




Faculty Details Proforma

Title	Dr	First Name	Beena	Last Name	Negi	Photograph
Designation		Assistant Professor				
Address		Gargi College Sirifort Road New Delhi-110049				
Phone No Office						
Residence*		Indrapuram Ghaziabad UP-201014				
Mobile*		9540141309				
Email		beenanegi@gargi.du.ac.in				
Web-Page		http://people.du.ac.in/~beena/				
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						
<ul style="list-style-type: none"> Advisor Chemical Society, Gargi College 2017-18 Member of B.Sc. Physical science (Zenith) 2019-20-21 Member of B.Sc. Life science (Zenith) 2017-18 Member of Website Committee 2017-18-19 Member of NSS 2018-19-20-21 						
Areas of Interest / Specialization						
Synthetic medicinal chemistry						
Subjects Taught						
GE6: Sem IV Polynuclear hydrocarbon, UV, IR spectroscopy (2021) DSE: Green Chemistry (BSc H Sem V- 2018, 2020) GE7: Molecules of Life (CBCS Sem II - 2017, 2018, 2020) GE1: Atomic structure, bonding, general organic chemistry and aliphatic hydrocarbons (CBCS) Organic chemistry V: Spectroscopy (CBCS)						
Research Guidance						
NA						
Research Projects (Major Grants/Research Collaboration)						

UGC-BSR Research Start-UP Grant 2016 for an amount of Rs 10 Lakh utilised ~ 8 Lakh, titled Design, SAR, docking studies and anticancer activity evaluation of novel benzothiazole linked hybrids from 16-02-2017 to 15-02-2019.

Publications

1. **Beena Negi**, Diwan S Rawat. Antituberculosis activity evaluation of thymol Schiff bases. **Chemistry & Biology Interface** **2018**, 8, 4, 244-254.
2. **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: 0.16)
3. **Beena Negi**, Prija Poonan, Mohammad Fawad Ansari, Deepak Kumar, Sakshi Aggarwal, Ramandeep Singh, Amir Azam, Diwan S. Rawat. Synthesis, antiamebic activity and docking studies of metronidazoletriazole-styryl hybrids. **Eur. J. Med. Chem.** **2018**, 150, 633-641. (Impact factor: 4.519)
4. **BeenaNegi**, 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: 2.576)
5. **Beena Negi**, Deepak Kumar, Widuranga Kumbukgolla, Sampath Jayaweera, Prija Ponnann, 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: 4.519)
6. Deepak Kumar, **BeenaNegi**, Diwan S. Rawat. The anti-tuberculosis agents under development and the challenges ahead. **Fut. Med. Chem.** **2015**, 7, 1981-2003. (Impact factor: 3.556)
7. Deepak Kumar, Garima Khare, **BeenaNegi**, 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: 2.608)
8. Deepak Kumar, **BeenaNegi**, 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: 4.519).
9. **BeenaNegi**, K. Kranthi Raj, Shadab Miyan Siddiqui, Dittakavi Ramachandran, Amir Azam, and Diwan S. Rawat. In vitro antiamebic activity evaluation and docking studies of metronidazole–triazole hybrids. **Chem. Med. Chem. Commun.** **2014**, 9, 2439–2444. (Impact factor: 3.225)
10. **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, 11962–11966. (Impact factor: 3.108)
11. **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.
12. **Beena**; Rawat, D. S. Antituberculosis drug research: A critical overview. **Med. Res. Rev.**

2013, 33, 693–764. (Impact factor:8.431).

13. **Beena**; Kumar, D.; Rawat, D. S. Synthesis and antioxidant activity of thymol and carvacrol based Schiff bases. **Bioorg. Med. Chem. Lett.** 2013, 23, 641–645. (Impact factor: 2.486).
14. **Beena**; Joshi, S.; Kumar, N.; Kidwai, S.; Singh, R.; Rawat, D. S. Synthesis and antitubercular activity evaluation of novel unsymmetrical cyclohexane-1,2-diamine derivatives. **Arch. Pharm. Chem. Life Sci.** 2012, 345, 896–901. (Impact factor: 1.53).
15. **Beena**; Kumar, N.; Rohilla, R. K.; Roy, N.; Rawat, D. S. Synthesis and antibacterial activity evaluation of metronidazole-triazole conjugates. **Bioorg. Med. Chem. Lett.** 2009, 19, 1396–1398. (Impact factor: 2.454).
16. Kumar, N.; Khan, S. I.; **Beena**; Rajalakshmi, G.; Kumaradhas, P.; Rawat, D. S. Synthesis, antimalarial activity and cytotoxicity of substituted 3,6-diphenyl-[1,2,4,5]tetraoxanes. **Bioorg. Med. Chem.** 2009, 17, 5632–5638. (Impact factor: 2.92).

