# SIMRAN JIT

# PERSONAL PROFILE

E-mail address <u>simranjit@mirandahouse.ac.in</u>

Gender Female
Date of Birth 21.07.1982

Orcid ID <u>https://orcid.org/0009-0001-7816-6575</u>

#### **EDUCATION**

Ph. D. (Molecular Biology)	Department of Zoology University of Delhi, Delhi	2006-2011
M. Sc. Zoology (Spl-Cell Biology)	Hindu College University of Delhi, Delhi	2003-2005
B. Sc. Zoology (Hons.)	Gargi College University of Delhi, Delhi	2000-2003
CSIR-UGC JRF	Qualified	2005
NET-LS	Qualified	2004

#### TEACHING EXPERIENCE

Miranda House (Permanent) 20.7.2015 till date Miranda House (Ad-Hoc) 21.7.2011 22.5.2015 Gargi College (Ad-Hoc) 19.1.2011 till 7.6.2011

#### COMPLETE LIST OF RESEARCH PUBLICATIONS

#### FIRST AUTHOR

- 1. **Jit, S.,** Dadhwal, M., Kumari, H., Jindal, S., Kaur, J., Lata, P., Niharika, N., Lal, D., Garg, N., Gupta, S. K., Sharma, P., Bala, K., Singh, A., Vijgen, J., Weber R., and Lal, R. 2011. Evaluation of hexachlorocyclohexane contamination from the last lindane production plant operating in India. *Environ. Sci. Pollut. Res.* ISSN: 0944-1344 (Print) 1614-7499 (Online) 18: 586-597. *Impact factor: 2.83*
- 2. **Jit, S.**, Dadhwal, M., Prakash, O. and Lal, R. 2008. *Flavobacterium lindanitolerans* sp. nov. isolated from hexachlorocyclohexane-contaminated soil. *Int. J. Syst. Evol. Microbiol*. Print ISSN: 1466-5026; Online ISSN: 1466-5034. 58: 1665-1669. *Impact factor: 2.798*

## **CO-AUTHOR**

1. Garg, N., Lata, P., **Jit, S.**, Sangwan, N., Singh, A. K., Dwivedi, V., Nihariks, N., Kaur, J., Saxena, A., Dua, A., Nayyar, N., Kohli, P., Gueke, B., Kunz, P., Rentcsch, D., Holliger, C., Kohler, H. P. and Lal, R. 2016. Laboratory and field scale bioremediation of hexachlorocyclohexane (HCH) contaminated soils by means of bioaugmentation and biostimulation. Biodegradation. doi:10.1007/s10532-016-9765-6.

