## Faculty Details proforma for college website



#### **DESHBANDHU COLLEGE**

## (UNIVERSITY OF DELHI)

## KALKAJI, NEW DELHI-110019



Title	Dr.	First Name	Gajendra	Last Name	Singh	Photograph	
Desig	nation	Assistant Professor					
Address		Department of Chemistry, Deshbandhu College University of					
		Delhi, Delhi-110019					
Phone No Office		011-26439565				Sa Cal	
Residence		C-153 Gali no 3 Ambika Vihar Shiv Vihar Karawal Nagar Delhi-					
		110084					
Mobile		09911037640				<b>V V</b>	
Email		gsposwal25@yahoo.co.in, gajendersinghdu@gmail.com					
Web-Page							
Educational Qualifications							
Degree		Institution			Year		
Ph.D.		C.C.S University Meerut .			2005		
M. Phil.		Department of Chemistry, University of Delhi, Delhi-			2000		
		110007.					
PG		C.C.S. University, Meerut (U.P)			1997		
UG		C.C.S.University, Meerut (U.P)				1994	
Caree	Career Profile						

Oct 2014-till date : Assistant Professor ,Department of Chemistry , Deshbandhu Colllege,University of

Delhi, Delhi-19

Sep 2008- Oct 2014: Assistant Professor, Department of Chemistry, Ramjas Colllege, University of

Delhi, Delhi-07

## **Administrative Assignments**

- Returning officer in Ramjas College Staff Co-Operative Thrift & credit Society Ltd. On 10 August, 2009, Ramjas College, University of Delhi, Delhi-110007
- One Day Seminar attended on 5 December, 2009, Revision of Bsc. Programme Chemistry syllabus into the Semester mode, Department of Chemistry, University of Delhi, Delhi-07
- Observership for UGC NET Examination for JRF on 30<sup>th</sup> Dec,2012
- Full time Observer for annual Examination 2013 w.e.f.3<sup>rd</sup> June,2013- 26 June,2013 in the morning session & evening session **,University of Delhi**, Delhi-07
- Observership for UGC NET Examination for JRF on 28thJune,2013
- Observership for CTET Examination on 28<sup>th</sup> July, 2013.
- Member Of Eco Club **Ramjas college**, All The Activity Of Eco Club held during the Year Of 2013-14.
- Member of Library Committee, Deshbandhu College, University of Delhi for the academic year 2015-2016.
- Member of Library Committee, **Deshbandhu College**, **University of Delhi** for the academic year 2016-2017.
- Member of sport Committee, Deshbandhu College, University of Delhi for the academic year 2016-2017.
- Observership for UGC NET Examination for JRF on 5 NOV,2017
- Coordinator Rangoli, Department Of Chemistry Deshbandhu College, University of Delhi for the academic year 2018

- One day Seminar attended(Member Of Committee) on 19 September,2018, Revision of (Bsc. Programme)Applied Industrial Chemistry syllabus into the Semester mode, Under The CBCS Scheme Department of Chemistry at Deshbandhu College, University of Delhi, Delhi-19
- Member of union advisery Committee, **Deshbandhu College, University of Delhi** for the academic year 2019-2020

## Areas of Interest / Specialization

- Synthetic Organic Chemistry
- Molecular interaction of cations with DNA...
- Structural Modification of Molecules.
- Structural Biology

### **Subjects Taught**

#### **A.THEORY**

- B.Sc.(H)Chem.- Organic Chemistry- 1st, 2nd and 3rd yr (2009-till now)
- B.Sc.(P) -Organic Chemistry- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> yr (2009-till now)
- B.sc(P)-Industrial Chemistry -1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> yr (2014-till now)

### **B. PRACTICALS**

- B.Sc.(H)Chem. -Organic Chemistry- 1<sup>st</sup> ,2<sup>nd</sup> and 3<sup>rd</sup> yr (2009-till now)
- B.Sc.(P) -Organic Chemistry- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> yr (2009-till now)
- B.sc(P)-Industrial Chemistry-1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> yr (2014-till now)

