

**Gopal Singh Bisht, Ph.D.**  
**Associate Professor**

**Ph.D.** –*Institute of genomics and integrative biology*(CSIR)

**Address for Correspondence**

Dr. Gopal Singh Bisht  
Department of Biotechnology and Bioinformatics  
JUIT, Wakanaghat, Dumehar Bani,  
Distt. Solan (HP), 173234  
Tel (office) : (91) 1792-239220 (W)  
E mail : gopal.singh@juit.ac.in, bisht.gopal@gmail.com



**Educations**

**Ph. D. (2008)**

- Research work station: Institute of Genomics and Integrative Biology (CSIR)

Degree awarded: University of Delhi

*Broad Area: Bio-organic chemistry/Medicinal chemistry*

*PhD title: Designing, Synthesis and Characterization of Antimicrobial Peptides and Study of their Biological Activity*

**M. Sc. (2003)**, Chemistry, University of Delhi, First Division

- *Specialization in Organic Chemistry*

**B. Sc. (1999)**, Industrial Chemistry, University of Delhi, First Division

- *Major: Industrial Chemistry, Chemistry, Minor: Combined Physics and Mathematics*

**Current research interests**

- Synthesis of small molecules and peptidomimetics as lead antimicrobial compounds
- Synthesis of peptides, peptoids and heterocyclic peptide conjugates as anticancer agents
- Phytochemical Investigation of important Medicinal plants

**Professional Experience**

**Teaching and Research**

- **September 2017-Till date**

**Associate Professor** in Department of BT & BI at Jaypee University of Information Technology, Wakanaghat, Distt. Solan (HP)

- **August 2013- August 2017**

**Assistant Professor (Senior Grade)** in Department of BT & BI at Jaypee University of Information Technology, Wahnaghat, Distt. Solan (HP)

➤ **February 2010-July 2013**

**Assistant Professor (Grade II)** in Department of BT & BI at Jaypee University of Information Technology, Wahnaghat, Distt. Solan (HP)

**Research/Industrial experience**

➤ **March 2008-Feb 2010**

**Research Scientist** in Ranbaxy Laboratories Limited, R&D Gurgaon, Haryana, India  
Ranbaxy Laboratories limited now Sunpharma is one of the top generic-drug companies and the largest pharmaceutical manufacturer in India.

Role : Research and Development in Organic Synthesis

➤ **Jan 2003- March 2008**

*Institute of Genomics and Integrative Biology*

Designation : **Senior Research Fellow (2005-2008) & Junior Research Fellow (2003-2005)**

**Competitions/Awards:**

- Qualified CSIR (Council for Scientific and Industrial Research, Ministry of Human Resource Development, Government of India), JRF (Junior Research Fellowship), June 2002
- Awarded research grant under Fast track scheme for young scientist, DST, Government of India (2010)
- Awarded Ad-hoc ICMR research grant in basic medical science.
- Certificate of merit on securing first position in M. Sc. Chemistry class in Ramjas College, University of Delhi, 2002

**Externally Funded R & D Project**

S. No.	Title of Research Project/ Consultancy Work	Details of Sponsoring Agency	Duration, Sanction Date & Status	Amount Sanctioned	Chief or Co Investigator Specify

1.	Skill Vigyan – Quality Control	DBT, Govt. of India & HIMCOSTE, Shimla	3 Years (2020 – 2023)	49.8 lakh	Co-coordinator
2	Synthesis of Novel Poly-N Substituted Glycines (Peptoids) Based on Cell Selective Antimicrobial Peptides for Gram Negative and Gram Positive Bacterial Infections (FN. 52/4/2013 BMS)	Indian Council of Medical Research (ICMR), Govt. of India	3 years, 2015 – 2018 (ongoing)	24.3 lakh	Chief Investigator
3.	Design, synthesis and biological evaluation of peptidomimetics (SR/FT/CS-61/2010)	Department of Science and Technology, Govt. of India	3 years, 2011-2014 Completed	19.15 Lakh	Chief Investigator