- 2. Dadhwal, M., **Jit, S.,** Kumari, H and Lal, R. 2009. *Sphingobium chinhatense* sp. nov., a hexachlorocyclohexane (HCH) degrading bacterium isolated from an HCH dump site. *Int. J. Syst. Evol. Microbiol.* Print ISSN: 1466-5026; Online ISSN: 1466-5034. 59: 3140-3144. *Impact factor: 2.798*
- 3. Nigam, A., **Jit, S** and Lal, R. 2010. *Sphingomonas histidinilytica* sp. nov. isolated from hexachlorocyclohexane (HCH)- dumpsite, India. *Int. J. Syst. Evol. Microbiol*. Print ISSN: 1466-5026; Online ISSN: 1466-5034. 60: 1038-1043. *Impact factor: 2.798*
- 4. Lal, D., & Jindal, S., Kumari, H., **Jit, S.**, Nigam, A., Sharma, P., Kumari, K., and Lal, R. 2013. Bacterial diversity and real-time PCR based assessment of *lin*A and *lin*B gene distribution at hexachlorocyclohexane contaminated sites. *J. Basic Microbiol.* JOBM201300211. Online ISSN: 1521-4028 2015 Mar; 55(3):363-73. doi: 10.1002/jobm.201300211. Epub 2013 Sep 3. *Impact factor:1.823*
- 5. Garg, N., Lata, P., **Jit, S.,** Sangwan, N., Singh A.K., Dwivedi, V., Niharika N., Kaur, J., Saxena. A., Dua A., Nayyar N., Kohli P., Gueke, B., Kunz, P., Rentsch D., Holliger, C., Kohler H.P.E. and Lal, R. 2016. Field scale bioremediation of hexachlorocyclohexane (HCH) contaminated soils by means of bioaugmentation and biostimulation. Biodegradation (Accepted for publication).
- 6. Dadhwal, M., Singh, A., Prakash, O., Gupta, S.K., Kumari, K., Sharma, P., **Jit, S.,**Verma, M., Holliger, C., and Lal, R. 2009. Proposal of Biostimulation for Hexachlorocyclohexane (HCH)-Decontamination and Characterization of Culturable Bacterial Community from High-Dose Point HCH-Contaminated Soils. *J. Appl. Microbiol.* Online ISSN: 1365-2672 106: 381-392. *Impact factor*:2.379
- 7. Lal, R., Dadhwal, M., Kumari, K., Sharma, P., Singh, A., Kumari, H., **Jit, S.,** Gupta, S.K., Nigam, A., Lal, D., Verma, M., Kaur, J., Bala, K. and Jindal, S. 2008. *Pseudomonas* sp. to *Sphingobium indicum*: a journey of microbial degradation and bioremediation of Hexachlorocyclohexane. *Ind. J. Microbiol.* ISSN: 0046-8991 (print version) ISSN: 0973-7715 (electronic version). 48: 3–18. *Impact factor*: 0.899.
- 8. Prakash, O., Verma, M., Sharma, P., Kumar, M., Kumari, K., Singh A., Kumari, H., **Jit, S.,** Gupta, S. K., Khanna, M. and Lal, R. 2007. Polyphasic approach of bacterial classification –An overview of recent advances *Ind. J. Microbiol.* ISSN: 0046-8991 (print version) ISSN: 0973-7715 (electronic version).47: 98-108. *Impact factor: 0.899*
- 9. Lal, R., **Jit, S.,** Verma, M., Dadhwal., M., Singh, A., Prakash, O., Sharma, P., and Khanna, M. 2006. Nanoorganisms: Smallest form of Life got smaller! (Research News) *Ind. J. Microbiol.* ISSN: 0046-8991 (print version) ISSN: 0973-7715 (electronic version). 46: 413. *Impact factor: 0.899*

# CONFERENCE PROCEEDINGS/ CHAPTERS IN EDITED VOLUMES

- 1. **Jit, S.** 2017. **Implications of Climate Change on Distribution & Degradation of Environmental Pollutants.** Climate Change and Disaster Management. CPDHE, University of Delhi, Shivalik Prakashan, Delhi ISBN 978-81-93451-95-3.
- 2. **Jit, S.** 2016. **Persistent Organic Pollutants: Impact on Health Environment.** Indian and Western Aspects of Identity. CPDHE, University of Delhi, Shree Kala Prakashan, Delhi ISBN 978-93-85329-22-7.
- **3.** Arora, J., **Jit, S.,** Gupta, G. and Aggarwal, P., 2016. **Application of Harda** (*Terminalia chebula*) **for antimicrobial finishing of textiles.** Proceedings of National Conference on Environmental Concerns of 21st Century Indian and Global context. Book Age Publications, Delhi ISBN 978-93-83281-65-7.
- **4.** Jain, A., Raina D, Jit, S., Kaur, J., Verma, M. 2024. Tree of Life: in search of viruses. Proceedings of 3rd International Conference on Integrative Chemistry, Biology & Translational Medicine (ICBTM-2024) AK Publications, Delhi ISBN 978-93-95033-37-4.

