Faculty Details proforma

Title	**Dr**	First Name	**Beena**	Last Name	**Negi**	
Designation		**Assistant Professor**				
Address		Gargi College Sirifort Road New Delhi-110049				
Residence		210/D-1 Niti Khand-1 Indirapuram Ghaziabad UP-201014				
Mobile		9540141309				
Email		drbeenanegi5@gmail.com beenanegi@gargi.du.ac.in				
Web-Page		http://people.du.ac.in/~beena/ https://sites.google.com/view/beenanegi/home				

Educational Qualifications		
Degree	**Institution**	**Year**
Ph.D	University of Delhi	2012
M.Sc	Department of Chemistry, University of Delhi	2008
B.Sc	Gargi College, University of Delhi	2005

Career Profile

Assistant Professor, Gargi College, Since 19-10-2015

Administrative Assignments

- **Convener** Chemical Society Gargi College (2023-24)
- **Member Secretary** Editorial Team of the Brochure Committee in the 99th Annual Convocation (Feb 25, 2023)
- Member of the Convocation Hall Preparation, Dias Management & Reception Committee (Feb 25, 2023)
- Member of the Grievance redressal committee Examination, DU (2023)
- Member, Centenary Brochure Committee, DU 2022
- **Deputy Coordinator**, Open Book Examination (OBE) Evaluation Committee, DU 2021-2022
- **Editorial Board Member** (DU Brochure - Highlights 2021 released on 98th Convocation (Feb 26, 2022)
- Member, Committee of Courses for UG, Department of Chemistry, DU (2021-2023)
- Member, Committee of Courses for PG, Department of Chemistry, DU (2021-2022)
- Member, Coordinator, BSc Physical Science, Gargi College 01-04-221 to 31-07-21

- Member, India Today Ranking Survey Committee, Gargi College 2020-21
- Member, Admission Committee B.Sc. Physical Sciences, Gargi College 2021-22
- Member, Time Table Committee, Department of Chemistry, Gargi College 2020-21
- **Editorial Board Member** (DU Brochure - Highlights 2020 released on 97th Convocation (Feb 27, 2021)
- Member, Prospectus Committee, Gargi College 2020
- **Convener**, Chemical Society, Gargi College 2017-2018
- Member of NSS, Gargi College 2018-2023
- Member of B.Sc. Life science (Zenith) Gargi College, 2017-2021
- Member of Website Committee, Gargi College 2017-2019

Areas of Interest / Specialization

Synthetic Medicinal Chemistry, Green Chemistry

Subject/Papers Taught

BSc Prog: Basic Concepts of Organic Chemistry (UGCF NEP)
GE14: Molecules of Life (UGCF NEP)
GE6: Section: B Organometallics, Bioinorganic Chemistry, Polynuclear Hydrocarbons and UV, IR Spectroscopy (LOCF)
GE7: Molecules of Life (CBCS)
GE1: Atomic structure, bonding, general organic chemistry and aliphatic hydrocarbons (CBCS)
BSc Chem Hons DSE: Green Chemistry (CBCS)
BSc Chem Hons: Organic chemistry V: Spectroscopy (CBCS)
BSc Chem Hons: Basics and Hydrocarbons (CBCS)
BSc Chem Hons: Oxygen Containing Functional Groups (CBCS)
BSc Chem Hons: Pharmaceutical compound, natural products, polymers (FYUP)
BSc Chem Hons: Carbonyl and Carboxylic acids (FYUP)
BSc Chem Hons: Spectroscopy, dyes and polymers (FYUP)
Foundation course: Science and Life (FYUP)

Research Guidance

Green Chemistry Projects to UG students

Research Projects (Major Grants/Research Collaboration)

UGC-BSR Research Start-UP Grant 2016 for an amount of Rs 10 Lakh titled **Design, SAR, docking studies and anticancer activity evaluation of novel benzothiazole linked hybrids.**

Publications

1. Ramya Vishwanath, **Beena Negi**. Conventional and green methods of synthesis of silver nanoparticles and their antimicrobial properties. **Curr. Res. Green Sust. Chem. 2021**, 4, 100205. (Impact Score: 5.66)
2. Shristi Rawat, Diwan S Rawat, **Beena Negi**. Synthesis, in silico pharmacokinetic analysis and anticancer activity evaluation of benzothiazole-triazole hybrids. **Indian J. Chem.-Sec B (IJC-B) 2021**, 60 (3), 409-417. (Impact factor: 0.456)
3. **Beena Negi,** Diwan S Rawat. Antituberculosis activity evaluation of thymol Schiff bases. **Chemistry & Biology Interface 2018**, 8, 4, 244-254.