**Research Guidance**

**Ph.D. Scholars**

SI No.	Name of students	Title of Project	Status/Awarded year
1	Sandeep lohan (116754)	Design, synthesis and antimicrobial evaluation of structurally diverse short peptide based molecules	Completed/September 2015 (2011-15)
2	Deepika (136753)	Synthesis and antibacterial evaluation of poly-n substituted glycines (peptoids)	Completed/ 2021
3	Lalit Sharma (136751)	Effect of polyherbal preparation (pol-6) on alcohol deprivation effects following voluntary alcohol consumption in rats	Completed / 2021

4.	Lalita Sharma (186554)	Synthesis and biological evaluation of antimicrobial peptide based compounds.	Ongoing
----	---------------------------	---	---------

### **M. Pharm. Dissertation Thesis**

#### **Details of P.G. (M. Pharmacy) thesis supervised**

SI No.	Name of students	Title of Project	Status
1	Champa Chauhan (125005)	Design synthesis and biological evaluations of short anticancer peptides	Completed 2013-14
2	Arneesh Kalanta (125014)	Design synthesis and biological evaluations of antimicrobial lipopeptides	Completed 2013-14
3	Ishan Verma (125002)	Design synthesis and biological evaluation of amino acid conjugated pyrazole derivatives for anticancer activity	Completed 2013-14
4	Abhilash Chandan 135005	Design and synthesis of novelmodified antimicrobial peptoids	Completed 2014-2015
5	Rajani Saini 135004	Synthesis of amino acid conjugated pyrazole derivatives	Completed 2014-2015
6	Girveer Singh Rawat 135011	Evaluation of phytochemical properties and fractionation of methanol extract callistemon viminalis leaves	Completed 2014-2015
7	Surbhi Sharma 135001	Design, synthesis and surface conjugation of peptides on vancomycin loaded solid lipid nanoparticle	Completed 2014-2015
8	Ridhi Patrwal 135002	Fabrication of antimicrobial nanoparticle and peptide conjugation on the surface of particle	Completed 2014-2015

## **Patent**

### **Granted**

- Rakesh Singh, Anu Mittal, Gopal Singh Bisht, Mahavir Singh Khanna, Rajesh Kumar Thaper M Parsad “CRYSTALLINE FORMS OF BOSENTAN SALTS AND PROCESSES FOR THEIR PREPARATION” US Patent 20,120,283,440

### **Filed/ Published**

- Gopal Singh Bisht, Sandeep Lohan, “NON-NATURAL SHORT CATIONIC ANTIMICROBIAL LIPOPEPTIDES” IN Patent 1161/DEL/2014

## **Publications**

1. Sharma D, Kumar K, and Bisht GS, 2022 A Mini-Review on Potential of Neuropeptides as Future Therapeutics. *International Journal of Peptide Research and Therapeutics* 28: 39
2. Lalit Sharma, Aditi Sharma, Ashutosh Kumar Dash, Gopal Singh Bisht, Girdhari Lal Gupta\*A 2021 standardized polyherbal preparation POL-6 diminishes alcohol withdrawal anxiety by regulating Gabra1, Gabra2, Gabra3, Gabra4, Gabra5 gene expression of GABAA receptor signaling pathway in rats. *BMC Complementary Medicine and Therapies* ,21 (1-15 )
3. Sharma D and Bisht GS, 2020. Recent Updates on Antifungal Peptides. *Mini Rev Med Chem* 20 (260-268)
4. Harjas Saini, Vikrant Abbot, Gopal Singh Bisht, Poonam Sharma (2020). Study of the physico-chemical properties of vancomycin hydrochloride for determining its potential applications in formulation development. *Indian Journal of Chemistry-Section A*, 59 (8), (1113-1119)
5. Sharma D, Poonam, Shrivastava R, Bisht GS. 2020. In Vitro Efficacy of Lipid Conjugated Peptidomimetics Against Mycobacterium smegmatis. *International Journal of Peptide Research and Therapeutics*. 26 (531–537)
6. Katoch P, Bisht GS, Shrivastava R. 2019. In vivo infection and In vitro stress survival studies of acid susceptible mutant of Mycobacterium fortuitum. *International Journal of Mycobacteriology* 8 390-396