#### CHAPTERS IN EDITED VOLUMES/BOOKS/E-LESSONS

- 1. **Jit, S.** and Kaur, J. 2022. Lesson Plan: Climate Change and Reproductive Fitness in Red Deer. published on TROP ICSU website for the The TROP ICSU Project, a global climate change education project supported by the International Science Council (ISC) https://tropicsu.org/lesson-plan-red-deer/
- 2. Kaur, J.\*, & **Jit, S.**\* 2019. **Natural Selection and Climate Change** published on TROP ICSU website for the TROP ICSU Project, a global climate change education project supported by the International Science Council (ISC).\* contributed equally
- 3. **Jit, S.\***, & Kaur, J.\* 2017. **Cell-Cell Adhesion & Communication** for e-Pathshala under National Mission on Education through ICT.\* contributed equally
- 4. **Jit, S.** 2017. **Extracellular Matrix** for e-Pathshala under National Mission on Education through ICT.
- 5. **Jit, S.**, & Garg, N. 2016. Applications of microbes in industry: **Production of primary and secondary metabolites** under MHRD Project National Mission on Education Through ICT. ISSN 2349-154X.
- 6. **Jit, S.**, & Garg, N. 2015. **RNA Structure & Function** under MHRD Project National Mission on Education Through ICT. ISSN 2349-154X.
- 7. Garg, N & **Jit, S**. 2015. **Fermentation Process** under MHRD Project National Mission on Education Through ICT. ISSN 2349-154X.
- 8. Garg, N & Jit, S. 2015. Fermentation Products and Downstream Processing under MHRD Project National Mission on Education Through ICT. ISSN 2349-154X.

## **ACTIVITIES IN COLLEGE**

#### RESEARCH PROJECT

- 1. Principal Investigator for Innovation Project MH-307 "Antimicrobial Finishing of Textiles using Eco-Friendly Bioactive Agents". Grant received Rs. 6, 50, 000. 2019-2020, Dr Jyoti Arora, Dr Simran Jit and Ms Nutan Rani, MH, DU. Ten students are working on this research project which aims at screening different natural antimicrobial agents, their application on textile material and finally development of antimicrobial textile with wide applications in medical and health care sector.
- 2. Principal Investigator for DBT Star Project on Natural Dyeing of Textiles: Evaluation of Antimicrobial Potential. Grant received Rs. 50, 000. 2019-2020, Dr Jyoti Arora, Dr Simran Jit. Students Name: Kritika Arora, B.Sc. (H) Zoology I; Atheena Abhaya Kumar, B.Sc. (H) Zoology I; Km Dakshta Tiwari, B.Sc. (H) Zoology I.
- 3. Co- Principal Investigator for **Analysis and Improvement of the Compost Generated in Urban-Academic Sector**. Grant received Rs. 1,25, 000. 2024-2025, Dr Saloni Bahri, Dr Simran Jit. Prof. (Dr) Sharda Mahilkar Sonkar and Dr Sujata Sengupta, MH, DU.

#### RESEARCH GUIDANCE/PROFESSIONAL CONSULTANCY

1. Experimental curriculum based project for the B. Sc. (H) Zoology, III Year Miranda House students for the core course of Evolutionary Biology were conducted in the even semester, 2019-20 under the DBT STAR College Scheme. A total of 33 students were mentored by Dr. Simran Jit and submitted individual project reports. The activity projects aimed to make the students understand the core concepts of evolutionary such as natural selection, genetic drift, adaptations, Hardy-Weinberg equilibrium.

The class was divided into groups and three projects were carried out-

#### • Sickle Cell Anemia: Natural Selection in Action

Students performed simulations to understand the concepts and applications of the Hardy Weinberg principle in population genetics. Various simulation conditions were set up to understand how natural

selection by the mechanism of heterozygote advantage can maintain a deleterious allele in the population.

## • Darwin's Finches: Natural Selection in Action

In this activity using several tools students understood how natural selection selects the best adapted characters in a population. The beaks of finches were represented by various tools such as blunt, pointed and toothed forceps and used different sizes of seed grains to determine the best tool.

## • Interactions between Natural Selection and Genetic Drift

This activity was designed to understand how genetic drift operates in a small population to bring random fluctuations in the allele frequencies and may even eliminate beneficial alleles. Students performed simple simulations to conclude that in a population, evolutionary forces such as genetic variability, competition and migration apart from natural selection act to determine the genetic equilibrium. Genetic drift adds a random component to its trajectory. As a result, the mutation's frequency can increase more rapidly than is expected from selection alone. But sometimes drift causes its frequency to increase less rapidly, or even to decrease.