4. **Beena Negi**, Diwan S Rawat, Synthesis, Characterization and Antituberculosis Activity of Novel Thymol Triazole Hybrids, **Indian J. Hetro. Chem. 2018**, 28, 113-124. (Impact factor: 0.12)
5. **Beena Negi**, Prija Poonan, Mohammad Fawad Ansari, Deepak Kumar, Sakshi Aggarwal, Ramandeep Singh, Amir Azam, Diwan S. Rawat. Synthesis, antiamoebic activity and docking studies of metronidazole triazole-styryl hybrids. **Eur. J. Med. Chem. 2018**, 150, 633-641. (Impact factor: 7.08)
6. **Beena Negi**, Deepak Kumar and Diwan S. Rawat. Marine peptides as anticancer agents: A remedy to mankind by nature. **Current Protein & Peptide Science 2017**, 18, 1-20. (Impact factor: 3.11)
7. **Beena Negi,** Deepak Kumar, Widuranga Kumbukgolla, Sampath Jayaweera, Prija Ponnan, Ramandeep Singh, Sakshi Agarwal, Diwan S. Rawat, Anti-methicillin resistant Staphylococcus aureus activity, synergism with oxacillin and molecular docking studies of metronidazole triazole Hybrids. **Eur. J. Med. Chem. 2016**, 115, 426-437. (Impact factor: 7.08)
8. Deepak Kumar, **Beena Negi**, Diwan S. Rawat**.** The anti-tuberculosis agents under development and the challenges ahead. **Fut. Med. Chem. 2015,** 7, 1981-2003. (Impact factor: 4.76)
9. Deepak Kumar, Garima Khare, **Beena Negi**, Saqib Kidwai, Anil K. Tyagi, Ramandeep Singh, DS Rawat. Novel isoniazid-amidoether derivatives: Synthesis, characterization and antimycobacterial activity evaluation. **Med. Chem. Commun. 2015**, 6, 131-137. (Impact factor: 5.12)
10. Deepak Kumar, **Beena Negi**, Garima Khare, Anil K. Tyagi, Ramandeep Singh, Diwan S Rawat. Synthesis of novel 1,2,3-triazole derivatives of isoniazid and their in vitro antimycobacterial activity evaluation. **Eur. J. Med. Chem. 2014**, 81, 301-313. (Impact factor: 7.08).
11. **Beena Negi**, K. Kranthi Raj, Shadab Miyan Siddiqui, Dittakavi Ramachandran, Amir Azam, and Diwan S. Rawat. In vitro antiamoebic activity evaluation and docking studies of metronidazole–triazole hybrids. **Chem. Med. Chem. Commun. 2014,** 9, 2439–2444. (Impact factor: 5.12)
12. **Beena**, Deepak Kumar, Widuranga Kumbukgolla, Sampath Jayaweera,MaiAnn Bailey, Torey Alling, Juliane Ollinger, Tanya Parish, Diwan S Rawat. Antibacterial activity of adamantyl substituted cyclohexane diamine derivatives against methicillin resistant Staphylococcus aureus and Mycobacterium tuberculosis. **RSC Adv. 2014**, 4, 11962**–**1196**6.** (Impact factor: 4.03)
13. **Beena,** Deepak Kumar, Mai Ann Bailey, Tanya Parish, Diwan S Rawat. Synthesis and antituberculosis activity evaluation of cyclohexane-1,2-diamine derivatives. **Chem. Biol. Interface 2014**, 4, 1-14.
14. **Beena**, Diwan S Rawat. Antituberculosis drug research: A critical overview. **Med. Res. Rev. 2013**, 33, 693–764. (Impact factor: 12.38).
15. **Beena**, Deepak Kumar, Diwan S Rawat. Synthesis and antioxidant activity of thymol and carvacrol based Schiff bases. **Bioorg. Med. Chem. Lett. 2013**, 23, 641–645. (Impact factor: 2.94).
16. **Beena**; Seema Joshi, Nitin Kumar, Saqib Kidwai, Ramandeep Singh, Diwan S Rawat. Synthesis and antitubercular activity evaluation of novel unsymmetrical cyclohexane-1,2-diamine derivatives. **Arch. Pharm. Chem. Life Sci. 2012**, 345, 896–901. (Impact factor:

5.1).