7. Katoch P, Gupta K, Yennamalli RM, Vashistt J, Bisht GS, Shrivastava R. 2020. Random insertion transposon mutagenesis of *Mycobacterium fortuitum* identified mutant defective in biofilm formation. *Biochemical and Biophysical Research Communications*. 521 991-996
8. Sharma D, Choudhary M, Vashistt J, Shrivastava R, Bisht GS. 2019. Cationic antimicrobial peptide and its poly-N-substituted glycine congener: Antibacterial and antibiofilm potential against *A. baumannii*. *Biochemical and Biophysical Research Communications*, 518 , 472-478
9. Poonam, Yennamalli RM, Bisht GS, Shrivastava R. 2019. Ribosomal maturation factor (RimP) is essential for survival of nontuberculous mycobacteria *Mycobacterium fortuitum* under in vitro acidic stress conditions. *3 Biotech*, 9 (127-137).
10. Sharma L, Sharma A, Gupta GL, Bisht GS. 2019 Acute and Sub-acute. "Oral Toxicity Assessment of a Standardized Polyherbal Preparation POL-6 in Rats. *The Natural Products Journal*. 9 207-216,
11. Dewangan PR, Bisht GS, Singh VP, ShaharYar M, Pasha S. 2018. Design and synthesis of cell selective  $\alpha/\beta$  diastereomeric peptidomimetic with potent in vivo antibacterial activity against methicillin resistant *S. Aureus*. *Bioorganic Chemistry*. 76 (538-547).
12. Sharma L, Sharma A, Gupta GL, Bisht GS. 2018. Pharmacological Evaluation of *Bacopa monnieri* Extract against Depressive like Behavior Induced by Ethanol Withdrawal in Rats. *Pharmacognosy Journal*. 10 ( 48-53)
13. Sharma L, Sharma A, Gupta GL, Bisht GS, 2018. Protective effect of *Ocimum sanctum* Linn. leaf extract on ethanol withdrawal syndrome in wistar rats. *Asian Pacific Journal of Tropical Medicine*. 11 (467-472).
14. Sharma D, Thakur N, Vashistt J, Bisht GS. 2018. Antibacterial Evaluation of Cuprous Oxide Nanoparticles Synthesized Using Leaf Extract of *Callistemon viminalis*. *Indian Journal of Pharmaceutical Education and Research*. 52 (449-455)
15. Sandeep Lohan, Jitender Monga, Chetan Singh Chauhan, Gopal Singh Bisht\* "In Vitro and In Vivo Evaluation of Small Cationic Abiotic Lipopeptides as Novel Antifungal Agents" *Chemical biology & drug design*, (2015) 86: 829-836 (IMPACT FACTOR 2.817)

