

Name	Dr. Sunita Khatak	
Designation	Assistant Professor	
Qualification	Doctorate in Biotechnology and Molecular Biology	
Date of joining	13 th February, 2009	
Phone	919416930148, 9999991240	
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1. Educational background: *Doctorate in Biotechnology and Molecular Biology*

- Ph. D in Biotechnology and Molecular Biology from Ch. Charan Singh, Haryana Agricultural University, Hisar with 7.72, CGPA (2007). **Dissertation Title-** Biochemical and molecular characterisation of genetic variability in Ashwagandha (*Withania somnifera* L. Dunal).
- M. Sc. in Biotechnology and Molecular Biology from Ch. Charan Singh Haryana Agricultural University, Hisar with 7.73, CGPA (2003). **Dissertation Title-** Plant regeneration and transformation studies in Cotton (*Gossypium hirsutum* L.)
- B.Sc. from Kurukshetra University, Kurukshetra with 73.7% (2000).
- Senior Secondary in Biology from N.Y.P. School C.B.S.E, , with 60.4% (1997).

2. Work experience : 15years 6 months,

(Excluding teaching as a Assistant Professor at Department of Biotechnology, (16th July, 2007- 24th July 2008) as Contractual Staff and 24th July-2008 to 13th Feb, 2009 as regular staff), Seth J.P.M.L. Institute of Engineering and Technology, Radaur, 135133, Yamuna Nagar, India).

3. Lecture courses: Genetics, Cell Biology, Intellectual Property Rights, Phyto-medicine, Nano Biotechnology, Advanced Genetic Engineering, Idea Workshop Labs and Genetics Lab, Plant cell tissue culture lab and Green biotech and pollution abatement labs.

4. Research

4.1 Areas of research interest: Plant Molecular Biology and Biotechnology

4.2 Research publications (International/National Journals and conference proceedings)

Published Research

(Before 2007-2009)

1. **Sunita Khatak** and Santosh Dhillon. DNA fingerprinting and molecular marker analysis in Ashwagandha (*Withania somnifera* L.). **Practical Manual** for ICAR sponsored winter school on 'Applications of Genomics, Molecular markers and Transformation tools for crop improvement' held at Department of BMB, CCS, HAU, Hisar, from Dec. 01-21, 2005, pp. 26-32.

2. S. Dhillon, P. Kharb and **S. Khatak**. Production of novel metabolites in plants.: Proceedings of **winter school** on 'Strategies for gene cloning and expression for value addition in crop plants' held at Deptt. Of BMB, CCS, HAU, Hisar, from Nov. 15- Dec. 5, 2006, pp. 97-105.
3. **Sunita Khatak**, Santosh Dhillon, Pushpa Kharb, Deepak Sehgal, Suruchi Malhotra, Meenakshi Bhardwaj, O.P. Yadav and K.S. Boora (2008). Genetic diversity in Ashwagandha (*Withania somnifera* (L.) using morphological and biochemical parameters. Poster presented in **National Conference** on Physiological and Biotechnological Approaches to improve plant productivity. March 15-17, 2008, at Centre for Plant Biotechnology, Department of Science and Technology, CCS, HAU New Campus Hisar.
4. Puja Singh, Pushpa Kharb, Neelam Pandey, Parveen Batra, **Sunita Khatak**, S. Dhillon, S. Uppal & V. K. Chowdhury. (2007). RAPD analysis for genetic diversity and identification of sex specific marker in date palm (*Phoenix dactylifera* L.). Haryana J. of Hort. Sci. 35 (3&4):232-234.

[Year, 2009-2018]