### Advanced Course UGC: (Orientation Programme/Re-fresher course)

- One UGC Sponsored Refresher Course in Chemistry conducted by the centre for Professional Development in Higher Education (CPDHE) , **University of Delhi**, Delhi-07,( 3 Week Refresher Course 26 June 16 July 2015 )
- One Two Week Faculty Development Programme on "Frontiers in Chemical Sciences" (Under TEQIP-II) organized by DTU, Delhi on 15-26 December, 2014.
- One week Global Initiative Of Academic Networks on "Advanced Nanomaterials: Applications in Disease Diagnosis and Imaging" (Under TEQIP) organized by NIT, Hamirpur H.P. and MHRD Govt. of India on May 29<sup>th</sup> –June 3<sup>rd</sup>,2016.
- One UGC Sponsored orientation programme ,conducted by the Human Resource Development Centre Jamia Millia Isamia New Delhi (4 Week orientation programme 15feb-16 march 2017).
- One MHRD programme-Sponsored by Government of India Commission for Scientific and Technical Termionology MHRD (Department of higher education) RKPuram New Delhi-110066.Organized by Department of Chemistry Sri Aurbindo College, University of Delhi, Delhi 16-17<sup>th</sup> Feb 2016
- One week Faculty Development Program entitled "From Chemistry of Life to Chemistry of Diseases:
   Understanding Clinical Biochemistry (UCB-17) from 15 June to 22 June 2017 by Department of Chemistry Daulat Ram College,. University of Delhi, Delhi-07
- One week Faculty Development Program entitled "From Effective Teaching And Learning Practices From 22-26 September,2018 By Shyama Prasad Mukherji College For Women, University of Delhi, Delhi-07

- One week Faculty Development Program entitled "From Effective Teaching And Learning Practices From 22-26 September,2018 By Shyama Prasad Mukherji College For Women, University of Delhi, Delhi-07
- Three Days Regional Workshop On Research Based Pedagogical Tools "From 31st July To 2nd August, 2018 By Kumaun University Nanital, Uttarakhand, DBT, Govt. Of India &, IISER Pune.
- Three Days **IDA Connect Workshop At Didac India 2018** "Pedagogy And ICT For Assesments" **From 4-6 October** Delhi By Guru Angad Dev Teaching Learning Centre Of MHRD
- Three Days **IDA** Connect Workshop At Didac India 2018 'Development Of Digital Content' From 4-6, October Delhi By CIET & NCERT

#### **Publications Profile**

# List against each head(If applicable)

## A.Research papers published in Refereed/Peer Reviewed Journals (in last 7 years)

- 1. **GajenderaSingh**, Ravi Kant, "Synthesis, spectral studies, and antimicrobial activity of metal complexes of schiff bases", **Heterocyclic Letters**, 2012, Vol. 2: (4), 419-428
- 2. <u>Veena Yadav, Shweta Gupta, Rupesh Kumar, Gajendra Singh</u> & <u>Rekha Lagarkha</u>, "Polymeric PEG35k-Pd nanoparticles: efficient and recyclable catalyst for reduction of nitro compounds". **Synthetic Communication**, 2012, 42: 213–222,
- 3. **Gajendera Singh**, Ajay kumar, "TBAHS catalyzed coupling reactions of aryl iodides and aryl bromides with thiols under solvent free conditions", **Heterocyclic Letters**, 2013, Vol. 3: (1), 183-190
- 4. **Gajendera Singh\***, AmitKumar, AjayKumar ,Shikar Tyagi, "Structure and Synthesis of some imidazole derivatives containing 2-(4-chlorophenyl)-4, 5-diphenyl imidazole moiety as anti-inflammatory and antimicrobial agents" **Heterocyclic Letters**, 2015, Vol. 5: (2), 205-212
- Gajendera Singh, Hemant Kumar, UditSoni, Shikhar Tyagi, Kritika Aggarwal, "comparison of urate-lowering efficacy and safety of febuxostat and allopurinol in gout patients" Heterocyclic Letters, 2016, Vol. 6: (1), 133-147
- 6. Hemant Kumar, Gajendra Singh and Udit Soni, "Potential Application of Gold Nanostructures in Photodynamic Therapy" Journal of Nanomedicine & Nanotechnology, 2016 vol.7:(1), 1-4
- 7. RishiPal singh Gajendera Singh" Synthesis and spectral characterization of Lanthanide metal complexes of Schiff base derived from substituted coumarin" Acta ciencia indica 2016, Vol-XLII C No. 2,59