16. Sandeep Lohan, Arneesh Kalanta, Parveen Sonkusre, Swaranjit Singh Cameotra, Gopal Singh Bisht\* “Development of novel membrane active lipidated peptidomimetics active against drug resistant clinical isolates” *Bioorg Med. Chem* 2014 22: 4544-52 (IMPACT FACTOR 3.641)
17. Sandeep Lohan, Jitendra Monga, Swaranjit Singh Cameotra, Gopal Singh Bisht\* “In vitro and in vivo Antibacterial Evaluation and Mechanistic Study of Ornithine Based Small Cationic Lipopeptides against Antibiotic Resistant Clinical Isolates” *Eur. J. Med. Chem* 2014 (IMPACT FACTOR 6.514)
18. Sandeep Lohan, Swaranjit Singh Cameotra and Gopal Singh Bisht\* “Antibacterial evaluation of structurally amphipathic, membrane active small cationic peptidomimetics: Synthesized by incorporating 3-amino benzoic acid as peptidomimetic element” *Eur. J. Med. Chem* 2014 83:102-14 (IMPACT FACTOR 6.514)
19. Sandeep Lohan, Swaranjit Singh Cameotra, Gopal Singh Bisht\* “Systematic study of non-natural short cationic lipopeptides as novel broad-spectrum antimicrobial agents” *Chemical Biology & Drug Design* 2013 82: 557-66 (IMPACT FACTOR 2.817)
20. Sandeep Lohan and Gopal Singh Bisht\* “Small Cationic Antimicrobial Peptidomimetics: Emerging Candidate for the Development of Potential Anti-infective Agents” *Current Pharmaceutical Design* 2013 19(32):5809-23. (IMPACT FACTOR 2.208)
21. Sandeep Lohan and Gopal Singh Bisht\* “Recent Approaches in Design of Peptidomimetics for Antimicrobial Drug Discovery Research” *Mini reviews in Medicinal Chemistry* 2013 13(7):1073-88. (IMPACT FACTOR 3.862)
22. Seema Joshi, Gopal Singh Bisht, Diwan S. Rawat, Rita Kumar, Souvik Maiti and Santosh Pasha “Comparative mode of action of novel hybrid peptide CS-1a and its rearranged amphipathic analogue CS-2a” *The FEBS Journal* 2012 279: 3776-90 (Impact factor 5.54)
23. Neha Kulshreshtha, Anil Kumar, Gopal Bisht, Santosh Pasha, and Rita Kumar, Usefulness of Organic Acid Produced by *Exiguobacterium* sp. 12/1 on Neutralization of Alkaline Wastewater, *ScientificWorldJournal*. 2012;2012:345101. Epub 2012 Apr 30 (Impact factor 2.107)
24. Neha Kulshreshtha, Anil Kumar, Purinma Dhall, Gopal Bisht, Santosh Pasha, and Rita Kumar, Bisht, Gopal., Pasha, S., Gupta, S. and Kumar, R. Neutralization of

- alkaline industrial wastewaters using *Exiguobacterium* sp. *International Biodeterioration and Biodegradation*, (2010) vol 64/3 191-196 (Impact factor 4.320)
25. Seema Joshi,\* Gopal Singh Bisht\*, Diwan S Rawat, Anil Kumar, Rita Kumar and Santosh Pasha “Interaction studies of novel cell selective antimicrobial peptides with model membranes and *E. coli* ATCC 91775, *BBA Biomembrane* (2010), 1798 1864-1875. (\*Equal contribution) (Impact factor 3.747)
26. Mukesh Chandra Joshi, Gopal Singh Bisht and Diwan S. Rawat “Syntheses and antibacterial activity of phendioxo substituted cyclic enediynes” *Bioorg. Med. Chem. Lett.* (2007), 17/11 3226-3230 (Impact factor 2.42)
27. Gopal Singh Bisht, Diwan S Rawat, Anil Kumar, Rita Kumar, Santosh Pasha “Antimicrobial activity of rationally designed amino terminal modified peptides” *Bioorg Med Chem Lett.* 2007 Aug 1; 17(15): 4343-4346. (Impact factor 2.823)

**National/International Conference/Symposium Publications**

- Deepika Sharma, Poonam Sharma, Rahul Shrivastava, Gopal Singh Bisht (2018). Design, Synthesis, Characterization and Evaluation of Antimycobacterial activities of Peptidomimetics. *Proceedings of the Himachal Pradesh Science Congress* [3rd. Indian Institute of Technology, Mandi, Himachal Pradesh, India: 22-23 October, 2018], pp.-.. Google Citation
- Saesha Verma, Ayushi Sharma, Gopal Singh Bisht, Rahul Shrivastava (2018). To Determine Anti-Mycobacterial Properties of *Valeriana jatamansi* and Its Prospective role as a Future Nutraceutical . *Proceedings of the International Conference on Nutraceuticals and Chronic Diseases ( INCD-2018)* [3rd : Cancer Research Institute - Himalayan Institute of Medical Sciences, Rishikesh (Dehradun), Uttarakhand : 14-16 September, 2018], pp.-.. Google Citation
- Sophia Puri, Deepika Sharma, Gopal Singh Bisht, Rahul Shrivastava (2018). Therapeutic Activity of *Valeriana jatamansi* Plant Extract against Diarrheagenic Infections. *Proceedings of the International Conference on Nutraceuticals and Chronic Diseases ( INCD-2018)* [3rd : Cancer Research Institute - Himalayan Institute of Medical Sciences, Rishikesh (Dehradun), Uttarakhand : 14-16 September, 2018], pp.-.. Google Citation
- Arpita Prasad, Rahul Pramjeet, Gopal Singh Bisht, Rahul Shrivastava (2017). In-Vitro studies of the Overexpressed Gene Isocitrate Lyase of *Mycobacterium fortuitum*