17. **Beena**, Nitin Kumar, R K Rohilla, Nilanjan Roy, Diwan S Rawat. Synthesis and antibacterial activity evaluation of metronidazole-triazole conjugates. **Bioorg. Med. Chem. Lett. 2009**, 19, 1396–1398. (Impact factor: 2.94).
18. Nitin Kumar, S I Khan, **Beena,** G Rajalakshmi, P Kumaradhas, Diwan S Rawat. Synthesis, antimalarial activity and cytotoxicity of substituted 3,6-diphenyl-[1,2,4,5]tetraoxanes. **Bioorg. Med. Chem. 2009**, 17, 5632–5638. (Impact factor: 3.46).

Book/Book Chapter Published

Book:

Chemistry of Heterocyclic compounds by Rakesh Kumar Parashar and **Beena Negi,** Ane Books Pvt. Ltd. and CRC Press Taylor and Francis Group; (**2015**) ISBN: 978-146-6517-13-4.

Book Chapters:

1. Diverse Pharmacological Activities of 4-Aminoquinoline and Its Derivatives. Beena Negi, Deepak Kumar and Diwan S Rawat. Book titled Recent Advances in Pharmaceutical Innovation and Research. DOI : 10.1007/978-981-99-2302-1 (accepted Springer Natures) **(2023)**

2. Beena Negi. Chapter 6 titled "From ancient medical knowledge to the modern drug development in India." Book titled *Indian and western knowledge traditions* at CPDHE, University of Delhi, Page 40-47 (**2016**), ISBN: 978-93-85144-82-0, By Shivalik Prakashan, Delhi.

e-Content Writer

e-PG Pathshala by NMEICT and UGC, **Modules** of Paper 5: Organic chemistry-2 (Reaction Mechanisms), Paper 12: Organic spectroscopy and Paper 14: Disconnection Approach.

http://epgp.inflibnet.ac.in

1. *CHE_P5_M1 Types of organic reactions*
2. *CHE_P5_M2 Overview of different types of organic reaction mechanisms*
3. *CHE_P5_M3 Thermodynamics and kinetic requirements of a reaction*
4. *CHE_P5_M4 Intermediates, transition states, potential energy diagrams and Hammond postulate*
5. *CHE_P5_M5 Methods of determining mechanism and isotope effects*
6. *CHE_P5_M6 Generation, structure, stability and reactivity of carbocations*
7. *CHE_P5_M7 Generation, structure, stability and reactivity of carbanions*
8. *CHE_P5_M8 Generation, structure, stability and reactivity of free radicals*
9. *CHE_P5_M9 Reactive intermediates: Carbenes and nitrenes*
10. *CHE_P5_M10 Linear free energy relationship, the hammett equation and substituent and reaction constants*
11. *CHE_P5_M31 Diazonium coupling, Vilsmeir reaction and Gattermann-Koch reaction*
12. *CHE_P5_M35 The Von Richter, Sommlet-Hauser and Smiles rearrangements*
13. *CHE_P12_M24 Mass spectrometery:Theory, instrumentation and modifications*
14. *CHE_P12_M25 Terms in mass spectrometery, nitrogen rule, rule of thirteen and isotopic abundance*

15. *CHE_P12_M26 General fragmentation rules*
16. *CHE_P12_M27 Fragmentation of various classes of organic molecules*
17. *CHE_P12_M228 Alpha, beta, allylic, benzylic cleavage and Mclafferty rearrangement*
18. *CHE_P12_M32 Combined problem on UV, IR, 1H NMR, 13C NMR and Mass-Part IV*
19. *CHE_P12_M34 Combined problem on UV, IR, 1H NMR, 13C NMR and Mass-Part VI*
20. *CHE_P14_M16 Total synthesis of complex organic compounds using disconnection approaches*

Conference/Seminar/Webinar Organized

1. **Member** of Certificate and Abstract Committee for 'International conference on Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter' held on August 2 and 3, 2022, organized by Department of Chemistry, DU and Vijnana Bharti.