1. Anuja Rangi, **Sunita Khatak** and Anita Punia (2012). Studies on Sequence Homology in Promoter Region for Abiotic Stress Responsive Genes in *Arabidopsis thaliana*. World Journal of Agricultural Sciences. 8 (6): 632-636, (ISSN-1817-3047).
2. Kanika Bamhania, **Sunita Khatak**, Anita Punia and Om Prakash Yadav (2013). Genetic Variability Analysis Using ISSR Markers in *Withania Somnifera* L. Dunal Genotypes from Different Regions. Journal of Herbs, Spices & Medicinal Plants, 19:22-32, ISSN -1049-6475.
3. **Sunita Khatak**, Santosh Dhillon, Om Parkash Yadav, Anita Grewal and Ram Niwas Sheokand (2013). Agro morphological and RAPD marker based characterization of genetic diversity in different genotypes of *Withania somnifera* L. Dunal. International Journal of Biotechnology and Research, VOL-3(4), 1-16. ISSN-2249-6858. **Impact -2.65**.
4. Anita Grewal, Archit Sharma, Surender Pahuja and **Sunita Khatak** (2013). DNA extraction optimization in Sorghum (*Sorghum Bicolor* L. Moench) for marker analysis. World Journal of Pharmacy and Pharmaceutical Sciences, Vol2 (6):5046-5051. ISSN-2278-4357. **IMPACT: 2.7**
5. **Sunita Khatak**, Satyender and Deepak Kumar Malik (2014). Antimicrobial activity of *Withania somnifera*, *Gymnema sylvestre* and *Cannabis sativa* against pathogenic bacteria. International Journal of Chemical Sciences: 12(1), 286-292. ISSN-0972-768X (Scopus indexed).
6. **Sunita Khatak**, Jalaj Nagar, Anuj Gupta and Deepak Kumar Malik (2014). Antimicrobial activity of *Vitex negundo* against pathogenic bacteria. Journal of Pharmacy Research: 8(2), 91-92. ISSN-0974-6943. Impact factor : 2.6
7. **Sunita Khatak**, Nitin Chauhan and Deepak Kumar Malik (2014). DNA isolation and optimization of PCR conditions in *Gymnema sylvestre* by using inter simple sequence repeats (ISSR) markers. Journal of Chemical Sciences: 12(2), 386-392. ISSN-0972-768X (Scopus indexed).
8. **Sunita Khatak**, Sonia Baches, Nitin Chauhan and Amandeep Kaur (2014). Synergistic effect of 2, 4-D and cytokinins on callus culture establishment in rare medicinal plant-*Gymnema sylvestre*. International Journal of Scientific and Engineering Research, Vol5(2). 213-218. ISSN-2229-5518. **IMPACT FACTOR-3.2**.
9. Kiran, Deepak Kumar Malik and **Sunita Khatak** (2014). Comparative antimicrobial activity of leaves and callus of *Gymnema sylvestre* against pathogenic bacteria. Journal of Pure and Applied Microbiology, Vol 8(4), 3253-3261. **NAAS RATING-6.0**.
10. **Sunita Khatak**, Preeti Sharma, Shikha Laller and Deepak Kumar Malik (2014). Antimicrobial antioxidant and phytochemical property of *Cassia tora* against pathogenic microorganisms. Journal of Pharmacy Research: Vol-8(9) 1279-1284. ISSN-0974-6943. **Impact factor: 2.6**.
11. **Sunita Khatak**, Ramender Kaith and Om Parkash Yadav (2014). Inter and intra specific genetic diversity analysis in thirty genotypes of Ashwagandha using protein markers. International Journal of Chemical Sciences: 12(2), 386-392. ISSN-0972-768X (Scopus indexed).

12. **Sunita Khatak**, Shikha Laller, Preeti Sharma and Deepak Kumar Malik (2014). Antimicrobial property of *Elettaria cardamomum* against pathogenic microorganisms. Paper published in proceedings of 2nd **National conference** on converging technologies beyond 2020 held in Nov, 28-29, 2014 at University Institute of Engineering and Technology, Kurukshetra University, Kurukshetra.Haryana,India
13. **Sunita Khatak**, Shikha Laller, Preeti Sharma and Deepak Kumar Malik (2014). Phytochemical analysis and antioxidant properties of *Elettaria cardamomum* . Paper published in proceedings of 2nd **National conference** on converging technologies beyond 2020 held in Nov, 28-29, 2014 at University Institute of Engineering and Technology, Kurukshetra University, Kurukshetra.
14. **Sunita Khatak**, Sumita Saini, Anita Punia, Komal and Baspreet (2016). *In vitro* micropropagation and assessment of genetic fidelity analysis in *Catharanthus roseus*. International Journal of Innovative Research in Science and Engineering. Vol-2(4), 322-334(ISSN- 2454-9665).
15. **Sunita Khatak**, Mansi Ghai and Swati Dahiya (2016). ISSR marker based genetic diversity analysis in different genotypes of *Cannabis sativa*” .International Journal of Engineering Technology Sciences and Research.Vol-3(4),6-16.ISSN-2394-3386).