under Stressed Conditions.. *Proceedings of the Annual Conference of Association of Microbiologists of India and International Symposium on Microbes for Sustainable Development: Scope and Applications (MSDSA-2017)* [58th : Babasaheb Bhimrao Ambedkar University Lucknow, Uttar Pradesh, India. : 16-19 November, 2017], pp.- Google Citation

- Deepika Sharma, Gopal Singh Bisht (2016). Lipid Based Peptidomimetics. *Proceedings of the NCRACS 2016* [MMU Maullana, Ambala : 11-12 November, 2016], pp.-.. Google Citation
- Ayushi Sharma, Jitendraa Vashistt, Gopal Singh Bisht, Rahul Shrivastava (2019). High throughput screening of Mycobacterium fortuitum proteome for discovery of novel drug targets. *Proceedings of the International Conference on Recent Advances in Agricultural, Environmental and Applied Sciences for Global Development (RAAEASGD-2019)* [2nd : Dr. Y.S. Parmar University of Horticulture and Forestry, Solan, India : 27-29 September, 2019], pp.51-51.. Google Citation
- Ayushi Sharma, Poonam, Jitendraa Vashistt, Gopal Singh Bisht, Rahul Shrivastava (2019). Identification and in-silico structure modeling of Mycobacterium fortuitum homolog of Mycobacterium tuberculosis lipase U. *Proceedings of the International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)* [Jaypee University of Information Technology, Solan, India : 01-03 August, 2019], pp.-.. Google Citation
- Monika Choudhary, Deepika Sharma, Gopal Singh Bisht, Rahul Shrivastava, Jitendraa Vashistt (2019). Antimicrobial potential of quercetin and curcumin against antibiotic resistant strains of Acinetobacter baumannii. *Proceedings of the International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)* [Jaypee University of Information Technology, Solan, India : 01-03 August, 2019], pp.-.. Google Citation
- Lalita Sharma, Rahul Shrivastava, Gopal Singh Bisht (2019). Synthesis, characterisation and evaluation of antibacterial activity of a 12 residue peptide A-12. *Proceedings of the International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)* [Jaypee University of Information Technology, Solan, India : 01-03 August, 2019], pp.-.. Google Citation
- Lalit Sharma, G L Gupta, Gopal Singh Bisht (2018). Centella asiatica extract normalizes GABAergic transmission in the rats amygdala attenuates ethanol withdrawal anxiety like behaviour associated with ethanol abstinence. *Proceedings of*

- the World Congress of Basic and Clinical Pharmacology (WCP2018)* [18th : Kyoto International conference Centre, Kyoto Japan : July 1-6, 2018], pp.-.. Google Citation
- Deepika Sharma, Gopal Singh Bisht (2018). Antibacterial lipopeptide LP-23. *Proceedings of the* [Bahara University: 28-29 March, 2018], pp.-.. Google Citation
  - Rahul Shrivastava, Shivani Sood, Gopal Singh Bisht (2018). An in Vitro Model for Mycobacterium Tuberculosis Persistent Infection Drug Discovery Studies. *Proceedings of the International Conference on Advances in Biosciences and Biotechnology - ICABB-2018* [Jaypee Institute of Information Technology, Noida : 01-03 February, 2018], pp.-.. Google Citation
  - Poonam, Jitendraa Vashistt, Gopal Singh Bisht, Rahul Shrivastava (2017). Ribosomal Maturation Factor RimP as Potential Drug Target for M. Fortuitum. *Proceedings of the International conference on Advances in Plant and Microbial Biotechnology* [Jaypee Institute of Information Technology, Noida : 2-4 February], pp.-.. Google Citation
  - Sandeep Lohan, Gopal Singh Bisht (2013). Design and synthesis of small lipopeptides as broad-spectrum antimicrobial agents. *Proceedings of the Annual convention of ABAP & international conference on plant biotechnology, molecular medicine and human health* [7th: University of delhi, south campus, new delhi : October 18-20], pp.173-.. Google Citation
  - Deepika Sharma & Gopal Singh Bisht\*. Green synthesis of copper oxide nanoparticles using leaf extract of *Callistemon viminalis*. RAFAS 2016, International conference held at LPU, Jalandhar on 25/11/2016 (Poster presentation).
  - Participated in one day workshop on Patent Filing & Geographical Indication held on 27<sup>th</sup> feb 2017 at Jaypee University of information Technology, Wagnaghat, Solan, Himachal pardesh
  - Participated in National Workshop on Statistical Techniques in Biological and Medical Sciences (STBMS) -2016 held on 13-18 June 2016 in Jaypee University of information technology
  - Resource person in **Faculty Development Program**, Jaypee University of Information Technology, Solan, Himachal Pradesh, India; Duration 24<sup>th</sup> to 30<sup>th</sup> December 2015
  - Attended **Faculty Development Program**, Jaypee University of Information Technology, Solan, Himachal Pradesh, India; Duration 14<sup>th</sup> to 19<sup>th</sup> July 2014

