

**CURRICULUM VITAE OF FARKHANDA JABEEN  
ASSISTANT PROFESSOR (BOTANY)  
PUNJAB UNIVERSITY OF LAHORE**

**DATE OF BIRTH** 24 March, 1959, Female

**AND SEX:**

**CORRESPONDENCE ADDRESS:** **Farkhanda Jabeen** 51-B-II, Punjab Government Employee Cooperative Housing Society, (PGECHS) Lahore Pakistan.

**EDUCATION:**

1. Ph.D thesis submitted (2011)
2. M. Sc. Botany (June 1985), Specialization: Microbiology, Government College Lahore, and University, of the Punjab, Lahore, Pakistan.
3. B. Sc. Biology, (1981) (Botany, Zoology Chemistry), Lahore College for Women, University of the Punjab, Lahore Pakistan.

**JOB EXPERIENCE:**

1. 2001, to date, Assistant Professor in Botany Department, University of the Punjab, Lahore-53700, Pakistan.
2. 1986 to 2001 Lecturer, Center of Excellence in Molecular Biology, University of the Punjab, Lahore-53700, Pakistan.
3. 1985 to 1986, Research Fellow, Center of Excellence in Molecular Biology, University of the Punjab, Lahore 53700, Pakistan.

**AWARDS/HONORS**

1. Role of Honor, 1985
2. Secondary School Certificate Scholarship.
3. Principal Investigator: Research project Punjab University (4)

**TEACHING EXPERIENCE:**

**Botany Department, PU:**

**Postgraduate Teaching:**  
Microbiology, Phycology and Bryology

**B.Sc. (Hons.):**  
Bacteriology and Virology  
Phycology and Bryology

**Teaching Outside Department:**  
B.Sc. (Hons – Lab )  
Biochemistry  
Plant Diversity  
(Department of Microbiology and Molecular Genetics, PU)  
External examiners for BS(Hons)

**THESIS:**

MS. thesis research: *Microbial Examination of un-bottled Beverages*

**RESEARCH**

M. Sc thesis research work included various microbial techniques such as Isolation, identification and purification of bacterial strains from un-bottled beverages. The work also included the quantitative and qualitative analysis of bacteria.

**EXPERIENCE:**

After completing my M.Sc., I joined the center for advanced Molecular Biology University of the Punjab, Lahore in 1985, and started my work on the isolation and characterization of bacteria from local habitat under the supervision of Dr. S. Riaz - u - Din. Firstly I was involved in the isolation of hydrocarbon degrading, sulfur degrading and iron leaching (*Thiobacillus ferrooxidans*) bacteria. The identification of these bacteria includes morphological and biochemical tests. Then I started the project of CAMB culture collection, which are the depositories of local bacteria, fungus and yeast as well as some strain of known standard bacteria from abroad. The project work included the isolation, characterization and maintenance for their preservation. All the microbiological techniques were involved for the completion of this work.

I have also learned the basic molecular biological techniques including the transformation, isolation of DNA, gel electrophoresis, enzyme assays, restriction mapping, lambda DNA preparation etc.

I established the microbial culture collection repository and collected more than one thousand bacterial strains along with the incharge of culture collection lab. I was also involved in another project related with the isolation, identification, characterization of local *Bacillus thuringiensis* strains from different ecological region of Pakistan, which is toxic against certain lepidopteron insects of cotton e.g. spotted ball worm, pink ball worm and American ball worm. All identification process included the protein isolation, purification, western and Dot blot, nature and denature gel electrophoresis and ELISA techniques. In this connection, I have isolated more than 1000 Bt, which were isolated from different ecological habitats of Pakistan.

After that I was involved in the production of Polyclonal antibodies against

toxic protein, (Cry IAc, Cry, II a, GNA Protein). For this purpose, I used the sophisticated technique of SDS-PAGE, ELISA, Western and dot blot.

For the production of antigens I have prepared these proteins by Electro elution and column chromatography. After the complete characterization and confirmation of purity by western blot this antigen was ready for immunization in rabbits. These antibodies are being used for the immunochemical characterization of transgenic plants of rice and cotton.

Presently I am teaching Bacteriology, Virology, Phycology and Bryology to M.Sc. and B Sc. Honors in the Botany Department, University of Punjab. I have submitted my Ph.D. thesis entitled “*Characterization of pesticides degrading Bacteria.*” under the supervision of with Prof. Dr. Shahida Hasnain. My research work also includes the research supervision of M.Sc students.