[Year2018-2021]

16. **Sunita Khatak**, Archit Sharma and Rashmi Saini (2018). Comparative analysis of plant growth regulators on bud break in *Prosopis* and *Tecomella* for sustainable agriculture in arid and semi arid regions of India. Biosciences Biotechnology Research Communication: 11 (2):208-215.(UGC,NAAS-3.0)
17. **Sunita Khatak**, Rashmi Saini and Archit Sharma (2018). In vitro study of antimicrobial activity of different plant parts of *Terminalia chebula* against pathogenic bacteria. Journal of Management Technology and Engineering. August, 2018; 8 (8):1339-1346.
18. **Sunita Khatak**, Jayant, Kamal Singh Rajput, Vivek Singh and Geeta Bhatt (2019). Enhanced efficacy of copper nanoparticles in comparison to methanolic leaf extracts of *Eriobotrya japonica*-Loquat. Journal of Management Technology and Engineering. March, 2019; 9 (3): 4432-4439.
19. **Sunita Khatak**, Naman Wadhwa and Deepak Kumar Malik(2019). Comparative analysis of antimicrobial activity and phytochemical assay of flower extracts of *Butea monosperma* and *Cassia fistula* against pathogenic microbes. International Journal of Recent Scientific Research. March, 2019;10(3(B):31825-31290.
20. **Sunita Khatak**, Abhilasha, Hemlata and Deepak Kumar Malik (2019). Biological synthesis of copper nanoparticles using intra generic edible medicinal plants of *Rosaceae* family. International Journal of Chemical Studies. 7(3):753-756.
21. **Sunita Khatak**,Swati Dahiya and Deepak Kumar Malik (2019). Antimicrobial potential of different plant parts of *Ficus carica* against pathogenic microbes in correlation to phytochemical analysis. International Journal of Research in Applied Sciences and Engineering Technology.Apr2019; 7(4):548-552
22. **Sunita Khatak**, Deepak Kumar Malik and Rajesh Dahiya (2019). Tecoma stans-A noxious weed put to beneficial use. International Journal of Chemical Studies. 7(3):296-299.
23. Vivek Singh, Divya Bhatia, **Sunita Khatak**,Tarun Kumar and Deepak Kumar Malik(2019). Biological ecofriendly synthesis of nanoparticles and their applications.Biosciences Biotechnology Research Communication. March2019;12(1):134-139.
24. **Sunita Khatak**, Heena Singh and Aneeta Khatak(2019). Potential antimicrobial activity of three top branded market samples in comparison to original mother plant of *Trigonella corniculata*-Kasuri methi. International Journal of Recent Scientific Research. July, 2019; 07(H):33842-33846.
25. Rekha Sharma,Sonika Ahlawat,Himani Sharma Ved Prakash, Shilpa, **Sunita Khatak**, R.K. Sawal, Madhu Sudan Tantia(2020). Identification of a new Indian camel germplasm by microsatellite markers based genetic diversity and population structure of three camel populations. **Saudi Journal of Biological Sciences**. May,2020..DOI-<https://doi.org/10.1016/j.sjbs.2020.04.046>. s1319-562X(20)30168-6Impact factor-5)

26. Naman Wadhwa, **Sunita Khatak** and Poonam(2020). Online versus offline mode of education-Is India ready to meet the challenges of online education in lockdown. Journal of the Social Sciences. July, 2020, 48(3), 405-413.
27. **Sunita Khatak**, Naman Wadhwa and Poonam(2020). . Implementing CODIS in India –A double edge sword. Journal Of Advanced Scientific Research (Dec, 2020), Vol 11(4):37-43. (ISSN -0976-9595).
28. **Sunita Khatak**, Naman Wadhwa and Pranay Jain(Dec, 2020). Monometallic Zn and Bimetallic Cu-Zn nanoparticle synthesis using stem extracts of *Cissus quadrangularis* (Haddjod) and proneness as alternative antimicrobial agents. Bioscience Biotechnology Research Asia. 17(4): 763-774.
29. **Sunita Khatak**, Naman Wadhwa and Pranay Jain (Oct-Dec, 2020). Efficacy of methanolic extract of fruit pulp and leaf of *Terminalia chebula* and *Aegles marmelos* against *Staphylococcus aureus*. Bioscience Biotechnology Research Communications.Vol13(4):2099-2107.(ISSN-0974-6455)
30. **Sunita Khatak**, Naman Wadhwa, Aashish Kumar Pandey, Priyanka and Poonam(July-Sep,2020). Public perception of genetic counselling in India-Opening minds eyes. Shodh Sarita,Vol-7(27):104-111.(ISSN-2348-2397).

