

Dr. Babita Khosla

M.Sc. (Biotech), Ph.D

Associate Professor

Department of Environmental Science

Maharshi Dayanand University

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AREA OF SPECIALIZATION: Environment Microbiology, Ground water monitoring

EDUCATION

QUALIFICATION	DISTINCTION	INSTITUTION	YEAR OF AWARD
Ph. D (Biotechnology)	-	Thapar University, Patiala	2005
M. Sc (Biotechnology)	Gold Medal	Punjabi University, Patiala	1999
B. Sc (Medical)	Gold Medal Roll of Honor	Punjabi University, Patiala (Govt. Mohindra College)	1997

ORGANIZATIONAL/ ACADEMIC EXPERIENCE: 18 YEARS

INSTITUTION	PERIOD	POSITION
Department of Environmental Science Maharshi Dayanand University, Rohtak	25-2-2023 onwards	Associate Professor
Department of Environmental Science Maharshi Dayanand University, Rohtak	15-2-2011 to 24-02-23	Assistant Professor
Ambala College of Engineering & Applied Research, Ambala affiliated to Kurukshetra University, Kurukshetra.	11-8-2008 to 14-2-2011	Assistant Professor
Ambala College of Engineering & Applied Research, Ambala affiliated to Kurukshetra University, Kurukshetra.	16-7-2005 to 11-8-2008	Lecturer
N.C. College of Engineering, Israna affiliated to Kurukshetra University, Kurukshetra)	7-2-2005 to 15-7-2005	Lecturer

ACADEMIC STAFF COLLEGE ORIENTATION/REFRESHER COURSE/FDP ATTENDED:

PROGRAM	DURATION	SPONSORING AGENCY AND PLACE
Workshop on "Climate change and Environmental	22-3-21 to 26-3-21	Teaching Learning Centre, Central University of Punjab, Bathinda

sustainability”		
Faculty development Programs	18-10-21 to 23-10-21	Faculty Development Centre, Maharshi Dayanand University, Rohtak.
Faculty development Programs	08-6-20 to 14-6-20	Teaching Learning Centre, Ramanujan College, University of Delhi
Refresher Course (Information Communication Technology Interdisciplinary)	18-6-18 to 7-7-18	UGC – Academic Staff College, Punjabi University, Patiala, Punjab
Refresher Course (Research Methodology in Sciences Interdisciplinary)	11-6-14 to 1-7-14	UGC – Academic Staff College, Kurukshetra University, Kurukshetra, Haryana
Orientation Program	14-6-13 to 11-7-13	UGC – Academic Staff College, B.P. S. Mahila Vishwavidalya Khanpur Kalan (Sonapat)

PROJECTS

NAME OF RESEARCH PROJECT	AMOUNT (In Rupees)	FUNDING AGENCY	PERIOD
Spatial Distribution of Uranium in Groundwater and Drinking water in Churu and Jhunjhunu Districts of Rajasthan.	21.76 lacs	BRNS, Department of Atomic Energy, Government of India.	2017-2021
Spatial Distribution of Uranium in Groundwater and Drinking water in Rohtak, Bhiwani, Jhajjar, Rewari and Mahendergarh Districts of Haryana.	27.56 lacs	BRNS, Department of Atomic Energy, Government of India.	2015-2018
Dy. Coordinator; Innovative Program to Strengthen M.Sc (Environment Biotechnology) in Dept. of Environmental Science at MDU Rohtak	40.00 lacs	UGC, New Delhi	2012-2017

DEVELOPMENT OF E-CONTENT UNDER NATIONAL MISSION ON EDUCATION THROUGH ICT OF MHRD-GOI

PAPER NAME	ROLE	LINK
Environmental Microbiology and Biotechnology	Paper Coordinator	https://epgp.inflibnet.ac.in/view_f.php?category=284
Environmental Pollution: Water and Soil	Content Writer	https://epgp.inflibnet.ac.in/view_f.php?category=280

RESEARCH GUIDANCE

S. No.	Name of the Scholar	Title of the Thesis	Awarded / Thesis submitted	University	Month and Year
1	Sonam Yadav	Microbial degradation of keratinous waste and its effects on plants.	Degree awarded	MDU Rohtak	October 2021
2	Priyanka Bumbara	Composting of poultry feathers and its bio efficacy on growth and physiology of plants.	Submitted	MDU Rohtak	February 2025
3	Naresh Tanwer	Assessment of uranium in groundwater of Jhunjhunu district of	Pursuing	MDU Rohtak	-