2. **Convener** of Webinar held via ZOOM on 21-5-2020 at 11:00 am to 11:45am on the topic OPEN EDUCATIONAL RESOURCES, Dr. Rohit Bhatia as Resource Person.
https://www.youtube.com/watch?v=F6fZTr9BjYI&t=3257s

Resource Person/Invited Talk

1. **Invited speaker** to deliver talk on the topic Samarth Portal and Open Book Examination (OBE): Concerns and Challenges, at SGND Khalsa College for IQAC's mentoring the mentor programme held online organized by SGND Khalsa College on 20-11-21.

2. Participated as a **Resource Person** in the *Virtual Workshop on Collating Chemistry Resources for Teachers in Higher Education* organized by National Resource Centre for Education of this Institute during June 18-19, 2020 at NIEPA, New Delhi.

3. Resource person **at DU Pre Entrance Summer School 2018** held from 1-6-18 to 16-6-18.

4. Invited Lecture titled Multiple biological activities and docking studies of metronidazole triazole hybrids, 49th Annual conference of the society of nuclear medicine-India (SNMICON) 14th-17th Dec, 2017 at Manekshaw Centre, New Delhi.

5. Delivered **oral talk** titled as "Synthesis of cyclohexane diamine derivatives as antimicrobial agents" at the 7th Junior National Organic Symposium Trust (J-NOST) Conference for research scholars at IISER Mohali, India, on dated 15th-18th Dec, 2011.

Conference Organization/ Presentations

Poster Presentations

1. Presented a poster titled as "**Synthetic library of cyclohexane-diamine derivatives as potential antimicrobial agents**" in the 16th ISCBC-International Conference at Solapur, India on dated 21st-24th Jan, **2012**.
2. Presented a poster titled as "**Synthesis and biological activity of cyclohexane diamine derivatives against *Mycobacterium tuberculosis* and other Gram-positive and Gram-negative bacterial strains**" in the INDO-US NIAID Drug Discovery Forum: Exploring Opportunities for Research CollaborationJoint Conference-DBT, DHR, ICMR and NIAID/NIH, at Oberoi Hotel, New Delhi, India, on dated 20th-21st April, **2011**.

3. Presented a poster titled as "**Cyclohexane-1,2-diamine derivatives: Synthesis and antimicrobial activity evaluation**" in the 15th ISCB International Conference (Commemorating 2011 as the international year of chemistry) at Rajkot, Gujrat, India, on dated 4th-7th Feb, **2011**.
4. Presented a poster titled as "**Synthesis of benzyl-[3-(benzylamino-methyl)-cyclohexylmethyl]-amine derivatives and metronidazole–triazole conjugates and their antibacterial activity evaluation**" in the4th Indo-Italian Seminar on Green Chemistry and Natural Products, at Department of Chemistry, University of Delhi, India, on dated 17th Nov, **2010**.
5. Presented a poster titled as "**Synthesis and antibacterial activity evaluation of metronidazole–triazole conjugates and benzyl[3-(benzylamino-methyl)-cyclohexylmethyl]-amine derivatives**" in the National Conference on Green and Sustainable Chemistry, at BITS-Pilani, India, on dated February 19th-21st, **2010**.
6. Presented a poster titled as "**Metronidazole-triazole conjugates as antibacterial and antiamoebic agents**"in the 14th ISCB International Conference, Chemical Biology for Discovery: Perspective and Challenges, at CDRI-Lucknow, on dated 15th-18th January, **2010**.

