

CURRICULUM VITAE

Dr. JAYA MALHOTRA

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Ph.D. THESIS

Ph.D. degree awarded in the Delhi University Convocation held on 19th March 2013 on the topic
“Dynamics of Soil Microbial Diversity at Pesticide Polluted Agricultural Soils”

Supervisor:

Prof. Rup Lal , Department of Zoology, University of Delhi.

Dr. Rajagopal Raman

EDUCATIONAL QUALIFICATION

DEGREE	SUBJECTS	UNIVERSITY	YEAR	GRADE/ DIVISION	PERCENT
Ph. D.	Molecular Biology	Department of Zoology, University of Delhi, Delhi	2008-2012		
M. Sc.	Zoology Specialization: Cell Biology	Department of Zoology, University of Delhi, Delhi	2006-2008	I	78.5%
B. Sc.	Zoology	Kirori Mal College, University of Delhi, Delhi	2003-2006	I	77.2 %
XII	Physics, Chemistry, Biology, Maths, English	J.D. Tytler School, New Rajinder Nagar, New Delhi	2002	I	70.8 %
X	Science, Maths, Social Studies, English, Hindi	J.D. Tytler School, New Rajinder Nagar, New Delhi	2000	I	82.4 %

ACADEMIC ACHIEVEMENTS

1. Awarded **University Teaching Assistantship** from University of Delhi. (May'2009- July'2012).

2. Selected for **Shyama Prasad Mukherjee Fellowship** for securing position among **top 25 candidates** in National Eligibility Test (NET) for Council of Scientific and Industrial Research (CSIR-JRF) in Life Sciences (2008).
3. Awarded certificate of excellence for '**Best Poster Award**' in the International Conference on Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants held at University of Delhi, Delhi from February 09-11, 2011.
4. Awarded certificate of distinction for securing **3rd position in University of Delhi**, M.Sc.Zoology (Hons.) examination(2007-2008).
5. Awarded certificate of distinction for securing **2nd position in University of Delhi**, M.Sc.Zoology (Hons.) examination(2006-2007).
6. Received meritorious **Scholarship by Department of Zoology**, University of Delhi (2006-2007).
7. Scored **3rd rank** in M.Sc. entrance examination and **5th position** in University of Delhi, B.Sc (Hons.)
8. Awarded certificate of distinction for securing **1st position in Kirori Mal College**, B. Sc.Zoology (Hons.) examination(2005-2006).
9. Awarded certificate of distinction for securing **2nd position in Kirori Mal College**, B. Sc.Zoology (Hons.) examination (2004-2005).
10. Awarded certificate of distinction for securing **1st position in Kirori Mal College**, B. Sc.Zoology (Hons.) examination (2003-2004).

TEACHING EXPERIENCE

1. Appointed as University Teaching Assistant for teaching postgraduate students (M.Sc. Zoology) at Department of Zoology, University of Delhi from 9th May, 2009 – 23rd July, 2012.
2. Appointed as assistant professor on ad-hoc basis in Kirori Mal College, University of Delhi (23rd July, 2012 – 22nd Jan, 2014).
3. Appointed as guest lecturer in Hans Raj College, University of Delhi (3rd Sep, 2014 – 14th Nov, 2014).

4. Appointed as assistant professor on ad-hoc basis in Hans Raj College, University of Delhi (20th January, 2015 – till date).