[Year2021-2024]

31. **Sunita Khatak**, Naman Wadhwa and Pranay Jain(Oct-Dec, 2021). Phytogenic synthesis of nanoparticles from extracts of *Achyranthes aspera*-A panacea for dental health care. Bioscience Biotechnology Research Communication .Oct-Dec, 2021, Vol-14(4), pp-1901-1908. (UGC Listed journal).
32. **Sunita Khatak**, Naman Wadhwa and Rajesh Kumar (Jan, 2022).. NEP-2020-A review cum survey based analysis of myths and reality of education in India (Jan, 2022).Int. Journal of Advances in Management, Technology and Engineering Sciences.ISSN-2249-7455.VOLUME-XII, ISSUE -1, pp12-22.
33. **Sunita Khatak**, Naman Wadhwa and Aashish Kumar Pandey (April, 2022). Synthesis, characterization and antimicrobial analysis of nanoparticles synthesized using *Terminalia chebula*(Harad). International Journal of Biology, Pharmacy and Allied sciences.ISSN—2277-4998,(April, 2022),Vol-11(4),pp- 2063-2079. (Web of Science indexed journal).
34. Neeharika Singh, Nancy Choudhary, **Sunita Khatak** and Meenu Rathi(July-2022). . Flowers – The noble role of most beautiful, plentiful but neglected bioresource in India, (July-2022). Int. Journal of Pharmaceutical Sciences and Research (IJPSR).ISSN-0975-8232, VOL-13 (7).pp- 2575-2586 .(Embase-a Elsevier product journal).
35. **Sunita Khatak**, Harinder Singh and Rajesh Kumar (July, 2022). E-Waste-A furiously growing technical waste with minimum management perspectives in India. International Journal of Biology, Pharmacy and Allied sciences.ISSN—2277-4998, July, 2022, Vol-11(7),pp-3344-3360, (Web Of Science Indexed Journal).
36. **Sunita Khatak**, ,Laxmi Bhatti and Meena Bagiyal (Jan-March,2023).Bimetallic nanoparticles– Expanding grassroots in medical health care through enhanced microbial resistance. Bioscience Biotechnology Research communication,Vol-16(1),Jan-March,2023,pp 54-63.
37. **Sunita Khatak**, Laxmi Bhatti and Pranay Jain (June,2023). Dental health care changing scenario from 1980s to ancient knowledge to 2020s, Nanodentistry. International Journal of Biology, Pharmacy and allied Sciences,(IJBPAS), ,vol-12(6),pp-(2852-2868).

38. Meena Bagiyal, Laxmi Bhatti and **Sunita Khatak** (JAN-JUNE,2023). Multiple factors affecting female fertility and proclivity towards herbal drugs developing and developed countries. Rabindra Bharti Journal of Philosophy(ISSN-0973-0087),vol-XXIV,pp139-148..
39. Abhishek Kumar ,Pradhumann Kataria and **Sunita Khatak** (JAN-JUNE2023). Landmine detection by transgenic plants –A placebo or ignition to new concept. Madhya Bharti-Humanities and Social sciences journal, UGC CARE GROUP -1,VOL-84,NO-21,,pp49-56.
40. Laxmi Bhatti,Meena Bagiyal and **Sunita Khatak** (March2024). Zinc nanoparticles and nanocomposite membrane synthesized using leaves of *Cinnamomum tamala* (Tejpatta) and packaging potential in food sector. Biosciences and Biotechnology Research Asia, Vol-21(1),pp-123-137.

(2024-Onwards)

1. Sumit Bhatti, Laxmi Bhatti and **Sunita Khatak**, 3D-Bioprinting –An eye to future aspects for space, cell, tissue engineering and organ regeneration. Int. Journal of biological pharmaceutical and allied sciences (IJPAS),Vol-13(10),October,2024,
2. **Sunita Khatak**. TLC (Thin layer chromatography)to construct chemical fingerprint of ashwagandha(*W. somnifera*)-A rejuvenating herb. Research Journal of Biotechnology(Scopus indexed), Vol20(3),March,2025,pp181-190.
3. **Sunita Khatak**, and Rajesh Kumar. HPTLC- A simple and sensitive method to characterize thirty chemotypes and total alkaloid content in Ashwagandha (*W. Somnifera*). Research Journal of Biotechnology (Scopus indexed),Vol-20(2),Feb,2025,pp147-156.
4. Laxmi Bhatti, Kamaljit Panchal, _Rajesh Kumar and **Sunita Khatak**. Green synthesis, characterization and Evaluation of the degradation potential of bimetallic copper-zinc nanoparticles for azo dye using Red Sage (*Lantana camara*).**Accepted** For Research Journal of Biotechnology (Scopus indexed).
5. Laxmi Bhatti and **Sunita Khatak**. Green synthesis of bimetallic copper-zinc nanoparticles using leaf extract of *Lantana camara* and their antioxidant and antimicrobial activity. **Accepted** for Research Journal of Biotechnology (Scopus indexed).

BOOK CHAPTERS.