		Rajasthan and its impact on soil biological properties.			
4	Vaishali Arora	Synthesis of phosphate Nano fertilizer and its effect on growth and yield of wheat (<i>Triticum aestivum</i>).	Pursuing	MDU Rohtak	-
5	Manisha Lochab	Preparation of micronutrient based nanofertiliser and its effect on plant growth parameters.	Pursuing	MDU Rohtak	-

PUBLICATIONS

1. Arora V, Khosla B. Synthesis of phosphorus nano-fertilisers their strategic applications and effect on plant growth, International Journal of Environmental Science and Technology, 2024. (Impact Factor: 3.0)
2. Tanwer N, Anand P, Singh KK, Singh B, Laura JS, **Khosla B**. Outdoor γ -radiation: seasonal variation and health risk assessment associated with its exposure in northern districts of Haryana, India. Journal of Radioanalytical and Nuclear Chemistry, 2023. (IF:1.6)
3. Tanwer N, Deswal M, Khyalia P, Laura JS, Gautam YP, **Khosla B**. Mapping of outdoor gamma radiation and consequential health risk assessment in north-eastern regions of Rajasthan, India. Environmental Forensics, 2023. (IF: 1.8)
4. Tanwer N, Deswal M, Khyalia P, Laura JS, Fluoride and nitrate in groundwater: a comprehensive analysis of health risk and potability of groundwater of Jhunjhunu district of Rajasthan, India. Environmental Monitoring and assessment 195 (2), 2023: 267 (IF:3.307)
5. Tanwer N, Deswal M, Khyalia P, Laura JS, **Khosla B**. Assessment of groundwater potability and health risk due to fluoride and nitrate in Churu district of Rajasthan, India. Environmental geochemistry and Health, 2023. (IF: 4.898)
6. Tanwer N, Khyalia P, Deswal M, Laura JS, **Khosla B**. Spatial distribution of uranium in groundwater and its health risk assessment in Haryana, India. Rasayan Journal of Chemistry, 15(01), 2022; 343-349.
7. Bumbra P, **Khosla B**, Behl RK. Valorization of poultry feathers into value added products, Annals of Biology, 38 (1), 2022; 118-122.
8. Yadav S, Bumbra P, Laura JS, **Khosla B**. Optimization of nutritional and physical parameters for enhancing the keratinase activity of *Bacillus cereus* isolated from soil of poultry dump site in Gurugram, Haryana. Bioresource Technology Reports, 2022; 18, 101108.
9. Khyalia P, Laura JS, **Khosla B**, Sahoo SK, Tiwari SN, Nandal M. Analysis of effective equivalent dose to the organs and cancer risk assessment due to natural outdoor gamma radiation in Eastern Thar desert, India, International Journal of Environmental Analytical Chemistry, 2022; 1-13. (IF:2.731)
10. Yadav S, **Khosla B**. Biostimulant effect of poultry feather hydrolysate on maize (*Zea mays* L.) seedlings. Annals of Biology 36 (3), 2020, 508-512.
11. Rastogi M, Nandal M, **Khosla B**. Microbes as vital additives for solid waste composting, Heliyon, 6 (2), 2020.
12. Barapatre S, Rastogi M, **Khosla B**, Nandal M, Synergistic Effect of Fungal Consortia and C/N Ratio Variation on Rice Straw Degradation, Nature Environment & Pollution Technology, 19(5), 2020; 1831-1839.
13. Deswal M, **Khosla B**, Nandal M, Laura JS. Spatiotemporal distribution of Fluoride in groundwater of five South-West districts of Haryana, India. Aut Aut, 2020,11(9):25-31
14. Yadav S, **Khosla B**. Biodegradation of poultry feather waste by keratinase producing *Bacillus cereus* strain isolated from poultry farms waste disposal site. Case Studies in Chemical and Environmental Engineering, 2021, 100114.