# List against each head(If applicable)

## A .Organization of a Conference

- 1. National Seminar on "Renewable Energy & Environment", Organized by, Deptt. of Chemistry, **Ramjas** College, University of Delhi, Delhi-07 on January 28-29<sup>th</sup> Jan 2011. (Executive Committee Member).
- 2. International Conference on "Interface between Chemistry & Environment (ICICE 2012)", Organized by, Deptt. of Chemistry, Ramjas College, University of Delhi, Delhi-07 on 13-14<sup>th</sup> Dec 2012(Advisory Committee Member)
- 3. 1st National conference on "Emerging Trends And Future Challenges in Chemical Sciences (ETFC-2016)" Organized by Deptt. of Chemistry, K.M College, University of Delhi, Delhi-07 on 3-4th Feb 2016 (Local Organizing Committee Member)
- Indo-Portuguese Workshop on "Emerging Trends of Nano Technology in Chemistry and Biology(INCB-2016)" Organized by Deptt. of Chemistry, Deshbandhu College & Deptt. of Chemistry, Hansraj College, University of Delhi, Delhi-07 on 12-13<sup>th</sup> Feb 2016(Organizing Committee Member)

## B. Participation as Paper/Poster Presenter

- 1. **Gajendera Singh,** "Nucleic Acid Metal Ion Interaction" **2nd National symposium on Analytical Sciences** 23-25 November 2008 held at IHBT Palampur (HP) organized by **Indian Society of Analytical Scientists** (Delhi Chapter) **(Paper)**
- 2. Gajendera Singh "RECENT ADVANCES IN ANALYTICAL SCIENCES"3<sup>rd</sup> National symposium on Analytical Sciences 12-14 april 2010 organized by HPU,Shima(Paper)
- 3. Gajendera Singh," ALTERNATIVE ENERGY SOURCES FOR SUSTAINABLE ENVIRONMENT" National Seminar on 6 May 2011 organized by Lingaya's university ,Faridabad(paper)
- 4. Gajendera Singh" RENEWABLE ENERGY AND ENVIRONMENT"National Workshop on 28-29 january 2011 held at conference center Delhi University(Oral)
- Priyanka Rani, Gajendera Singh, "Microwave Assisted Synthesis of 1,5-Benzothiazepine derivatives".
   International Symposium on Recent Advances in Green Chemistry and Chromatography Sciences, 12-14<sup>th</sup>
   January, 2012 held at Manav Rachna International University, Faridabad Organized by Indian Society of Analytical Scientists (Delhi Chapter) (Paper)
- Manju, Gajendera Singh, "Greener Synthesis of Ruthenium Metal Chelates with Bidentate Schiff Bases Ligands" International Symposium on Recent Advances in Green Chemistry and Chromatography Sciences, 12-14th January, 2012 held at Manav Rachna International University, Faridabad Organized by Indian Society of Analytical Scientists (Delhi Chapter) (Poster)
- 7. Gajendera Singh, "A Novel synthesis of pyrimidino substituted derivative of 1,4-benzodiazepin-5-carboxamide linked at its 2-position through a oxyphenyl spacer via dimethylaminomethylene ketone intermediate." International Symposium on Recent Advances in Green Chemistry and Chromatography Sciences 12-14<sup>th</sup> January, 2012 held at Manav Rachna International University, Faridabad Organized by Indian Society of Analytical Scientists (Delhi Chapter) (Paper)
- 8. Manoj Kumar, **Gajendera Singh**, "Ion Transport Studies Through Polystyrene based Model Membrane: Conductance data and Absolute Reaction Rate theory. International Conference on Interface between Chemistry & Environment (ICICE 2012)" 13-14<sup>th</sup> December-2012 Organized by Ramjas College, Dept. of Chemistry, University of Delhi, Delhi-07 (Oral)
- Gajendera Singh, "Synthesis, Spectroscopic, Thermal and Therapeutic Potent Metal Complexes of Schiff
  Bases derived from Carbazole Moiety". International Conference on Interface between Chemistry &
  Environment (ICICE 2012)", 13-14th December-2012 Organized by Ramjas College, Dept. of
  Chemistry, University of Delhi, Delhi-07 (Poster)
- 10. **Gajendera Singh**, Sakshi Malik, Ravikant, "Synthesis and Cytotoxic Evaluation of Novel Anthraquinone, Dihydropyridines and Dihydropyrimidones Derivatives." **National Seminar** on Frontier and Challenges in