1. Manjit Kaur, **Sunita Khatak** and Harinder Singh. Noble role of phytochemicals in nanoparticle synthesis and as proven antimicrobial agents:-A review. Book chapter in book entitled-Microbes for Humanity and its Application. Astral International pvt.ltd. New delhi-110002.**Feb, 2022**.ISBN-978-93-5461397-5(HB).
2. Harinder Singh, **Sunita Khatak** and Manjit Kaur. DNA Sequencing: Its generations and interpretations-A review. Book chapter in book entitled-Microbes for Humanity and its application. Astral International pvt. Ltd., New delhi-110002.**Feb, 2022**. ISBN-978-93-5461397-5(HB).
3. Aayushi Gaur,**Sunita Khatak**,Laxmi Bhatti,,Ajay Singh and Meena Bagiyal.**Analysis of Zinc nanoparticles synthesized using leaves of *Solanum nigrum*(Solanaceae) and its microbiological application** Book Chapter In Edited Book Entitled Advances In Engineering Sciences And Management,Proceeding of Int.Conference on Joint Modernistics and Innovative Technology,Iterative International Publishers,Vol-1,2023,pp-90-100.ISBN-978-93-5747-053-7,Karnatka India.

4. **Sunita Khatak**, Aayushi Gaur, Laxmi Bhatti, and Meena Bagiyal. **Functionalization of nanoparticles synthesized using leaves of *Chenopodium album* against dental pathogens**. Book Chapter In Edited Book Entitled Advances In Engineering Sciences And Management, Proceeding of Int. Conference on Joint Modernistics And Innovative Technology, Iterative International Publishers, Vol-1, 2023, pp-118-133. ISBN-978-93-5747-053-7, Karnatka India.
5. **Sunita Khatak and Aneeta Khatak**. Turmeric – A household spice cum- medicine in Pharma sector for healthcare., Book Chapter in edited book entitled Recent advances in Pharmaceutical Sciences, Vol-17 Publisher – INNOVARE Academic Sciences Pvt. Ltd, Bhopal, M.P., May, 2024, ISBN-978-81-964888-6-4.

4.3 Research Papers Presented (International/National Journals and conference proceedings)

- 1..Poster presented on “**A simple and efficient approach for conservation of germplasm and sustainable utilization of selected medicinal plants in India**” in **International conference on Crop Technology led agriculture development and sustainability of Eco-system** in organized by Department of Economics, University College, Kurukshetra University, Kurukshetra from **26th -27th March 2015**.
- 2.Participated and presented poster in **International conference on Bio and Nano Technologies for sustainable agriculture, food, health, energy and industry (ICBN-2018)**. Organized by Department of Bio and Nano Technology, GJU&ST from **21-23, MARCH, 2018**.
3. Paper presented on **Potential of monometallic zinc and bimetallic CU-Zn nanoparticles synthesized using *Chenopodium album* –An obnoxious weed of Amaranthus family** in **ICRABAS-2021, International conference on recent advances in basic and applied sciences**. In association with IQAC from **27-28, August, 2021**.
4. Paper presented on **Functionalization of nanoparticles synthesized using *Chenopodium album* against dental pathogens** in **International conference on Joint Modernistic& Innovative Technology** organized by JMIT, RADAUR from **25-26, March, 2022**.
5. Paper presented on “**Ethical mindset of youngsters in preferring younger generation over senior citizens during pandemic in India-Loosing grounds and Morality**” in **International Conference On Global Dynamics In Management, Health, Social Sciences, Sciences and Engineering**. NIILM University, KAITHAL, HARYANA, INDIA, DATED **17TH DEC., 2023**.
6. Poster presented on “**Bio & nanotechnology in developing climate resilient crops and role in present status of agri-sector in India**” in **International conference on Rejuvenating salt affected ecologies for land degradation, neutrality under changing climate**. **14-16th Feb, 2024**, ICAR INSTITUT, CSSRI, KARNAL, HRY, INDIA.
- 7.. Paper presented in **Deteriorating air quality index, its detrimental effects on health and threat of neurological and cardiovascular disorders in upcoming generations**. 2ND International conference OF INDIAN SCIENCE CONGRESS ASSOCIATION-ROHTAK CHAPTER, On Science and Technology for sustainable future(.ICSTS-2024) **7-8, Feb, 2024**, UIET, MDU, ROHTAK, HRY, INDIA.
8. Paper presented On **Pandemic, epidemic and outbreak history of different diseases and their after effects on human from time immemorial**. International conference on Recent advances in Education, research, Social sciences and engineering. **Jan, 12, 2024**. PGDAV COLLEGE, UNIVERSITY OF DELHI, NEW DELHI, INDIA.
9. Paper presented in **Controversial case study of clinical trials in downfall of big brand Pharma companies in India-Defamation and Savage**. International conference on international day of women & girls in Sciences **11th Feb, 2024** M.D.S.D. COLLEGE, Ambala City ,HRY.