- 2. Mentor for the Student Activity Project on **Darwin's Finches and Evolution** under the DBT STAR College Scheme. Experimental curriculum based project for the undergraduate science students held in April, 2019. Following students of B. Sc. (H) Zoology, Miranda House were guided who were working on the following research projects: Anubhuti, Anupama, Anuradha, Amisha, Chandrika, Noor, and Shreyata.
- 3. Facilitator and mentor at the Experimental summer workshop for undergraduate science students, **Flavour of Research**, Investigative Projects in Multidisciplinary Contexts held from June-July, 2017. Following students were guided who were working on **Antimicrobial textile finishing using eco-friendly natural compounds.**Nine students participated in this research project. PI: Dr. Jyoti Arora & Dr. Simran Jit. Vartika Srivastava, Chandrika Bhatt, Rama Rajpoot, Anubhuti Krishna, Vibhuti Bhat Miranda, Prerna Aggarwal M.Sc Genetics of Department of Genetics, University of Delhi, Gunjan Gupta M. Sc. Biotechnology, Manav Rachna International University, Anmol Singh Environmental Engineering. In this study, students prepared extracts from various herbs and medicinal plants and did a qualitative and quantitative estimation of antimicrobial activity on cotton against indicator strains.

Facilitator and mentor at the Experimental summer workshop for undergraduate science students, **Flavour of Research**, Investigative Projects in Multidisciplinary Contexts held from 1 June- 15 July, 2016. Following students were guided who were working on the following research projects:

- 4. **Antimicrobial finishing of textiles using bioactive reagents.** Four students participated in this research project: PI: Dr. Jyoti Arora & Dr. Simran Jit. Rashim Malhotra (MH), Sandipana Chakraborty (MH) and Pooja Jakhar (GC). In this study, students worked on natural antimicrobial bioactive compounds derived from Clove and Triphala that were applied on cotton in the presence of cross-linking agents to develop an antimicrobial textile.
- 5. **Application of Natural Dyes on Different Textile Materials through Sustainable Processes.** PI: Dr. Jyoti Arora & Dr. Simran Jit. Sparsh Gupta (M.Sc. (Applied Chemistry), Amity Institute of Applied Sciences, Amity University Uttar Pradesh. Natural dyes were applied on to different textile materials through different mordanting techniques and in presence of different mordants.
- 6. Use of plant-based Natural Dyes for imparting colour to hand-made paper: An Ecofriendly Approach. PI: Dr. Jyoti Arora & Dr. Simran Jit. Three students worked on this project: Avni (MH), Arshia (MH) and Bhavya (MH). Plant dyes were used to make azo free handmade paper.

Facilitator and mentor at the Experimental summer workshop for undergraduate science students, **Flavour of Research**, Investigative Projects in Multidisciplinary Contexts held from 8 June- 10 July, 2015. Two groups of students were guided who were working on the following research projects:

7. Sustainable antimicrobial finishing of cotton fabrics by eco-friendly bioactive compounds. PI: Five students participated in this research project: Prerna Aggarwal (MH), Gunjan Gupta (MH), Amber Raja (MH),

- Anamika (MH), Anchal Gupta (HRC). In this study, students worked on several natural antimicrobial agents such as pomegranate and chitosan that were applied on cotton in the presence of cross-linking agents to develop an antimicrobial textile.
- 8. Effect of antioxidants on longevity of *Drosophila*. Six students worked on this project: Prerna Aggarwal (MH), Gunjan Gupta (MH), Amber Raja (MH), Anamika (MH), Mahak Khurana (KMC), Rudhika Arora (KMC). They evaluated the influence of antioxidants like Manjistha on the life span of *Drosophila*.

#### **ADMINISTRATIVE RESPONSIBILITIES**

- 1. **Member, IQAC, Miranda House, University of Delhi from 6.2.2023 to 5.2.2025.**
- 2. **Member (Teacher Representative), Governing Body** Miranda House, University of Delhi from 12.9.2021 to 12.9.2022.
- 3. Co-opted Member, IQAC, Miranda House, University of Delhi from 2020 to 2022.
- 4. **Teacher-in-Charge, Department of Zoology,** Miranda House, University of Delhi from 1.5.2019 to 30.4.2021.
- 5. **Teacher-in-Charge**, **Department of Zoology**, Miranda House, University of Delhi from 13.2.2023to 30.3.2023.
- 6. Convener, Extended Admission Committee-Zoology Miranda House, University of Delhi from 2019-2021.
- 7. **Member, Extended Admission Committee-Life Sciences** Miranda House, University of Delhi from 2020-2021.