- Pharmaceutical & Environment Chemistry, 1<sup>st</sup> & 2<sup>nd</sup> March, 2013, Organized by **Department of Chemistry, Dyal Singh College, University of Delhi (Poster)**
- 11. **Gajendera Singh**, "synthesis of Aza-Michael product Via greener method" The 5<sup>th</sup> Asia Oceania Conference on Green And Sustainable Chemistry(AOC-5 GSC), 15-17<sup>th</sup> Jan 2015, at India Habitat Centre Lodhi Road, New Delhi organized by North India Section Of The Royal Society Of Chemistry(London), Green Chemistry Network Centre( New Delhi) And The Energy And Resources Institute New Delhi{Poster}.
- 12. **Gajendera Singh,** Leelavati "Structure and synthesis of some imidazole derivatives containing 2-(4-chlorophenyl)-4,5-Di phenyl imidazole moiety as anti-inflammatory and anti microbial agents" **1**<sup>st</sup> **National Conference** on Emerging Trends And Future Challenges in Chemical Sciences, 3<sup>rd</sup>-4<sup>th</sup> Feb 2016, Organized by **Department of Chemistry, Kirori Mal College, University of Delhi, Delhi-07( Poster**)
- 13. **Gajendera Singh**, Hemant Kumar, Anita Kumari, "Greener Synthesis of Cadmium Metal Chelates with Bidentate Schiff Bases Ligands" **1**<sup>st</sup> **National Conference** on Emerging Trends And Future Challenges in Chemical Sciences, 3<sup>rd</sup>-4<sup>th</sup> Feb 2016, Organized by **Department of Chemistry, Kirori Mal College, University of Delhi, Delhi-07( Poster**)
- 14. **Gajendera Singh**, Sanjay Kumar, Deepa Rani, Abhishek Vashisth "Microwave Assisted Synthesis of Potent Metal Complexes of Schiff Bases Derived From Carbazole Moiety A Green Approach" **1**<sup>st</sup> **National Conference** on Emerging Trends And Future Challenges in Chemical Sciences, 3<sup>rd</sup>-4<sup>th</sup> Feb 2016, Organized by **Department of Chemistry, Kirori Mal College, University of Delhi, Delhi-07( Poster**)
- 15. Hemant Kumar, **Gajendra Singh**, MonikaVikal, "Potential Application of Gold Nanostructure in Photodynamic Therapy" **National Symposium on Nanobiotechnology**(BIOTIKOS 2016), 31<sup>st</sup> Mar- 1<sup>st</sup> Apr, organized by Teri University.(**Poster**)
- 16. **Gajendra Singh**, Tanushree, "Greener Synthesis of Biologically Active Compounds Using Solvent free Reaction Conditions; **RSC workshop on green chemistry and water treatment** 17<sup>th</sup> October 2016 at Hotel Maidens Delhi by Royal society of chemistry London North India section (**poster**)
- 17. **Gajendra Singh\***,Kavita Verma ",Synthesis of New Biologically Active Compounds by Greener Pathway under Solvent Free Conditions", **International conference on green chemistry in environmental** sustainability and chemical education (ICGC-2016), 17<sup>th</sup>-18<sup>th</sup> November 2016 by Department of chemistry Daulat Ram college University of Delhi, Delhi-07(**poster**)
- 18. Gajendra Singh "Microwave and Conventional Synthesis, Structural Investigation & Pharmacological Activity of Schiff's Base Ligands and Their Metal Complexes" National Conference on Latest Advancements in Physical Sciences and Life Sciences 18-19 March 2017 organized by Department of Chemistry, Meerut College Meerut CCS University Meerut (U.P)-ORAL
- 19. **Gajendra Singh** "Microwave and Conventional Synthesis, Structural Investigation & Pharmacological Activity of Schiff's Base Ligands and Their Metal Complexes" International Conference on Materials Research And Technology (ICMRT2017) held on July 10-11,2017 at Faculty of science Aggarwal College Ballabgharh, Faridabad (Hriyana) India, (**poster**)
- 20. Gajendra Singh "Synthesis Of Bio-Active Heterocycles Pyrazoles And Diazepines In Aqueous Medium By Greener Pathway Under Solvent Free Conditions" International Conferences On Advances In Analytical Sciences (ICAAS-2018) 15-17 March, 2018 Jointly Organised By ISAS, Delhi Chapter & CSIR-IIP, Dehradun (UK) Oral
- 21..Gajendra Singh "Nucleic Acid Metal Ions Interaction Effect Of Temprature" International Conference On Recent Advances At Interfaces Of Physical And Life Sciences. January 28-30,2019. By Department Of Chemistry University Of Rajasthan, Jaipur(RJ) Oral
- 22...Gajendra Singh "Microwave Assisted Synthesis Of Bio-Active Heterocycles Compounds By Greener Pathway Under Solvent Free Conditions" National Seminar On Emerging Trends And Future Challanges In Sciences. 27-28 February,2019 By Department Of Chemistry Sri Guru Ram Rai(PG)College,Dehradun(Uk)-Oral