PUBLICATIONS

1. **Malhotra J**, Dua A, Saxena A, Sangwan N, Mukherjee U, Pandey N, Rajagopal R, Khurana P, Khurana J & Lal R. 2012 Draft genome of *Acinetobacter* sp. HA isolated from gut of polyphagous insect pest *Helicoverpa armigera* . J Bacteriol. **194**:5156. Impact factor 3.59
2. **Malhotra J**, Anand S, Jindal S & Lal R. 2012. *Acinetobacter indicus* sp. nov., isolated from hexachlorocyclohexane (HCH) dumpsite. Int. J. Syst. Evol. Microbiol. **62**:2883-90. Impact factor 2.11
3. **Malhotra J**, Aparna K, Dua A, Sangwan N, Trimurtulu N, Rao DLN & Lal R. 2014. Microbial and genetic ecology of tropical Vertisols under intensive chemical farming. Environ Monit Assess. **187**:4081. Impact factor 1.68.
4. Dua A, **Malhotra J**, Saxena A, Khan F. & Lal R. 2013. *Devosia lucknowensis* sp. nov., a bacterium isolated from HCH contaminated pond soil. J. Microbiol. (Accepted). Impact factor 1.27
5. Sangwan N, Lata P, Dwivedi V, Singh A, Niharika N, Kaur J, Anand S, **Malhotra J**, Jindal S, Nigam A, Lal D, Dua A, Saxena A, Garg N, Verma M, Kaur J, Mukherjee U, Gilbert JA, Dowd SE, Rajagopal R, Khurana P, Khurana J & Lal R. 2012. Comparative metagenomic analysis of soil microbial communities across three Hexachlorocyclohexane gradients. Plos One. **7**:e46219. Impact factor 4.09
6. Anand S, **Malhotra J**, Dua A, Garg N, Saxena A, Sangwan N, Lal D, Verma M, Jindal S, Kaur J, Kumari K, Nigam A, Niharika N, Kaur J, Jit S, Bala K, Negi P L & Lal, R. **2010**. A New Life in a Bacterium through Synthetic Genome: A successful venture by Craig Venter. Indian J. Microbiol. **50**:125-131. Impact factor 0.45
7. Abstract for poster presentation in Indo-Portuguese Workshop on **Emerging Trends of Nanotechnology in Chemistry and Biology** organized by Department of Chemistry, Hansraj College & Deshbandhu College, University of Delhi, India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal on 12-13 February, 2016. Title “Isolation, characterization and phylogenetic analysis of HCH (hexachlorocyclohexane) degrading *linA* (Dehydrochlorinase) and *linB* (Haloalkane Dehalogenase) gene variants from HCH contaminated soil”. Journal of Materials NanoScience. 2016, 3(1), S1-S22. **ISSN NO.2394-0867**.

BOOKS/ CHAPTERS

1. Shailly Anand, **Jaya Malhotra**, Neha Niharika, Devi Lal, Swati Jindal, Jaspreet Kaur, Aeshna Nigam, Nidhi Garg, Pushp Lata, Jasvinder Kaur, Naseer Sangwan, Amit Kumar Singh, Ankita Dua, Anjali Saxena, Vatsala Dwivedi, Udit Mukherjee and Rup Lal. 2013. **Chapter 23 titled “Bioremediation of Hexachlorocyclohexane (HCH) Pollution at HCH Dump Sites” in KNOWLEDGE SYSTEMS OF SOCIETIES FOR ADAPTATION AND MITIGATION OF IMPACTS OF CLIMATE CHANGE.** doi 10.1007/978-3-642-36143-2_23. ISBN NO 978-3-642-36143-2

2. E lesson for undergraduate course on **Eukaryotic transposable elements** under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. **ISSN No. 2349-154X**

3. E lesson for undergraduate course on **Transposons in prokaryotes** under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. **ISSN No. 2349-154X**

4. E lesson for undergraduate course on **Uses of transposons and eukaryotic viruses** under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. **ISSN No. 2349-154X**

5. CHAPTER FOR E-PATHSHALA FOR POST GRADUATE COURSES –AN MHRD PROJECT UNDER ITS NATIONAL MISSION ON EDUCATION THROUGH ICT (NME-ICT), GOVT. OF INDIA “Model organisms- “*Drosophila* and *C. elegans*”.

6. CHAPTER FOR E-PATHSHALA FOR POST GRADUATE COURSES –AN MHRD PROJECT UNDER ITS NATIONAL MISSION ON EDUCATION THROUGH ICT (NME-ICT), GOVT. OF INDIA “system biology ”.

7. CHAPTER FOR E-PATHSHALA FOR POST GRADUATE COURSES –AN MHRD PROJECT UNDER ITS NATIONAL MISSION ON EDUCATION THROUGH ICT (NME-ICT), GOVT. OF INDIA “ Model organisms- “*Mus musculus* and *Zebrafish*”.

POSTER PRESENTATION / CONFERENCE ATTENDED

1. Kumari, H., Vagne, C., Sharma, P., Jindal, S., **Malhotra, J.**, Roelof Van der Meer, J., and Lal, R. “Characterization of σ^{54} Dependent Transcriptional Activator Protein HbpR and Isolation of Novel Members of the XylR/DmpR Subclass from Environmental Samples”. **“Best Poster Award”** presented in the 49th Annual Conference of the Association of Microbiologists of India entitled “International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics” held at University of Delhi, Delhi from November 18 -20, 2008.
2. **Malhotra, J.**, Jindal, S., Anand, S., Dua, A., Rao, D. L. N. and Lal, R. “Soil health assessment of pesticide polluted sites using culture independent and dependent approaches”. Poster presented in the 51st Annual Conference of the Association of

Microbiologists of India entitled “International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges” held at Birla Institute of Technology, Mesra, Ranchi from December 14-17, 2010.