#### **RESOURCE PERSON/ MENTOR**

- 1. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from January 23-27, 2023.
- 2. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from July 4-8, 2022.
- 3. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from February 22-26, 2021.
- 4. **Resource Person** for the **Add on Certificate Course** on **Nanochemistry**, **2017-18**: organized by Department of Chemistry, Miranda House on Februarys 2, 2018.
- 5. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from August 5-14, 2018.
- 6. **Mentor** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from December 18-22, 2017.
- 7. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from August, 2017.
- 8. Resource Person for the Bridge Course on Laboratory Instrumentation: Principle, Usage and Applications organized by DSKC and Department of Zoology, Miranda House from October 27-30, 2016.
- 9. **Resource Person** for the workshop **Drosophila-A Smart Model for Biological Studies** organized by Department of Zoology, DSKC, Miranda House under DBT Star College Project from March 17-19, 2015.
- 10. **Resource Person** for **Techniques in Biotechnology** organized by Department of Zoology, Miranda House, University of Delhi from January 9-12, 2013.
- 11. **Mentor** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from December 15-20, 2013.
- 12. **Resource Person** for **Computational Biology-A Workshop for Science Teachers** organized by Department of Zoology, Miranda House, University of Delhi from January 9-11, 2012.
- 13. **Mentor** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from July 16-20, 2012.

#### **SYLLABUS REVISION**

- 1. **Member**, CC Molecular Biology, LOCF Course revision committee. 2019.
- 2. **Member, Syllabus Drafting Committee** for NEP-UGCF 2022 for B. Sc. Hons. Zoology, DSE 7, Molecular Biology.
- 3. **Member, Syllabus Drafting Committee** for NEP-UGCF 2022 for B. Sc. Hons. Zoology, GE 7, Introduction to Biology

#### EDUCATIONAL RESOURCE MATERIAL DEVELOPED

- 1. Manual-
  - 1. Study different types of cells
  - 2. Isolation of DNA by home kit & its detection
  - 3. Perform gram staining of bacteria

for the session **Designing Life: Small Experiments** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from December 18-22, 2017.

- 2. Co-authored workshop manual Eco-friendly Dyeing and Finishing of Textiles for the session Assessment of Antimicrobial Properties of Natural Extracts and Textile organized by Department of Zoology, Miranda House on October 6, 2015.
- 3. Manual-
  - 1. Study different types of cells
  - 2. Drosophila: Encyclopedia of life
  - 3. Perform gram staining of bacteria

for the session **Designing Life: Small Experiments** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from July 13-17, 2015.

- 4. Manual preparation for the workshop **Drosophila-A Smart Model for Biological** Studies organized by Department of Zoology, DSKC, Miranda House under DBT Star College Project from March 17-19, 2015.
- 5. Manual-
  - 1. To study the activity of trypsin from the pancreas of rat
  - 2. Isolation of DNA by home kit & its detection
  - 3. Liver catalase- the housekeeper of body

for the session **DNA and Enzymes: Tiny but Mighty Players** in the **Inspire Internship Programme** held at Miranda House, University of Delhi from December 15-20, 2013.

- 6. Workshop manual for **Computational Biology-A Workshop for Science Teachers** organized by Department of Zoology, Miranda House, University of Delhi from January 9-11, 2012.
- 7. Manual preparation **Bridge Course** on Laboratory Instrumentation: Principle, Usage and Applications for B.Sc. Hons. Zoology, Semester I held at Miranda House, University of Delhi from July 22-26, 2021.
- 8. Manual preparation **Bridge Course** on Laboratory Instrumentation: Principle, Usage and Applications for B.Sc. Hons. Zoology, Semester I held at Miranda House, University of Delhi from July 4-8, 2022.
- 9. Manual preparation **Bridge Course** on Laboratory Instrumentation: Principle, Usage and Applications for B.Sc. Hons. Zoology, Semester I held at Miranda House, University of Delhi from January 23-27, 2023.
- 10. Manual preparation **Bridge Course** on Laboratory Instrumentation: Principle, Usage and Applications for B.Sc. Hons. Zoology, Semester I held at Miranda House, University of Delhi from October 3-10, 2023.