23..Gajendra Singh "Synthesis of New Bio- Active Heterocycle Compounds by Greener Pathway under Solvent Free Conditions" National Conference On Energy And Environment:Perspective And Challanges (NCEE-2019).9-10 March, 2019 By Department Of Chemistry, JNV University, Jodhpur (RJ) India-Oral

## C. Conference Participation

- 1. "First National Symposium on Green chemistry", January, 1999, Organized by Department of Chemistry, University of Delhi
- 2. Indo- Russian Seminar on Trends in Chemical Sciences, January 25-25, 2000, Organized by Department of Chemistry, **University of Delhi**
- 3. International Symposium on trends in medicinal chemistry and biocatalysts, January 26-29, 2000, Organized by Department of Chemistry, **University of Delhi**
- 4. "IUPAC International Symposium of Green Chemistry", January 2001, Organized by Department of Chemistry, **University of Delhi**
- 5. Indo-Italian conference on Chemistry and Biochemistry of antioxidants, January 2006, Organized by Department of Chemistry, **University of Delhi**
- 6. Analytical Innovations for process and Technology Development from Nov.23 to 25, 2008 Organized by **IHBT Palampur (HP).**
- 7. Indo-Italian on Green Chemistry and Natural Products 5<sup>th</sup> Dec.2008, Organized by Department of Chemistry, **University of Delhi**
- 8. Indo-Danish Symposium on "Bioorganic Chemistry, 2<sup>nd</sup> March 2009, Organized by Department of Chemistry, **University of Delhi**
- 9. Indo-French Symposium on "Biomolecular Chemistry, 4<sup>th</sup> March 2009, Organized by Department of Chemistry, **University of Delhi**
- 10. Work Shop on Green Chemistry in Real World Practice, 9<sup>th</sup> May 2009, Organized by Department of Chemistry, **University of Delhi**
- 11. National Workshop on "Role of analytical Techniques in Industry", January 21-22, 2010, Organized by Department of **Chemistry Kirori Mal College, University of Delhi**
- 12. 3<sup>rd</sup> National Symposium on analytical Sciences on Recent Advances in Analytical Sciences April 12-14 2010, Himachal Pradesh University Organized by **ISAS** and Department of Chemistry **HP University, Shimla**
- 13. National Seminar on "Analytical solutions from Bruker AXS", 1st October 2010, ESSEX Farms, New Delhi.
- 14. National Seminar on "Role of analytical Techniques in Biological and Environmental Sciences", January 27-29 2011 Organized by Department of Chemistry **Kirori Mal College, University of Delhi**
- 15. National Seminar on "Renewable Energy & Environment", January 28-29 2011, Organized by Department of Chemistry Ramjas College, University of Delhi
- 16. National Seminar on "Alternative Energy Sources for Sustainable Environment", 6<sup>th</sup> May 2011, Organized by Lingaya's University, Faridabad
- 17. International Symposium on Recent Advances in Green Chemistry and Chromatography Sciences, 12-14<sup>th</sup> January, 2012, Organized by Manav Rachna International University, Faridabad & **Indian Society of Analytical Scientists** (Delhi Chapter)
- 18. National Workshop on "Basics and Applications of Spectroscopic Techniques", 5-6<sup>th</sup> October-2012 Organized by Department of Chemistry **Kirori Mal College**, **University of Delhi and Petrotech Society**
- 19. International Conference on Interface between Chemistry & Environment (ICICE 2012), 13-14<sup>th</sup> December-2012 Organized by Department of Chemistry, **Ramjas College**, **University of Delhi**
- 20. National Seminar on Frontier and Challenges in Pharmaceutical & Environment Chemistry, 1<sup>st</sup> & 2<sup>nd</sup> March, 2013, Organized by Department of Chemistry, **Dyal Singh College**, **University of Delhi**
- 21. The 5<sup>th</sup> Asia Oceania Conference on Green And Sustainable Chemistry(AOC-5 GSC), 15-17<sup>th</sup> Jan 2015, at India Habitat Centre Lodhi Road, New Delhi organized by North India Section Of The Royal Society Of Chemistry(London), Green Chemistry Network Centre( New Delhi) And The Energy And Resources Institute (New Delhi)
- 22. 1st National Conference on Emerging Trends And Future Challenges in Chemical Sciences, 3rd-4th Feb 2016, Organized by Department of Chemistry, **Kirori Mal College, University of Delhi, Delhi-07**
- 23. Seminar on "Recent Trends In Technical Terminology In Science organized by Commission for Scientific and Technical Terminology" 16-17<sup>th</sup> Feb 2016 Organized by Department of Chemistry **Sri Aurbindo College, University of Delhi, Delhi**National Seminar on "Role of Analytical Sciences in Sustainable