Workshops/Symposiums Attended

1. Attended International conference on Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter' held on August 2 and 3, 2022, organized by Department of Chemistry, DU and Vijnana Bharti.
2. Attended Saksham-IT champion training program conducted by Microsoft from 24-09-2015 to 30-09-2015.
3. Attended workshop/course on Digital Literacy for Teachers under **UKIERI** (**UK-INDIA Education and Research Initiative**) conducted by University of Delhi & Edinburgh College, UK, at Campus of Open Learning, from November 18 to 22, **2013** at Campus of Open Learning, Keshav Puram.
4. Attended 3rd Workshop on "**Bioinformatics and molecular modelling in drug design**" at Dr. BR Ambedkar center for biomedical research, Delhi University, New Delhi, on dated 24th-26th February, **2011**.
5. Attended a Workshop on "**Information literacy and competency**" organized by Central science library, University of Delhi, on dated 23rd February, **2010**.
6. Attended National Seminar on "**Green chemistry and natural products**" organized by Department of Chemistry, University of Delhi, Delhi-07, India, on dated 26th -27th December, **2009**.
7. Attended Conference cum workshop on "**Current trends in medicinal chemistry**" organized by IIT-Madras, on dated 2nd-4th April, **2009**.
8. Attended 13th ISCB International Conference on **"Interplay of chemical and biological sciences: impact on health and environment**" organized by Department of Chemistry, University of Delhi, Delhi-110007, on dated 26th Februrary-1st March, **2009**.
9. Attended DU-NERI (AU) Workshop on "**Atmospheric science and climate change**" organized by Department of Chemistry, University of Delhi, 27th-28th February, **2009**.
10. Attended National Seminar on **"Open source drug discovery**" organized by Department of Chemistry, University of Delhi, Delhi -110007, on dated 26th February, **2009**.
11. Attended Indo-Italian Seminar on "**Green chemistry and natural products**" organized by Department of Chemistry, University of Delhi, Delhi-110007, India, on dated 5th -6th

December, **2008**.

12. Attended National Seminar on **"Recent trends in chemistry**" organized by Department of Chemistry, Maitreyi College, New Delhi, on dated 22nd-24th September, **2004**.

Awards and Distinctions

- Qualified **National Eligibility Test** held by Council of Scientific and Industrial Research, New Delhi, India (**CSIR-JRF/NET**)
- Received University Teaching Assistantship (**UTA**) from **2009** to **2012**
- Award of **"Jeans and Ashit Ganguly Education Scholarship"** University of Delhi **2007-2008**
- **"Certificate of Merit"** M. Sc. Chemistry, College topper, **Ramjas College**, University of Delhi **2008**
- "**Science Meritorious Award**" M. Sc. (Previous) by University of Delhi **2007**
- **"Certificate of Merit**" M. Sc. Chemistry, College topper, **Ramjas College**, University of Delhi **2007**
- **"Certificate of Merit"** 5th position in the University examination (South campus), B. Sc. Chemistry (Hons) 2nd year, **Gargi College**, University of Delhi **2004.**

Association With Professional Bodies

- Life Member of the Association of Chemistry Teachers (ACT)
- Life Member of The Indian Science Congress Association (ISCA)
- Life Member of Chemical Research Society of India (CRSI)
- Life Member of Indian Society of Chemist and Biologist (ISCB)

Orientation/Refresher Course Attended

1. One week (Online) Interdisciplinary **Faculty Development Programme** on "Research and Beyond" organised by Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi from 9-10-21 to 14-10-21.

2. Refresher course from 1 Dec 2020 to 31 march 2021 ARPIT organized by GAD-TLC, Khalsa College, DU.

3. **FDP** on "Instrumental methods of analysis", organized by GAD TLC and Bishop Moorre College, affiliated to Kerala University, from 07-10-20 to 13-10-20

4. Refresher course in Chemistry scheduled from **16-07-18 to 04-08-2018** at Kumaun University, Nainital (UGC-HRDC).

5. Participated in faculty Development Program Entitled "From Chemistry of Life to Chemistry of Diseases: Understanding Clinical Biochemistry (UCB-17) from 15 June to 22 June 2017 at Daulat Ram College, University of Delhi.

6. Orientation course OR-81 at CPDHE, University of Delhi

Web links

http://people.du.ac.in/~beena/

https://orcid.org/0000-0003-1198-9478

https://vidwan.inflibnet.ac.in/profile/297349

https://www.researchgate.net/profile/Beena_Negi2

https://scholar.google.co.in/citations?user=6XxaxsgAAAAJ&hl=en

https://www.youtube.com/watch?v=6sGDo6UW89w&t=18s

https://sites.google.com/view/beenanegi/home https://gargicollege.academia.edu/BeenaNegi
Educational videos on the topic Green Chemistry You Tube Video Link
https://youtu.be/6sGDo6UW89w https://youtu.be/bsq5rc5_xhg https://youtu.be/hUekON4fX88 https://youtu.be/2R_4rIWGqCY https://youtu.be/SI0NlDD-uJQ https://youtu.be/BdKjWcAfTcQ https://youtu.be/7nAOSaK3mdc https://youtu.be/2R_4rIWGqCY https://www.youtube.com/watch?v=fcXCUihrDV8