### INVITED TALKS/ORAL PRESENTATIONS

- 1. **Simran Jit. Environmental Biotechnology and Development of Eco-friendly Processes** Invited talk in Add on certificate course in Nanochemistry organized by Chemistry Department, MH on February 2, 2018.
- 2. Simran Jit, Jyoti Arora, Prerna Agarwal, Gunjan Gupta. Application of *Punica granatum* extract for antibacterial textile finishing: Development of health care textile. Invited talk in INSCR International Conference entitled Role of Microbe- Plant-Animal Interactions in Human Health from September 26-28, 2017 at University of Delhi.
- 3. Simran Jit. Hexachlorocyclohexane (HCH): Contamination; Degradation; Toxicity and Bioremediation. Invited talk in VigZest 2107 organized by Tricord, The Life Sciences Society on February 13, 2107.
- 4. **Simran Jit**, Jyoti Arora, Sandipana Chakraborty and Rashim Malhotra. **Antibacterial finishing of cotton fabric using neem** (*Azadirachta indica*). Oral presentation in International Conference on Green Chemistry in Environmental Sustainability and Chemical Education organized by Daulat Ram College from November 17-18, 2016.
- 5. Jit, S., Bahri, S., Sengupta, S., Sonkar, SM., **Oral presentation** on Mitigation of solid waste generated in campus by compost in 8<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR-2024) on 'Exploring the Microbial World from Human Health to Environmental Sustainability' and 4th International Symposium on Ciliate Biology (ISCB-2024), organised by INSCR and Acharya Narendra Dev College, University of Delhi (UoD) from April 03-05, 2024 at Conference Centre, UoD, Delhi, India.

#### POSTER PRESENTATIONS

- 6. Raina D., Jain, A., Jit, S., Kaur, J., Verma, M. **Poster** on Tree of Life: Unveiling the Viral Lineage in 8<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR-2024) on 'Exploring the Microbial World from Human Health to Environmental Sustainability' and 4th International Symposium on Ciliate Biology (ISCB-2024), organised by INSCR and Acharya Narendra Dev College, University of Delhi (UoD) from April 03-05, 2024 at Conference Centre, UoD, Delhi, India. (*Best Poster Presentation Award*).
- 7. Jain, A., Raina D, Verma, M. Kaur, J., Jit, S., **Poster** on Wastewater: Contaminants, implications and solutions in 8<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR-2024) on 'Exploring the Microbial World from Human Health to Environmental Sustainability' and 4th International Symposium on Ciliate Biology (ISCB-2024), organised by INSCR and Acharya Narendra Dev College, University of Delhi (UoD) from April 03-05, 2024 at Conference Centre, UoD, Delhi, India.
- 8. Jit, S., Bahri, S., Sengupta, S., Sonkar, SM., Tanuja, Sharma, A., Joshi, N. Participated and presented a **Poster** on Compost: As a sustainable solution to waste management in the urban academic sector at the People's Festival of Innovations,2023, a National Conference on scaling innovations from idea to impact, held at India International Centre, New Delhi from 28-30 November, 2023.
- 9. Jit, S., Bahri, S., Sengupta, S., Sonkar, SM., Tanuja, Sharma, A., Joshi, N. Participated and presented a **Poster** on Compost: As a sustainable solution to waste management National Conference Advances in Plant Biology (APB 2024): Innovations and Strategies for Sustainable Agricultural Productivity for Viksit Bharat@2047 organized by Department of Botany, Hansraj College, in collaboration with Mahatma Hansraj Malviya Mission Teacher Training Centre (MH-MMTC on 10 February, 2024.
- 10. Jain, A., Raina D, Jit, S., Kaur, J., Verma, M. **Poster** on Tree of Life: in search of viruses in 3rd International Conference on INTEGRATIVE CHEMISTRY, BIOLOGY & TRANSLATIONAL MEDICINE (ICBTM-2024), jointly organized by Hansraj College, University of Delhi, Delhi, and Pacific University, Udaipur, Rajasthan from 8-10 March 2024. (Best Poster Presentation Award)
- 11. Arora J., Jit S., Mukherji R. and Singh K. Participated and presented a **Poster** on Sustainable and Eco-Friendly Processes for Natural Dyeing of Textiles in ISW-2020 International Summit on Women in Stem-"Visualizing the future: New Skylines" organized by DBT and ICGEB held at India Habitat Centre, Lodhi Road, Delhi on 23-24 January, 2020.