15. Anjali S. Nair, Machiavelli Singh and **Babita Khosla**. 2019 Phytoremediation of heavy metals contaminated soil using *Tegetes patula*. Annals of Biology.
16. **Babita Khosla**, Pravin Kumar Sharma, Mohammad Ahatsham, Vikash, Pratima Vijay Dahiya, Rishi Kumar Behl 2019 Performance of Wheat Genotypes for Grain Yield and its Attributes under Irrigation with Saline Water. Ekin Journal of Crop Breeding and Genetics 5(2):92-96.
17. Ravneet Chug , **Babita Khosla** and Machiavelli Singh. 2015 Modulation of the Extracellular Polymeric Substances (EPS) Production by Quorum Sensing (QS) in Bacteria. International Journal of Current Microbiology & Applied Science 4(6): 884-896.
18. **Babita Khosla** and M.S. Reddy. 2014 Mycorrhizal fungi in extreme environments and their impact on plant growth. Kavaka 42: 123-130.
19. Machiavelli, Pankaj Bhatia, Pragati Sharma and **Babita Khosla**. 2014. Characterization for plant growth promoting rhizobacteria towards rice seedling germination and growth. Annals. of Biology 30(4): 567-573.
20. **Babita Khosla** and Sneh Sagarika. 2012. Study on hypoglycemic effect of *Trigonella foenum graecum* seeds extract in alloxan-induced hyperglycemic mice. Proceedings of Challenges in Combating Diseases: Cause to Cure 1-3.
21. **Babita Khosla**. Harpreet Kaur and M. Sudhakara Reddy. 2009. Influence of ectomycorrhizal colonization on the growth and mineral nutrition *Populus deltoides* under aluminium toxicity. Journal of Plant Interactions 4 (2) 93-99. (IF: 0.865)
22. **Babita K** and M. S. Reddy. 2008. Response of ectomycorrhizal fungi on the growth and mineral nutrition of Eucalyptus seedlings in bauxite mined soil. American-Eurasian J. Agric. & Environ. Sci. 3 (1):123-126.
23. G. Richa, **Babita Khosla** and M. Sudhakara Reddy. 2007 Improvement of maize plant growth by phosphate solubilizing fungi in rock phosphate amended soils. World Journal of Agricultural Sciences. 3 (4): 481-484.
24. M. Sudhakara Reddy, Surinder Kumar, **K. Babita**, M.S. Reddy. 2002. Biosolubilization of poorly soluble rock phosphates by *Aspegillus tubingensis* and *A. niger*. Bioresource Technology 84: 187-189. (IF: 11.889)
25. M. Sudhakara Reddy, **K. Babita**, G. Gay and V.Ramamurthy. 2002. Influence of Aluminum on mineral nutrition of ectomycorrhizal fungi *Pisolithus* sp. and *Cantharellus cibarius*. Water, Air and Soil pollution 135: 55-64.(IF: 2.984)

BOOK CHAPTERS

1. Vaishali Arora, Naresh Tanwer, Babita Khosla, Jitender Singh Laura (2024) Distribution of plastic debris and associated contaminants in Indian river ecosystem and their ecological implications in book River Basin Ecohydrology in the Indian Sub-Continent: Sustainable Strategies and Sustenance, Elsevier, ISBN 978-0-323-91545-8
2. Naresh Tanwer, Krishan Kant, Bhupender Singh, Jitender Singh Laura, Babita Khosla (2024) Uranium in groundwater is an emerging concern in Rajasthan, India: A study of distribution, potential sources, health impacts, and management strategies in book Environmental Metagenomics, Water Quality and Suggested Remediation Measures of Polluted Waters: A Combined Approach. Elsevier, ISBN 978-0-443-13660-3
3. Priyanka Bumbra, Babita Khosla (2024) Phytoremediation of Polluted Water Using Aquatic Macrophytes: A Sustainable Approach in book Biosensing to Biomanipulation: Microbes, Molecules and Gene Editing, Agaroacademics, ISBN 978-8-196-95370-6