M.Sc. Thesis Guidance: 08

**Title:**

1. Isolation and characterization of *Bacillus thuringiensis* from local habitat
2. Isolation of pesticides degrading bacteria from Agricultural soils.
3. Bacterial analysis of some dehydrated Packed food items
4. Effect of physical growth factors and genetic of insecticides degrading bacteria.
5. Isolation of Imidacloprid Degrading Bacteria from Cotton Fields
6. Isolation of Pesticides degrading Yeast.
7. Isolation of Pyrethorides Degrading Bacteria from Rhizosphere of Plants Growing at Tannery Solid Waste from Kasur, Pakistan
8. Bioremediation of Cypermethrin contaminated soil by using indigenous bacterial strains

**PUBLICATIONS:**

1. Robin, S.P., Ghauri, M.A., Jabeen, F. Riazuddin, s. and shams, F.A. (1987). *Isolation and characterization of acidophilic bacteria from the local environment Punjab University J. Zool.*, 2: 1-9.
2. Butt, A.I., Riazuddin, S., Shakoori, A. R. and Jabeen F. (1988). *Isolation and identification of petroleum hydrocarbon degrading*

- bacteria from the local environments*. Pak. J. Zool 20 (4): 391-399.
3. S. Baig ., O.Younus., F.Shabaz and Jabeen. F. (1998). *Assessment of Bacterial Contamination in Some Freshly Consumed Beverages in Lahore City*. Pak. J. of Sci. Reac 5(3-4)
  4. Shahid.M.N. Jabeen. F. and Hassan.S.W. (2008). Isolation of Imidacloprid Degrading Bacteria from Cotton Fields. Sci.Int. (Lahore). 20(4). 285-293)
  5. Shahid.M.N., Jabeen. F. and Hassan.S.W. (2009). Isolation of Imidacloprid Degrading Bacteria from Industrial Sites. Sci. Int. (Lahore). 21(1), 61-68
  6. Arifa Tahir. A., Aftab. M., Mateen. B., and Jabeen. F. (2009). Hyper production of enzyme penicillin amidase by locally isolated thermo-tolerant *Bacillus* sp. MARC-0103 from rice starch in cheese whey. *Annals of Microbiology*. 59(4). 777-783
  7. Manzoor, F., Malik, S. Habipour, French, J.R.J. and Jabeen, F. (2010). Survey of termites in forest of Punjab: Pakistan. *African journal of Environmental Science & Technology*. Vol 4(11), pp. 790-796, November 2010 ISSN 123

**ABSTRACT/POST  
ERS**

1. Riazuddin, S. Hussain, T., Makhdoom, R., Fatima, T. malik, K., Karim, S. and Jabeen, F. *Pesticide genes and transgenic plant technology*. In the 5<sup>th</sup> International Congress of plant Molecular Biology, September 21-27, 1997, Singapore.
2. Riazuddin, S., Hussain, T., Makhdoom, R., Fatima, T., Malik, k., Karim, S. and Jabeen, F. Bt. *Pesticidal genes and transgenic plant technology*. In the general meeting of the International program on rice biotechnology, September 15-19, 1997, Malacca, Malaysia.
3. Conference on Research Finding, Burban, Murree Hills. Towards Solution for Stressed Lands May 7-9, 1994.
4. Jabeen, F. and Hasnain, S. "Isolation and characterization of Pesticide degrading bacteria from agricultural soils." International Symposium

on Microbial Technology for Sustainable Agriculture. 12-16, March, 2007. NIBGE. Faisalabad, Pakistan.

5. Jabeen, F. and Hasnain, S. Isolation and characterization of pyrethroids degrading bacteria from agricultural soils. In Genomic, Proteomics, Metabolomics: Resent Trends in Biotechnology. 22-23 October, 2007. Deptt of Microbiology and Molecular Genetic. New Campus, Lahore.
6. Jabeen, F. and Hasnain, S. Bioremediation of Endosulfan contaminated Soils using Indigenous Bacterial Strains. In an International Symposium on "Bioremediation and Sustainable Environmental Technologies" June 27-30, 2011 Reno, Nevada, USA.