10. Paper presented on **ISSR marker based genetic diversity analysis in different genotypes of *Cassia tora*** in 7th **National Conference** on Recent advances in Chemical, Biological and environmental Sciences, organized by Department of Biotechnology and Chemistry, Multani Mal Modi College Patiala (Punjab), India from **30th to 31th January 2015**.

11. Poster presented on “**An efficient method to micropropagate *Prosopis cineraria***” in 5th **National conference** on Chemical sciences; Emerging scenario and Global challenges” organized by Arya Post Graduate college, Panipat, Haryana on **26 March, 2016**.

12. Poster presented on “**Comparative analysis of antimicrobial activity from different parts of *Ficus carica***” in **National conference** on Biodiversity and Sustainable utilization of plant resources, Organized by Botany Department of Kurukshetra University, Kurukshetra from **17th to 18th Feb, 2017**.

13. Paper presented On **Axillary bud proliferation and genetic stability of *in vitro* grown *Actinidia deliciosa* (kiwi)**. National Conference on Recent Advances in sustainable approaches for biological sciences. (RASA-BIO-2024) **29-31, Jan, 2024**, Deptt. of biotechnology, Veer Narmad South Gujarat University, Surat, GUJRAT, India. SPONSORED BY DRDO, MINISTRY OF DEFENCE, GOI, NEW DELHI

5. Post Graduate students

5a) Doctorate students status (Total-4) (2021-2024)

Sr.No.	Name of student	Session	Status/Title
1.	Laxmi Bhatti	May, 2021-onwards	Synthesis, characterization and Functionalization of bimetallic Copper-Zinc nanoparticles in plant growth and health sector using weed plant- <i>Lantana camara</i> .
2.	Meena Bagiyal	June, 2021-Onwards	Deciphering the genetic basis of unique attributes of Kadaknath chicken through genomic and transcriptomic analysis.
3.	Kusum Rani	Dec, 2022-Onwards	Unraveling the role of oct4, sox2, and nanog in buffalo scnt embryonic development.
4.	Manisha Rani	March, 2023-Onwards	(coursework finished)

5b) M. Tech. Dissertation guided: 21 students and 2 pursuing.

Sr. No.	Student Name	Session	No. of Students	Title of Dissertation
1.	Kanika	2009--2011	2	Analysis of genetic variability among <i>Withania somnifera</i> (L.) Dunal.
	Deepika Dahiya			Analysis of genetic variability among different <i>Cannabis</i> sp.. seized from various regions of Haryana
2.	Sonia Baches	2010-2012	2	Development of protocol for In vitro plant propagation of Gumar (<i>Gymnemas ylvestre</i>) with emphasis on initial culture establishment
	SumitaSaini			Development of protocol for In vitro propagation of <i>Catharanthus roseus</i>
3.	ArshiyaBattan	2011-2013	4	Molecular variation and fingerprinting of <i>Cassia tora</i> genotypes by ISSR markers
	NitinChauhan			Genetic diversity ananalysis of <i>Gymnema sylvestre</i> using inter simple sequence repeat ISSR markers
	Mansi			Genetic characterization of regional varities of <i>Cannabis</i> (Bhang) by ISSR markers
	Kiran			Comparative analysis of antimicrobial potential of <i>Gymnema sylvestre</i> leaves (in vivo) and callus (in vitro) produce by leaves
4.	Megha	2012-2014	3	Development of protocol for In vitro propagation of <i>Prosopis cineraria</i>
	Shikha			Antimicrobial, phytochemical and antioxidant properties of <i>Elettaria cardamomum</i>
	Preeti			Evaluation of antimicrobial, antioxidant activity and phytochemical analysis in <i>Cassia tora</i>
5.	Ramender Pal Kaith	2013-2015	2	An efficient micro propagation system for <i>Prosopsis cineraria</i> (L.) Druce: A medicinally important plant
	Karamvir			Effects of different plant growth regulators on In vitro propagation of <i>Tecomella undulata</i>
6.	Swati Dahiya	2014-2016	3	Evaluation of antimicrobial activity of leaves, bark and fruits from <i>Ficus carica</i> against pathogenic bacteria
	Komal			Comparative analysis of Antimicrobial potential of leaves induced from regenerated shoots (In vitro) and leaves (In vivo) of <i>Tecoma stans</i>
	Baspreet			Comparative analysis of Antimicrobial efficacy in commercial samples of Fenugreek (<i>Trigonella foenum-graecum</i>)
7.	Divya	2015-2017	1	Isolation and screening of strict anaerobic bacteria for enhance bio-butanol production