Books Published

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

Book Chapter

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 (<http://epgp.inflibnet.ac.in>) by NMEICT and UGC MOOCs, **Modules of**

Paper 5: Organic chemistry-2 (Reaction Mechanisms)

<http://epgp.inflibnet.ac.in/Home/ViewSubject?catid=5>

http://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_module_pg.php/660

Paper 12: Organic spectroscopy

http://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_module_pg.php/667

Paper 14: Disconnection Approach

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, Vilsmeier reaction and Gattermann-Koch reaction*

12. CHE_P5_M35 The Von Richter, Sommet-Hauser and Smiles rearrangements
13. CHE_P12_M24 Mass spectrometry: Theory, instrumentation and modifications
14. CHE_P12_M25 Terms in mass spectrometry, 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/Workshop/Webinar Organized

Convener of Webinar held via ZOOM on 21-5-2020 at 11:00am to 11:45am on the topic OPEN EDUCATIONAL RESOURCES, Dr. Rohit Bhatia as Resource Person.

Conference Organization/ Presentations

- **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.
- 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.

Resource Person

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

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 Collaboration Joint 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 the 4th 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**.

FDP

1. ICT enabled higher education in India: Challenges and opportunities. Organized by GAD TLC 15 April 2020.

Workshops/Symposiums/Seminars/Webinars Attended

1. Participated in the **National Webinar** on International Yoga Day, organized by Gargi College under the aegis of IQAC on June 21, **2020**.
2. Participated in One Day **National Webinar** on “Virtual Classes Tools: Google Classroom, Google Meet and You Tube” held on 11 May, **2020**, by Department of Botany Gargi College
3. Participant in the One Day **National Webinar** on “Enhancing quality and visibility of research output of faculty and researchers” held on 16th May, **2020**.
4. **Webinar** on Nanoscience and nanotechnology in the present scenario 9 and 10 June **2020** organised by school of physical sciences and special centre for nanoscience JNU.
5. Attended 2nd Task Force meet under star college scheme on 8 and 9 may 2018 at Gargi College.
6. Participated in National conference on CIPSE 2016 at Gargi College from 22-09-16 to 23-09-16.
7. Participated in RSC Workshop on Chemistry for Tomorrow’s World from 02-12-15 to 03-12-15 organized by Green chemistry network centre, DU.
8. Participated in DU-JAIST Japan Symposium on chemistry of functional molecules from 26-02-16 to 27-02-16 organized by Department of Chemistry, DU.
9. Attended Saksham-IT champion training program conducted by Microsoft from 24-09-2015 to 30-09-2015.
10. 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.
11. 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**.
12. Attended a Workshop on “**Information literacy and competency**” organized by Central science library, University of Delhi, on dated 23rd February, **2010**.
13. 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**.
14. Attended Conference cum workshop on “**Current trends in medicinal chemistry**”

<p>organized by IIT-Madras, on dated 2nd-4th April, 2009.</p> <p>15. 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 February-1st March, 2009.</p> <p>16. Attended DU-NERI (AU) Workshop on “Atmospheric science and climate change” organized by Department of Chemistry, University of Delhi, 27th-28th February, 2009.</p> <p>17. Attended National Seminar on “Open source drug discovery” organized by Department of Chemistry, University of Delhi, Delhi -110007, on dated 26th February, 2009.</p> <p>18. 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.</p> <p>19. Attended National Seminar on “Recent trends in chemistry” organized by Department of Chemistry, Maitreyi College, New Delhi, on dated 22nd-24th September, 2004.</p>
Awards and Distinctions
<ul style="list-style-type: none"> • 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
<p>The Association of chemistry teachers (ACT) Life member w.e.f 30-9-16 Membership no 1893</p> <p>Life Member of The Indian Science Congress Association (ISCA)</p> <p>Life Member of Chemical Research Society of India (CRSI)</p> <p>Life Member of Indian Society of Chemist and Biologist (ISCB)</p>
Orientation/Refresher Course Attended
<p>National Webinar FDP 15 April 2020 ICT enabled higher education in india: Challenges and opportunities by GAD TLC.</p> <p>Refresher course in Chemistry scheduled from 16-07-18 to 04-08-2018 at Kumaun University, Nainital (UGC-HRDC).</p> <p>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.</p> <p>Orientation course OR-81 at CPDHE, University of Delhi</p>
Web links

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

<https://sites.google.com/view/beenanegi/home>

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

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

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/SI0NIDD-uJQ>

<https://youtu.be/BdKjWcAfTcQ>

<https://youtu.be/7nAOSaK3mdc>

https://youtu.be/2R_4rIWGqCY

<https://www.youtube.com/watch?v=fcXCUihrDV8>