4. Naresh Tanwer, Vaishali Arora, Krishan Kant, Bhupender Singh, Jitender Singh Laura, Babita Khosla (2024) Prevalence of Uranium in groundwater of rural and urban regions of India in book Water Resources Management for Rural Development Challenges and Mitigation, Elsevier, ISBN 978-0-443-18778-0
5. Pardeep Kumar, Babita Khosla, Machiavelli Singh (2023) Exploration and exploitation of bacterial cellulose for industrial applications in book Microbial Technologies and Their Applications, Nova Science Publishers, Inc. ISBN 979-888697937-4.
6. Naresh Tanwer, Priyanka Bumbra, Babita Khosla, Jitender Singh Laura (2022) Mercury pollution and its bioremediation by microbes in book Microbes and Microbial Biotechnology for Green Remediation, Elsevier, ISBN 978-0-323-90452-0
7. Babita Khosla, Vaishali Arora (2022) Effect of Plastic waste on human and animal life in book Plastic waste management: Turning challenges into Opportunities. Bharti Publications, ISBN: 9789391681067
8. Babita khosla, Naresh Tanwer, Sumit Vashistha, Poonam Anand (2022) Plastic waste Disposal in book Plastic waste management: Turning challenges into Opportunities. Bharti Publications, ISBN: 9789391681067
9. Babita Khosla Machiavelli Singh (2022) Intellectual Property Rights (IPR), Biosafety and Bioethics in Handbook of Biotechnology. Astral Publishers ISBN: 9789354614200
10. Babita Khosla, Ravneet Chugh (2022) Environment Biotechnology in Handbook of Biotechnology. Astral Publishers ISBN: 9789354614200
11. Babita Khosla, Priyanka Bumbra, Naresh Tanwar, Vaishali Arora, Jitender Singh Laura (2022) Microbial Inoculants: An Invasive Approach for the Bioremediation of Soil Contaminated with Heavy Metals in book Microbial and Biotechnological Interventions in Bioremediation and Phytoremediation Springer ISBN: 9783031088292
12. Babita Khosla, Vaishali Arora (2021) Conventional and Contemporary Techniques for Removal of Heavy Metals from Soil in book Biodegradation INTECHOPEN LIMITED. ISBN 978-1-83968-896-6
13. Babita Khosla, Vaishali Arora, Sangeeta Jonwal (2020) Bio-Based Plastics: A Sustainable Alternative to Conventional Plastic” in book Trends in Technology for Agriculture, Food, Environment and Health AGROBIOS (International) Publishers, Jodhpur India. ISBN: 978-81-947480-7-6
14. **Babita Khosla** and Vishal Behl (2019) “Biodiesel Production: Process and Current Scenario” in Emerging Technologies towards Agriculture, Food and Environment” by AGROBIOS (International) Publishers, Jodhpur India. ISBN: 9789381191224
15. **Babita Khosla** and M. Sudhakara Reddy (2018) “Aluminium tolerant isolates of ectomycorrhizal fungi for reclamation of bauxite mined out acidic soils” in Genetic and Natural Resources Towards Food, Energy and Environment by AGROBIOS (International) Publishers, Jodhpur India. ISBN : 978-93-81191-19-4
16. **Babita Khosla** and M. Sudhakara Reddy (2017) “Microbial degradation of keratinous waste and its potential applications in agro-industry” in Biotechnology and Bioscience Perspectives Agrobios (International) Publishers, Jodhpur India. ISBN : 978-93-81191-18-7
17. **Babita Khosla** (2015) “Biophysical and Bioanalytical Techniques” in Biotechnology – *Progress and Prospects*, Studium Press LLC, USA. ISBN No: 978-1-62699-059-3

18. **Babita Khosla** and Machiavelli (2012) “Mycorrhiza-a natural symbiont” in Environmental Biotechnology-Recent Perspectives Application and New Horizons of Environmental Biotechnology LAP, Germany. pp. 173-193

BOOKS

1. **Babita Khosla** and Machiavelli (2018) “BIOLAB MANUAL- A Handbook of basic and applied techniques in biotechnology” by Paging Publishers. ISBN: 978-81-93630-95-2
2. **Babita Khosla** Sangeeta Kumari and Machiavelli Singh (2022) “Modern concepts of Cell Biology and Biochemistry” by AGAROACADEMICS ISBN:978-93-94380-09-7