8.	Tamali	2016-2018	1	Elucidation of the effect of Lupeol on the HGF mediated activation of cMET and its anti-migratory potential on MCF-7 breast cancer cell line
9.	Shilpa	2017-2019	2	STR based analysis of molecular diversity and distinctness of sindhi camel of Rajasthan.
	Avni			Preclinical evaluation of antivenom efficacy against viper venom collected from different locations.
10.	Ashish Kumar Pandey	2019-2021	1	Green synthesis of monometallic Zinc and bimetallic copper-Zinc nanoparticles from <i>Chenopodium album</i> and potential applications
11.	Diksha Sharma	2023-2025		(pursuing)
12.	Pankaj Sharma	2024-2026		(pursuing)

6. Infrastructure development:

- *Established Plant Cell Tissue Culture Lab in the Department.*
- *Developed infrastructure for Lab on Microbial technology.*

7. Events /workshop/Lecture series/participated/ organized and attended

7.1 Workshop /Seminar/Lecture series/ Events Organized)(2017-2024)

1. Organised TEQUIP-2 and U.I.E.T., KUK sponsored **workshop** on “**Molecular characterization of genetic variability in medicinal plants**” from 9th-10th March, 2017(Convenor), Department of Biotechnology, U.I.E.T, Kurukshetra University, Kurukshetra.
2. Tequip -2 sponsored **Two days workshop** on “**Bioprospecting microbes for industrial applications**” from 27th-28th,March, 2017(**Organizing committee member**), Department of Biotechnology, U.I.E.T, Kurukshetra University, Kurukshetra.
3. “**Opportunities and challenges to womens in STEM**” WORKSHOP, 24-25Jan/2018, Faculty of Life sciences ,Engineering & Technology of Kurukshetra University, Kurukshetra. (**Organizing committee member**),
4. Tequip Sponsored **Three days lecture series** on “**Opportunity and challenges in different sector of biotechnology**” on 7th-9th,March, 2018, Department of Biotechnology as **Co- convener**.
5. Interdisciplinary **Short Term Course** on “**Sustainable renewable energy: Science Technology and development**” sponsored by MHRD under TEQIP-III project from 19-25,March,2018,(**Organizing committee member**).
6. Organised **Faculty Development Programme** on “**Opportunities and Challenges in Biotech sector post Covid**. Biotech Deptt., UIET, KUK from 8-12,March,2021 as **Co-Convener**.
7. Seminar- on **Advances in Cancer Diagnostics & Treatment** on Friday 18th Nov.,2022—as Co-coordinator at UIET,KUK by BIOTECHNOLOGY DEPARTMENT,UIET ,KUK.
8. 2 days workshop conducted as **Convener** on **Data mining-Applications in retrieving biological data**, BIOTECH DEPARTMENT, UIET, KUK from Feb28th-1 March, 2023.

Webinars Conducted (2019-2020)

1. Conducted Teqip sponsored Webinar on “**Artificial intelligence -beyond mind eyes**” on 19th June, 2020 using online platform google meet under Teqip-III. Department of Biotechnology.
2. Conducted webinar on “**Covid-19 –Challenges and Opportunities**” on 23rd July, 2020 under Teqip-III using online platform google meet(G-Suite), Department of Biotechnology.
3. Conducted Webinar on “**Gender Equality-A myth or reality**” on 26th July, 2020 under Teqip-III funds using online platform google meet(G-Suite), Anti Sexual Harassment committee of UIET.
4. Conducted Student-Alum interaction on topic “**Advancing for a career in Intellectual Property Rights: a talk by UIET alumni**” on 13th June, 2020 using google meet.com as online platform, Department of Biotechnology.

