh, 12th CRSI National Symposium in Chemistry & 4th CRSI-RSC Symposium in Chemistry, ICT, Hyderabad, 4–7th February, **2010** (Poster Presented)

Personal Profile

Name	Dr. Divya Pratap Singh
Date of Birth	6 th May 1983
Gender	Male
Nationality	Indian
Father's Name	Shri Santosh Kumar Singh
Permanent address	Dr. Divya Pratap Singh Vill/P.O.: Sultanipur, Via: Karhan, District: Mau–276402 (U.P.), India. Mob: +91–9415997470; +917007719113
Correspondence address	Dr. Divya Pratap Singh B38/8–36, Raghunath Nagar Colony, Tulsipur, Mahmooorganj, Varanasi–221010 (U.P.), India. Mob: +91–9415997470; +917007719113

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