- 12. Arora, J., Jit, S., Anubhuti, Vartika, Rama, Vibhuti and Chandrika. **Poster presented** on Antimicrobial finishing of textiles with rind of pomegranate, *Punica granatum*: applications in the health care sector in National Conference on Innovations In Sciences and Emerging Challenges in Health and Environment (NSHE-2018), Daulat Ram College, University of Delhi, 20 March, 2018. (Best Poster Presentation Award).
- 13. **Simran Jit**, Jyoti Arora, Sandipana Chakraborty and Rashim Malhotra. Application of chitosan for antimicrobial finishing of textiles. Poster presentation in Environment & Ecology: Sustainability and Challenges (ENCON 2017) organized by Sri Venkateswara College from January 4-6, 2017.
- 14. **Simran Jit**, Jyoti Arora, Nutan Rani, Akanksha Sharma. Application of Neem Leaves Extract on cotton: Development of Natural Antimicrobial Textile. Poster presentation in National Conference in Chemistry Environment & Harmonious Development (NCC-2016) organized by Shyam Lal College from April 7-8, 2016.
- 15. Jyoti Arora, **Simran Jit**, Nutan Rani, Rashim Malhotra, Sandipana Chakraborty. Antimicrobial Textile Finishing with a Traditional Herb, Triphala: A Green Technology. Poster presentation in National Conference on Combating Industrial Pollution Environment A Fusion of Industrial and Scientific Efforts (CIPSE-2016) organized by Gargi College from September 22-23, 216.
- 16. Jyoti Arora, **Simran Jit**, Anjana Singha Naorem, Prerna Aggarwal & Anamika. Development of Antimicrobial Cotton Textiles from Eco-freindly Bioactive Compounds: Applications in Medical & Health Care Sector. Oral presentation at a National Symposium on Environmental Contamination and Public Health organized by Zakir Husain College on 24 August, 2015.
- 17. Anjana Singha Naorem, Jyoti Arora, **Simran Jit**, Gunjan Gupta & Amber Raza. Fish- Poison on the Platter? Oral presentation at a National Symposium on Environmental Contamination and Public Health organized by Zakir Husain College on 24 August, 2015.
- 18. Jyoti Arora, **Simran Jit**, Prerna Aggarwal, Gunjan Gupta. Antimicrobial finishing of textiles by using ecofreindly bioactive compounds derived from rind of pomegranate, Punica granatum. Poster presentation in 56th Annual Conference of Association of Microbiologists of India (AMI-2015) and International Symposium on "Emerging Discoveries in Microbiology" organized by School of Life Sciences, Jawaharlal Nehru University, Delhi from December 7-10, 2015.
- 19. Nidhi Garg, **Simran Jit**, Petra Kunz, Christof Holliger, Hans-Peter E. Kohler and Rup Lal. Bioremediation of hexachlorocyclohexane (HCH) contaminated soils by means of bioaugmentation and biostimulation. Poster presentation in 56th Annual Conference of Association of Microbiologists of India (AMI-2015) and International Symposium on "Emerging Discoveries in Microbiology" organized by School of Life Sciences, Jawaharlal Nehru University, Delhi from December 7-10, 2015.
- 20. Jyoti Arora, **Simran Jit**, Prema Aggarwal, Gunjan Gupta. Evaluation of different cross-linking agents in antimicrobial finishing of cotton by dry rind of pomegranate. Oral presentation at National Symposium Man Made Diseases An Urban Menace organized by Department of Zoology, Maitreyi College, University of Delhi on 11-12 February, 2016. (Best Platform Presentation Award)
- 21. **Simran Jit**, Jyoti Arora, Gunjan Gupta and Prema Aggrawal. Treatment of cotton textile with Chitosan for protection from microbial attack. Poster presentation at National Symposium Man Made Diseases An Urban Menace organized by Department of Zoology, Maitreyi College, University of Delhi on 11-12 February, 2016. (Best Poster Presentation Award)
- 22. Jyoti Arora, **Simran Jit** and Richa Misra. Programming of fetal epigenome in the womb by modulations in maternal diet. Poster Presentation in National Symposium on Reproductive Health in India: Concerns and Awareness organized by Deshbandhu College on 12 February, 2016. (Best Poster Presentation Award).
- 23. Jyoti Arora, Rekha Kumari, and **Simran Jit**. "Impact of climate change on human diseases: Outbreaks, weather extremes and deadly diseases". Poster presented in the National Conference on Climate change: impacts, adaptation, mitigation scenario and future challenges in Indian perspective organized by Department of Botany, Deen Dayal Upadhyaya College, University of Delhi held from March 2-3, 2015.
- 24. **Simran Jit**, Birgit Geueke, Pooja Sharma, Kirti Kumari, Kiran Bala, Thomas Poiger, Daniel Renstch, Hans-Peter E. Kohler, Christof Holliger and Rup Lal. "Metabolism of  $\alpha$ -,  $\delta$ -, and  $\gamma$ -HCH (hexachlorocyclohexane)