**ADMINISTRATIVE  
EXPERIENCE:**

1. Member Admission Committee, B.Sc. (Hons) Botany Department, Punjab University.
2. Chairperson Sports Committee, 2004 - 2010 Botany Departments. Punjab University.
3. Member Store Verification Committee.
4. Stock taking, Library, 2003 & 2004. Botany Deptt. PU.
5. Member Admission Committee, M.Sc. 2004, Botany Department, PU.
6. Member Board of Studies, 2007-2008
7. Member Departmental Scholarship committee.

**COURSES  
ARRANGED/  
CONDUCTED**

1. Member organizing committee for International Symposium Workshop on the "Applications of Genetic Engineering to Basic Biology and Agriculture" March 29-April 2, 1987, at CAMB, University of the Punjab, Lahore, Pakistan.
2. Member organizing committee and Instructor of Second Regional Training Course on "Recombinant DNA Techniques used in Plant

Genetic Engineering" at CAMB, Lahore, Pakistan  
(Sept. 26- Oct. 15, 1987).

3. Member organizing committee and Instructor of "Third Regional Training Course on Plant Biotechnologies" at CAMB, Lahore, Pakistan  
(Dec. 10-31, 1988).

4. Member organizing committee for Training course on "Expression of bacterial genes in Plants" held at National Centre of Excellence in Molecular Biology, Lahore, Pakistan from 10th-24th Oct, 1992.

**CONFERENCES  
WORKSHOP  
ATTENDED:**

1. Second National Conference of Plant Scientists 25-28 Nov. 1984, Botany Department, Punjab University, Lahore, Pakistan.
2. Twenty Third National Science Conference, 27 Dec. 1985-Ist Jan., 1986. Punjab University, Lahore, Pakistan.
3. One day International Mini-symposium, Oct. 21, 1986, Centre for Advanced Molecular Biology, Punjab University, Lahore, Pakistan.
5. Second International Symposium Workshop on the Applications of Genetic Engineering" Oct. 18-22, 1987, at the Centre for Advanced Molecular Biology, Punjab University, Lahore, Pakistan.
6. SAARC Symposium Workshop on the "Biological Control of Agriculturally Important Plant Pests" Dec. 16-18, 1991 at CAMB, Lahore, Pakistan.
7. Third International Symposium Workshop on "The Applications of DNA Technology to Agriculture and Health" Oct. 25-28, 1992 at CEMB, Lahore, Pakistan.
8. Fourth International Symposium Workshop on the Applications of Molecular Biological Research in Agriculture, Health and Environment. April 8-11, 1995 at CEMB, Lahore, Pakistan.
9. Fifth International Symposium-Workshop on the Applications of Molecular Biological Research in Agriculture, Health and Environment. October 14-15, 1997 at CEMB, Lahore, Pakistan.
10. International Symposium-workshop on Genomics and Computational Analysis. October 16-18, 1997. CEMB, Lahore, Pakistan.

11. First National Conference of Biology, 28-30 March, 2002, Biological Society of Pakistan, organized by Biology Department , Government College Lahore.
12. Seventh International Conference on Trends in Biochemistry and Molecular Biology. April 2-5, 2003. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore
13. Genomic, Proteomics, Metabolomics: Resent Trends in Biotechnology. 22- 23 October, 2007. Deptt of Microbiology and Molecular Genetic. New Campus , Lahore.
14. Participated the workshop on Introduction to Laboratory Instrumentation. 10-18 July, 2008.
15. Workshop on “Development of sustainable and Collaborative Research Net Work” . 13-14 December, 2010

### **Oral Presentation**

1. International Symposium on Microbial Technology for Sustainable Agriculture. 12-16, March, 2007. NIBGE. Faisalabad, Pakistan.
2. Genomic, Proteomics, Metabolomics: Resent Trends in Biotechnology. 22-23 October, 2007. Deptt of Microbiology and Molecular Genetic. New Campus, Lahore.
3. International Conference on Sustainable Approaches for pest and Vector Management in Pakistan. Feb, 21-22, 2011. Department of Zoology. Lahore College for Woman University, Lahore.

### **PROJECTS**

1. Isolation and Characterizations of Endosulfan and Cypermethrin degrading bacteria from pesticides used agricultural lands.  
**2005 0.16 Million**
2. Application of Polymerase chain Reaction to the detection of catabolic genotypes in Endosulfan-degrading bacteria.  
**2007 0.1 Million**
3. Isolation of Pyrethorides degrading bacteria Local Habitat.  
**2009, 0.1 Million**
4. Antibacterial activities of selected plants extracts against Pesticides degrading bacteria.  
**2010, 0.1 Million**