PRESENTATION IN CONFERENCES

1. Presented a paper titled “Soil nutrient augmentation by poultry feathers using keratinase producing *Bacillus cereus*” in 65th Annual International Conference of AMI on “Perspectives of microbes for human welfare” organised by Guru Jambheshwar University of Science and Technology, Hisar from 14th to 17th November 2024.
2. Presented a paper titled “Exploring synthesis routes for nano-phosphorus fertilizer: A comparative analysis” in National Seminar to celebrate “World Intellectual Property Day” organised by Centre for IPR studies in collaboration with Department of Pharmaceutical Sciences, MDU on 26th April 2024.
3. Presented a paper titled “Assessment of distribution of Uranium and health hazards associated to its long term consumption of groundwater of Jhunjhunu districts of Rajasthan, India.” in 4th World Environment Summit 2023 organised by Galgotias University, Greater Noida, U.P. 4th November -6th November, 2023.
4. Presented a paper titled “Mapping of outdoor gamma radiation and consequential health risk assessment in North-Eastern regions of Rajasthan, India” in National Conference on Promoting IPR in University System organised by Centre for IPR studies in collaboration with department of Zoology, Maharshi Dayanand University, Rohtak. 3rd June, 2023.
5. Presented a paper titled “Distribution and chemo-radiological health risk assessment associated to long term consumption of groundwater of Jhunjhunu district of Rajasthan, India” in International Conference Integrated approaches in Science and Technology for Sustainable Future organised by J.C. Bose University of Science and Technology, YMCA, Faridabad . 28th Feb-1st March, 2022
6. Presented a research documentary “Optimization of keratinase production by *Bacillus cereus* H16 isolated from waste disposal site of poultry farm” in International Conference Advances in sustainable research for energy and environmental management (ASREEM-2021) organised by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat.06-08 August, 2021
7. Presented a paper “Isolation and characterization of keratinase producing bacteria isolated from waste disposal site” in International Conference Recent developments and Challenges in earth and Environmental sciences, Natural resource Management & Climate change with special focus on eastern Himalayas” organised by Department of Geology, Sikkim University. 08-09 October, 2020.
8. Presented a paper titled “Keratin based bioplastic from feather quill” in National Seminar on “Frontiers in Life Sciences- An interdisciplinary Perspective’ organized by Deptt. of Zoology, MD University, Rohtak March 15, 2019
9. Presented a paper titled “Bioplastics from keratinous poultry waste” in International seminar on Sustainable environment and agriculture under global climate change, organized by Department of Environmental science, Maharshi Dayanand University, Rohtak. February 21, 2019.
10. Presented a paper titled “Phytoremediation of heavy metals from the effluent of electroplating industry using *Tegetes patula*” in national symposium on environment (NSE – 20). December 13-15, 2018 at IIT Gandhinagar, Gujarat.

11. Participated in 4th Workshop on “Generation of National Database on Uranium in Drinking water held at BARC, Mumbai during 29-31, August, 2018.
12. Participated in UGC sponsored national conference cum Awareness Programme on “Protection of Intellectual Property Rights- Need of the Hour” held on May 10, 2018 organised by Department of Pharmaceutical Sciences, Maharshi Dayanand University, Rohtak.
13. Presented a paper titled ‘Organic farming: A Sustainable approach in the field of agriculture’ in the International conference on Sustainable Agriculture, Energy, Environment and Technology ICSAEET-2018 February 24-25, 2018 organized by Environmental sustainability management Cell, Maharshi Dayanand University, Rohtak in collaboration with Society for Sustainable Agriculture and Resource Management.
14. Presented a paper titled ‘Assessment of Groundwater near a Municipal Solid Landfill Site of Rohtak, Haryana’ in 5th Rajasthan Science congress, October 13-15, 2017 held at Amity University Rajasthan.
15. Presented a paper titled ‘Microbial degradation of poultry waste’ in the National conference on Emerging Trends in Biochemistry (ETIB2017), September 15-16, 2017 organized by Department of Biochemistry, Maharshi Dayanand University, Rohtak.
16. Presented a paper titled ‘Distribution of saline soils in Haryana and their management’ in UGC sponsored National Seminar on ‘Biodiversity: Status and Significance’ March 21, 2017 organized by Department of Botany, Maharshi Dayanand University, Rohtak.
17. Presented a paper titled ‘Role of phosphate solubilising mycorrhizal fungi in reclamation of acidic soils’ in the International conference on Biodiversity: Current Scenario & Future strategies. October 6-8, 2016 organized by Department of Zoology and Botany, St. Bede’s College, Shimla, Himachal Pradesh, India.
18. Presented a paper titled ‘Microbial removal of chromium from the effluent of electroplating industry’ in the International conference on New approaches in Biotechnology and Biosciences. February 18-20, 2016 organized by Raja Balwant Singh Engineering Technical campus, Agra.
19. Presented a paper titled ‘Study on antimicrobial and antioxidant properties of *Withania somnifera*.’ in the National conference on Therapeutic potential of Natural Products: Current Innovations & Future Trends. March 19, 2015 organized by Department of Genetics, M.D.U, Rohtak under UGC-SAP Programme.
20. Presented a paper titled ‘Salinity tolerant plant growth promoting rhizobacteria in the soil.’ in the National seminar on Innovative Research in Life Sciences. February 21, 2015 organized by Department of Zoology, M.D.U, Rohtak
21. Participated in National Conference on “Contemporary issues in Biotechnology: Progress & Future Applications” April 2nd 2014 organised by Amity University, Gurgaon.
22. Presented a paper titled ‘Isolation of salt-tolerant bacteria from the saline soils of Haryana.’ in the National Seminar “Next Generation Sciences: Vision 2020 & Beyond” March 8th 2014 organized by Department of Zoology, M.D.U, Rohtak sponsored by UGC, New Delhi.
23. Presented a paper titled ‘Feeling the Heat- The climate change.’ in the National Seminar cum workshop “New Dimensions in Eco Management” February 25th 2014 organized by MCM DAV College for Women under the aegis of Star College Scheme, DBT, Govt. of India.
24. Presented a paper titled ‘Mineral response of ectomycorrhizal fungi for their tolerance to aluminium.’ in the International symposium on Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevance. November 17-20, 2013 organized by Association of Microbiologists of India.
25. Presented paper on “Studies on the influence of ectomycorrhizal fungi on the growth and mineral nutrition of *Eucalyptus tereticornis* seedlings grown in bauxite mined out soils..” in National Conference (1-3-2013 to 2-3-2013) entitled “Advances In Chemical Sciences” organized by Deptt. of Chemistry ,M.D.U, Rohtak.