- Arun Sharma, Ridhi Patrwal, Gopal Singh Bisht and Uday Malairaman “Nanoparticles-mediated delivery system for antimicrobial peptides against bacterial infection 4<sup>th</sup> Nano today conference 2015, December 6-10, Dubai
- Sandeep Lohan and Gopal Singh Bisht\* “ Design and synthesis of small lipopeptides as broad-spectrum antimicrobial agents” 7<sup>th</sup> annual convention of ABAP & International conference, Oct 2013, University of Delhi, New Delhi, India
- Gopal Singh Bisht, Diwan S Rawat, Anil Kumar, Rita Kumar, and Santosh Pasha, “Antimicrobial activity of short synthetic amphipathic cationic peptides against antibiotic resistant bacterial strains” Abstract book, 1<sup>st</sup> Indian Peptide Symposium 2007, Hyderabad, India, Feb 2007.
- Seema Joshi, Gopal S Bisht, Shruti Yadav, Diwan S Rawat and Santosh Pasha, “Interaction studies of novel cell selective amphipathic antimicrobial peptides using microscopic techniques” 14<sup>th</sup> ISCB International Conference (ISCBC-2010), Chemical biology for discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, January 15<sup>th</sup> -18<sup>th</sup>, 2010
- Seema Joshi, Shruti Yadav, Gopal Singh Bisht, Santosh Pasha” Role of primary amphipathicity in imparting toxicity to Sarcotoxin-Cecropin hybrid peptide CS-1” Abstract book, 3<sup>rd</sup> Indian peptide Symposium-2011, Yashda Pune, India, Feb 2011
- Participated in INDO-TIWAN INTERNATIONAL WORKSHOP-2011: DRUG DEVELOPMENT FOR CANCER AND INFECTIOUS DISEASES: FROM BASIC TO INDUSTRY held on 14<sup>th</sup>-15<sup>th</sup> December, 2011 at I.S.F. College of Pharmacy, Moga
- Participated in Biotech 2004: challenges and opportunities held on 13<sup>th</sup>-15<sup>th</sup> October, 2004 at New Delhi
- Participated in 9<sup>th</sup> CRSI national symposium on chemistry held on 1-4 Feb 2007, at University of Delhi, Delhi-7
- Participated in the Symposium on the “applications of nuclear resonance to material and medicine” held on Nov 21, 2006 at Indian Institute of Delhi, New Delhi India
- Completed successfully three months online certificate course in “Intellectual Property Rights and Information Technology in the internet age” conducted by Indian Law institute from 1<sup>st</sup> December, 2010 to 28<sup>th</sup> February 2011 with A+ grade.
- Attended Research associate development programme held on 7<sup>th</sup> -8<sup>th</sup> October 2008 at Ranbaxy Laboratories limited R & D centre