3. **Malhotra, J.,**Jindal, S., Anand, S., Dua, A., Rao, D.L.N., and Lal, R. “Studying The Effect Of Soil Microbial Diversity And Fuctional Marker Genes On The Pesticide Contaminated Sites”. “**Best Poster Award**” presented in the Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled “Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants” held at University of Delhi, India from 9th – 11th February, 2011.
4. **Malhotra, J.,** Dua, A., Sangwan, N., Rao' D, L, N., and Lal, R. “Studying the influence on soil microbial diversity and functional marker gene on addition of high amount of pesticides at agricultural sites”. Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled “International Conference on Microbial Biotechnology for Sustainable Develpoment” held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
5. Dua, A., **Malhotra, J.,**Gupta,A.K., and Lal, R. “Screening of antibiotic producing bacterial isolates against plant pathogen *Agrobacterium tumefaciens* C58”. Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled “International Conference on Microbial Biotechnology for Sustainable Develpoment” held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
6. S Anand, S., Lata, P., Dua, A., **Malhotra, J.,** Verma, M., Kaur, J., Niharika, N., Kaur, J., Singh, A,K., Saxena, A., Sangwan, N., Dwivedi, V., Mukherjee, U., Raghuvanshi, S., Khurana, J,P., and Lal, R. “Genome sequence of a Hexachlorocyclohexane (HCH) degrading *Sphingobium indicum* B90A”. Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled “International Conference on Microbial Biotechnology for Sustainable Develpoment” held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
7. IndoUS International Symposium on "Biological Timing and Human Health in the 21st Century" during 22-24 February 2017 at conference centre, University of Delhi organized by Department of Zoology, University of Delhi
8. Poster presentation entitled “ASSESSING SOIL HEALTH USING SOIL QUALITY INDICATORS INVOLVING PHYSICAL, CHEMICAL AND BIOLOGICAL PROPERTIES OF DELHI RIDGE AND GARDEN SOIL” in the internal conference organized by INSCR On theme “Role of Microbe-Plant-Animal Interactions in Human Health” held on 27-28 September 2017.

WORKSHOP ORGANIZED / ATTENDED

1. Organized a one day workshop under the Life Science Society on “Computational Biology and its role in Genomics & Metagenomics” on 15th Feb, 2018 by Prof. Rup Lal at Hansraj College, University of Delhi.
2. Participation in Pre conference workshop organized by ISME and INSCR on “ Hands on to Computational Biology for Metagenomic Analysis” held on 26th September 2017 at Department of Zoology, University of Delhi.
3. IndoUS workshop on "Biological Timing and Human Health in the 21st Century" 21 February 2017 at the Department of Zoology, University of Delhi, Delhi.
4. Attended a workshop on 'Microbial Genomics and Metagenomics' i under the aegis of IUMS-INSa, AMI Delhi Unit, University of Delhi and Indian network for soil contamination research (INSCR) on 22nd September, 2016 at the Department of Zoology, University of Delhi, Delhi.
5. Indo-Portuguese Workshop on **Emerging Trends of Nanotechnology in Chemistry and Biology** organized by Department of Chemistry, Hansraj College & Deshbandhu College, University of Delhi, India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal on 12-13 February, 2016.
6. Member of organizing committee in workshops conducted in Department of Zoology, Hansraj college
 - a. Workshop on Bioinformatics held on 28th September, 2015
 - b. Workshop on Model organism held from 14th -21st December, 2015
 - c. Workshop on Biotechnology techniques from 21-22nd March, 2016
4. Workshop on Immunology (Paper No. ZOHT 507) held in Kirori Mal College on 24th August 2012.
5. Workshop on Scientific Writing and Publishing organized by American Society of Microbiology held in Shri Venkateshwara College, University of Delhi on 6th February 2013.
6. Workshop on Improving Communicating Scientific Skills organized by American Society of Microbiology held in Ramjas College, University of Delhi on 4th September 2013.

Short term research project with students of B.Sc. (H) Zoology 3rd year.

Project title: “Isolation and characterization of novel bacteria from Delhi ridge area”

The project work is funded under the DBT’s Star College Scheme

EXTRACURRICULAR ACTIVITIES

1. Staff Advisor of Zoology Society Kirori Mal College ,University of Delhi
2. Awarded certificate of distinction for three year diploma in Kathak dance from Pracheen Kala Kendra.
3. President of Zoological Society of Kirori Mal College (2005-2006).
4. Head Girl of J.D. Tytler School, New Rajinder Nagar, New Delhi (2001-2002).