Development" 4-5<sup>th</sup> March 2016, Organized by Department of Chemistry, **Hansraj College, University of Delhi, Delhi-07** 

24. National Symposium on Nanobiotechnology 31st March–1st April 2016 organized by TERI University Biotechnology Society , New Delhi

### Research Project/Collaboration

Name of Project: "Microwave Assisted Synthesis of potent metal complexes of Schiff bases derived from carbazole moiety: a Green Approach" (Project Code: DBC 304)

Funding Agency: University of Delhi, Delhi.

Position in Project: PI, Period: 2015-2016, Grant: Rs. 6.0 lakh

Collaboration with Dr. Ajay Kumar, Professor Res-I & Director, International Center for Trans-disciplinary Research, School of Environmental Affairs, Universidad Metropolitana, PO Box 21150, San Juan, PR00928-1150

USA

Supervision of Summer Project 02 (2015-16)

#### **Association With Professional Bodies**

## A. Reviewing

## 1-Heterocyclic Letters International Publications

# 2-List of major review of the courses(Applied Chemistry and Organic Chemistry) at Amity University

- A. PG courses 1-APPLIED CHEMISTRY LAB II) (Course Code: CHEM713) 2-DRUGS AND DYES CHEMISTRY (Course Code: CHEM711) 3- NATURAL PRODUCTS CHEMISTRY (Course Code: CHEM615) 4- SPECTROSCOPIC METHODS OF ANALYSIS (Course Code: CHEM601)
- B. UG courses 1-Comprehensive Chemistry (Course Code: CHEM 135 2-FUNDAMENTAL PRINCIPLES OF SPECTROSCOPY (Course Code: CHEM319) 3-INTRODUCTION TO NATURAL PRODUCTS (Course Code: CHEM317) 4-Spectroscopic Techniques (Course Code: CHEM316) 5-SUBSIDIARY CHEMISTRY-II (Course Code: CHEM113) 6-SUBSIDIARY CHEMISTRY-II (Course Code: CHEM112)

## B. Memberships

- 1 Life Time Member of Indian Society of Analytical Scientists (ISAS), Delhi Chapter c/o Indian Oil Corporation limited, Faridabad.
- 2. Member of Editorial Board an International journal of Heterocyclic Letters (2015-till date) .
- 3.Member of **Editorial Board** an International Peer Reviewed Universe journal of Education & Humanities (2015 2016)
- 4 .Life Time Member of Green Chemistry (onward 2016)

Signature of Faculty Member