26. Organised a National Workshop (3.5.2012 – 12.5. 2012) on “Microbial Diversity: Exploration and Perspectives” funded by Dr. Radha Krishnan Foundation Fund, MDU & Association of Microbiologists, Rohtak Unit & Promega.
27. Presented paper on “Study on hypoglycemic effect of *Trigonella foenum-graecum* seeds extract in alloxan-induced hyperglycemic mice.” in National Conference (23.3.2012) entitled “Challenges in Combating Diseases: Cause to Cure” organized by Deptt. of Zoology ,M.D.U, Rohtak.
28. Participated in 76th BRNS-IANCAS National Workshop (3.4.2011 – 11.4.2011) on “Radiochemistry and Applications of Radioisotopes” sponsored by Department of Atomic Energy at Thapar University, Patiala.

INVITED TALK IN INTERNATIONAL CONFERENCES HELD ABROAD

- Presented a paper titled ‘Aluminium tolerant isolates of ectomycorrhizal in bauxite mined out soils’ in the 7th IFSDAA-ICSA International Seminar on “Sustainable Resource Management Towards Food, Energy, Environment and Livelihood” November 27-29, 2016 organized by International Council for sustainable agriculture at Theodor Heuss, Goettingen, Germany.

RESOURCE PERSONS IN THE CONFERENCE/WORKSHOP

- Invited Speaker in the National conference (29.9.2012 – 30.9.2012) on “Emerging trends in Pharmaceutical Sciences” organized by Department of Pharmacy in collaboration with Department of Biotechnology at Manav Bharati University, Solan, HP.
- Resource person in a workshop “Techniques in Monitoring Environmental Pollution” October 25-26th 2013 organised by Department of Environmental science, M.D.U, Rohtak.
- Resource person in a seven day Youth Red Cross camp, June 8-14, 2016 organised at Mussoorie, Uttarkhand.
- Invited speaker in a National Workshop on “Promoting Rural technologies for skilling Youth in India” February 25, 2017 organised by Surender Kaur Memorial Agriculture College, Sriganganagar, Rajasthan in collaboration with MGIRI, National institute under Ministry of MSME, GoI.
- Resource person in a seven day Youth Red Cross camp, June 1-7, 2017 organised at Mussoorie, Uttarkhand.
- Invited Speaker in Indo-canada workshop on “Food and healthcare for wellness” February 20, 2020 organised by Jagannath University, Bahadurgarh, Haryana

COMMUNITY EVENT/ RADIO TALK

- **AIR Radio talk** “Career Counselling- Employment Opportunities in the field of Environmental Science.” in **ALL INDIA RADIO** (1143 KHz; 262.4Meters) at in Yuva Sansar Program on July 8th 2015 from Prasar Bharati Station - Rohtak.

MEMBERSHIP

- **Life Member**, IFSDAA Germany
- **Life Member**, Association of Microbiologists of India
- **Life Member**, Mycological Society of India
- **Life Member**, SSARM India
- **Life Member**, Indian Science Congress

I certify that the information given by me is correct to the best of my knowledge and belief and no material information has been concealed.