**Book Chapters**

- Nanomaterial in Diverse Biological Applications, Deepika Sharma, Rahul shrivastava and **Gopal Singh Bisht\*** Metabolic engineering of Bioactive compounds strategies and processes Kalia, V. C. (Ed), Saini, A. K. (Ed) (2017) (Springer Singapore) ISBN 978-981-10-5511-9 (In Press)
- Factories for Antibody Generation, **Gopal Singh Bisht**, kinam gupta and Rahul shrivastava\* Metabolic engineering of Bioactive compounds strategies and processes Kalia, V. C. (Ed), Saini, A. K. (Ed) (2017) (Springer Singapore) ISBN 978-981-10-5511-9 (In Press)
- Engineering Yeast as Cellular Factory Poonam, Ritu Ghildiyal, Gopal Singh Bisht, and Rahul Shrivastava Metabolic engineering of Bioactive compounds strategies and processes Kalia, V. C. (Ed), Saini, A. K. (Ed) (2017) (Springer Singapore) ISBN 978-981-10-5511-9 (In Press)

**Additional Academic/ Departmental Responsibilities**

- Member of Organizing committee in National Symposium on Computational Systems Biology (NSCSB-2016) held on 18-20 march 2016, DBT & Jaypee University
- Participated in conducting mock aptitude test and grooming session for BT & BI final year student
- Member of Departmental safety committee
- Member of Departmental purchase committee
- Member of Doctoral Progress Monitoring Committee
- Warden of Azad Bhavan Hostel since Nov-2014 to till date
- Involved in mentoring of first year students.
- Member of Anti ragging squad
- Member of IQAC Committee
- Member of mess food evaluation committee

**Extra Curricular Activities**

- Principal Investigator of Unnat Bharat Abhiyan (UBA 2.0) A scheme of MHRD (Govt. of India)

- Faculty Coordinator of JYC environmental club (2016- 2020)
- Faculty Coordinator of JYC disciplinary committee (2020-2022)
- Participated in National Social Service (NSS), Junior Division (1993) under NSS Delhi
- Participated in National Cadet Corp (NCC), Senior Division (1996-1999) under NCC Directorate, Delhi, B Certificate

**Courses taught**

- Organic Chemistry (PY212)
- Pharmaceutical Organic Chemistry (PY371)
- Advanced Organic Chemistry-11 (PY113)
- Synthetic methodology (PY341)
- Research Methodology & Research Ethics (PY112)
- Drug Design Discovery & Process Development (PY731)
- Data Interpretation (PY162)
- Quality control analysis and Management (14M2WPY441)
- Research Methodology (11B1WPY731)
- General chemistry (14B11BT211)
- GLP & Instrumentation Lab (13B17BT173)

**Faculty Development Programme Attended**

S. No.	Title	Dates/ Duration	Sponsoring Agency and Organisation & Place held
1	Faculty Development Programme “Outcome Based Education in Biotechnology and Bioinformatics”	24-30, December, 2015	JUIT, Solan, H.P.
2	Faculty Development Programme	14 <sup>th</sup> July 2014 – 19 <sup>th</sup> July, 2014	JUIT, Solan, H.P.
3	ICT Tools for Teaching Learning process and Institute	Faculty Development Program 10-21Aug2020 <b>(2 weeks)</b>	Electronics and ICT Academies NIT Patna, MNIT Jaipur, ICT Academies of Ministry of electronics and information Technology

4	Advancement in Biotechnology and Nanotechnology	One week online FDP 21-26 Sep 2020 <b>(1 weeks)</b>	Punjab University in association with government college of Engineering and technology Jammu
5	Faculty Development Program on Introduction to Six Sigma from	18th Jan to 29th Jan, 2021 <b>(2 weeks)</b>	E & ICT Academy, IIT Kanpur
6	Faculty Development Program on Advanced Excel with Data Visualization	from 11 January to 16 January 2021 <b>(1 week)</b>	E & ICT Academy, IIT Kanpur

**Professional Membership**

- The Indian science congress (Life Member since 2012)
- Indian peptide Association (life Member since 2007)
- American Peptide Society ( Member Id: 4973)

**Reviewer**

- European Journal of medicinal chemistry
- Bio-organic medicinal chemistry
- RSC –advances
- Bio-Organic medicinal chemistry letter