7.2 Workshop /Seminar/Lecture series/ Events Participated)

1. **Attended Short term course** on Biotechnology and Biochemical Engineering from 19th to 23rd November, 2007 at National Institute of Technical Teachers Training and Research at Sector 26, Chandigarh.
2. Attended **orientation programme-2** held in academic staff college from 19th July, 2010 to 14th Aug, 2010
3. Attended **Refresher programme** held in academic staff college from 14th June, 2011 to 4th July, 2011 in the subject of Information Technology(Biotechnology) organized by Department of Computer Sciences and Applications.
4. Participated in **Seminar** on IBM technology Department of Computer Sciences, U.I.E.T., Kurukshetra University, Kurukshetra. 5th Nov, 2015.
5. Participated in **One day Seminar** cum orientation programme on **Entrepreneurship in Biotechnology**. 19th of September, 2016, Department of Biotechnology, U.I.E.T., Kurukshetra University, Kurukshetra.
6. Participated in **One week workshop** on Productivity enhancement Program(PEP) Teqip-III sponsored workshop affiliated to World Bank NPIU from 22-27th July, 2019.
7. Participated in **one day workshop** on “**Proteomics in Life Science Research**”, Organised by Department of Biotechnology, U.I.E.T., Kurukshetra University, Kurukshetra. 27-28 August, 2019.
8. **Three days Training on Functional Characterization of differential Gene Expression under salt stress**. Sponsored by ICAR, NASF, organized by CSSRI, Karnal, Hayana from 11-13 Sep, 2019.
9. Participated in **Faculty Development Programme on “Genetically engineered plants: Biosafety considerations, Policies, challenges and detection strategies”**, (Virtual Mode), ICAR, NBPGR, New Delhi sponsored by DBT from 19th July-25th July, 2022.
10. Participated in **Scientific writing** using Latex and Overleaf(one day FDP) ACE COLLEGE AMBALA, HRY conducted on 31ST July, 2022.
11. Invited talk on “**Nanocatalyst driven synthesis of biofuel as potent alternative to combat pollution**”, at GJU, University, Hisar in International conference on Global challenges in Environment, Food, and Biotechnology for sustainable development, from **21-23 Feb, 2024**.

12. **Attended one week workshop on Recent advances in Design,Manufacturing and testing of composites, organized by Deptt. of Mechanical engineering ,Chaitanya Bharathi Institute of Technology(A) in collaboration with Advances Systems Laboratory(ASL),DRDO and Indian Society for Advancement of Materials and process Engineering, Hyderabad FROM 6TH OF January -11th of Jan,2025.**
13. **Attended workshop on Atificial Intelligence in clinical research and Pharmacovigilance,Jan16th-Jan19,2025.organized by IMSR(Institute of management sciences and Research**
14. **Attended 10 days Workshop on Crisper- Cas genome editing in animals at NDRI, KARNAL FROM 8TH of Feb, 2025-17th of Feb,2025.**

8. Honours, awards and achievements (If any):

- ASRB-NET (National Eligibility Test) in Biotechnology (Agricultural Science) in June, 2004.
- Scholarship awarded by M/S Monsanto Enterprises Pvt. Ltd. during M.Sc. Programme(2000-2002)
- Merit Scholarship awarded by CCS H.A.U. during Ph. D programme (2003-2007).
- One year experience as an SRF in CSIR funded project entitled '**Identification of gender specific marker in date palm (*Phoenix dactylifera* L.)**',Tenure14thFeb,2006-30th Dec,2006)
- **Membership in professional bodies:**
- Member of Biological society in college from 1998-2000.
- Member of Board of Studies (UIET, 2015-2024).
- **Member of World Researcher Association from (2023-2024).**
- **LIFE Member of The Association of Microbiologist of India,(Membership No- 5614-2024)**
- **Life member of ISAMPE(Indian Society for Advancement of Materials and Process Engineering, Hyderabad Chapter,(NO-L-2336).**

Membership in Institute/ University Committees

1. Co-coordinator of Department Time table committee (2022-23, 23-24, 24-25).
2. Co-convenor of Discipline committee and Anti ragging committee (2017-18, 18-19).
3. Member of Training and Placement committee (2017-2018, 18-19).
4. Convener and Member of Anti Sexual Harassment committee.(2017-18,18-19,19-20,20-21,24-25)
5. Member of Sessional exam conduct committee (2019-2020).
6. Member of Grievance committee.(Internal complaint)(2019-2020,2020-2021).
7. Member of sports committee (Pratispardha, 2018-2019).
8. Member of cultural and technical event committee (Genesis-2022-23, 23-24, 24-25).
9. Member of Admission committee B. Tech and M. Tech (2017-2018, 2024-2025).
10. Convener, Ph. D affair committee (2021-22, 22-23, 23-24).

9. Any additional roles and responsibilities

- a) Acted as **Depti- superintendent** and **Centre Superintendent** in **December 2015, 2018** respectively.
- b) Designed **scheme and syllabus of M. Tech Biotech** as coordinator.

- c) Proctorial duties in Ratnawali, Convocation, Geeta Seminars and other departmental entrance exams(2015-2024)
- d) Have been in selection committee as women and SC representative.

I hereby declare that the information stated above is true to the best of my knowledge.

(Dr. Sunita Khatak)