- by HCH dehydrochlorinase: LinA1 and LinA2". Poster presented in the 51<sup>st</sup> Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges & International Workshop on rRNA Sequencing, Phylogeny Biotechnology: Diversity, Genomics and Metagenomics" held in BIT Mesra, Ranchi from December 14-17, 2010.
- 25. Simran Jit, Pushp Lata, Neha Niharika, Jasvinder Kaur, Birgit Geuke, Kirti Kumari, Kiran Bala, Roland Weber, Thomas Poiger, Daniel Renstch, Petra Kunz, Hans-Peter E. Kohler, Christof Holliger and Rup Lal "Assessment of HCH (hexachlorocyclohexane) & it's metabolites contamination from the last lindane production plant operating in India" in the Indo-Swiss International Conference entitled "Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants" held in University of Delhi, Delhi from February 9-11, 2011.
- 26. **Simran Jit,** Aeshna Nigam and Rup Lal. "A study on vertical distribution of linA and linB and community structure in Hexachlorocyclohexane (HCH) contaminated soil". Poster presented in the 49<sup>th</sup> Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held in University of Delhi, Delhi from November 18 -20, 2008.
- 27. Aeshna Nigam, **Simran Jit** and Rup Lal. "Taxonomical Characterization of *Sphingomonas histidinilytica* sp. nov., isolated from Hexachlorocyclohexane (HCH) dumpsite, India". Poster presented in the 49<sup>th</sup> Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held in University of Delhi, Delhi from November 18 -20, 2008.
- 28. Amit Kumar Singh, Vatsala Dwivedi, **Simran Jit**, Pushp Lata, Neha Niharika, Jasvinder Kaur, Kiran Bala, Nidhi Garg, Devi Lal, Roland Weber and Rup Lal. "Assessment of HCH (hexachlorocyclohexane) contamination from the last lindane production plant operating in India". Poster presented in the 51<sup>st</sup> Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges & International Workshop on rRNA Sequencing, Phylogeny Biotechnology: Diversity, Genomics and Metagenomics" held in BIT Mesra, Ranchi from December 14 -17, 2010.
- 29. Pooja Sharma, S. K. Gupta, Kirti Kumari, **Simran Jit,** Devi Lal, Kiran Bala, Nidhi Garg, Jaya Malhotra, Shailly Anand, Christof Holliger, Hans-Peter Kohler, Vishakha Raina and Rup Lal. "Microbial Degradation of Hexachlorocyclohexane (HCH) & Prospects for Bioremediation". Oral presentation at 10<sup>th</sup> International HCH and Pesticides Forum, Brno, Czech Republic on September 9, 2009.
- 30. Mandeep Dadhwal, Ajaib Singh, Om Prakash, Sanjay Kumar Gupta, Kirti Kumari, Pooja Sharma, **Simran Jit,** Mansi Verma, Christof Holliger and Rup Lal. "Proposal of Biostimulation for Hexachlorocyclohexane (HCH)-decontamination and Characterization of culturable bacterial community from High-dose point HCH-contaminated soils." Poster presented in the 49<sup>th</sup> Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held in University of Delhi, Delhi from November 18 -20, 2008.