

SUBHASHREE .V

SUMMARY OF QUALIFICATIONS

Doctor of Philosophy (Ph .D) Aug 1999 – Sep 2003

Specialisation : Microbial Pathogenicity

Thesis title: Nontypeable Haemophilus influenzae: Virulence factors and mechanisms contributing to its pathogenicity

**University of Madras,
Guindy Campus, Chennai, Tamilnadu
Degree awarded in Nov.2005**

Master of Science (M.Sc) Jun 1995 – May 1997

Specialisation: Biochemistry, Passed with Distinction (GPA 8.1/10)

Avinashilingam Deemed University
Coimbatore, Tamilnadu

Bachelor of Science (B.Sc.) Aug 1992 – May 1995

Specialisation: Biochemistry, Passed in First Division (74 %)

Annai Sandhya College for Women (University of Madras) Krishnagiri, Tamilnadu

PROFESSIONAL EXPERIENCE

Vellore Institute of Technology

July 2004 to present date

Vellore, Tamilnadu

Lecturer, School of Bioengineering and Biosciences

Position involves handling theory and practical classes enabling students to prepare for the Bachelor of Science examination and Master of Science examination in subjects like Principles of Immunology, Biochemistry and Enzyme technology, evaluate them with internal tests and appraise them.

Auxilium Women's College

Jun2004 – March 2005

Vellore, Tamilnadu

Lecturer in Biochemistry & Bioinformatics

Position involved handling theory and practical classes enabling students to prepare for the III and II year of the Bachelor of Science examination of the Madras University, I year Master of Science examination for Bioinformatics in Biophysical Methodology & Genomics of the Thiruvalluvar University, evaluate them with internal tests and appraise them.

Chrsitian Medical College & Hospital

Nov 2002 – Sep 2003

Vellore , Tamilnadu

Sr.Demonstrator in Biochemistry

Position involved handling theory and practical classes enabling students to prepare for the the Master of Science examination and B.Sc. Nursing Students of the Dr. MGR Medical University, evaluate them with internal tests and appraise them.

Auxilium Women's College
Jun 1998 – March 1999
Vellore, Tamilnadu

Lecturer in Biochemistry

Position involved handling theory and practical classes enabling students to prepare for the I and II year of the Bachelor of Science examination of the Madras University, evaluate them with internal tests and appraise them.

ADDITIONAL PROFESSIONAL ACTIVITIES

Tata Institute of Fundamental Research **Jan 98 – Mar 98**
Bangalore, India

Undertook a project work entitled Expressing and purifying a His tagged protein using the pET bacterial expression system.

PUBLICATIONS

V.Subhashree and Dr.Sivagami Srinivasan, Effect of Molybdenum and phosphorus on Growth, nodulation and Biomass production of *Sesbania rostrata*, Proceedings of National Conference on remedies to Environmental pollution, 1999, 65- 69

AWARDS RECEIVED

Junior Scholarship from Lady Tata Memorial Trust, Mumbai for Ph. D. work, Aug 2000 – Aug 2002

Junior Research Fellowship from Indian Council of Agriculture and Research (ICAR), New Delhi for M.Sc. studies, Jun 1995- May 1997

Conferences participated

HIV/ AIDS, research issues conducted by Sir Dobarji Tata Institute for Tropical and Infectious Diseases, IISc Campus, National Institute of Advanced studies, Bangalore

Research issues in Gastrointestinal diseases , 4th winter Symposium organized by Christian Medical college, Vellore

LANGUAGES KNOWN

English, Tamil, Hindi

PERSONAL DETAILS

Sex: Female

Nationality: Indian

Date of Birth: 23 - September - 1975

REFERENCES

Dr. Niranjali Devaraj, Professor and Head, Department of Biochemistry and Molecular Biology, University of Madras, Guindy Campus, Chennai, India
Phone no: 044-24419596, niranjali@yahoo.com

Dr. Revathy Srinivasan, Head, P.G. Dept. of Biochemistry, Bharathi Women's College, Chennai, India.
Phone no: 044-24482016

Techniques known

I have successfully completed a project to express and purify the protein using the pET bacterial expression system.

During the project I learnt the following techniques.

1. Making competent bacterial cells for DNA transformation by the Calcium chloride method and PEG method.
2. Transformation of bacteria by both of the above types of competent cells.
3. Screening for plasmids in transformed cells by making minipreps and running them on agarose gels.
4. Expression of a His- tagged protein by IPTG induction in small and large scale bacterial cultures.
5. Purification of the His- tagged protein from small and large cultures by Ni affinity chromatography column.
6. Separation, Size Analysis and Activity Staining of Proteins by Native and SDS-PAGE

Also I have completed a project to identify the Virulence factors and Mechanisms contributing to its pathogenicity. During the project I learnt the following techniques

Anaerobic Culture Technology, Medium Preparation and Sterilization, Growth Physiology, Cell Disruption Techniques, Enzymatic Assays

1. Isolation of plasmid and genomic DNA and screening for them by agarose gel.
2. Antimicrobial susceptibility testing in wild and plasmid -cured strains.
3. Isolation of outer membrane proteins from the pathogens
4. Animal cell culture using cell lines.
5. Adherence assay using radio labeled bacterium
6. Competitive inhibition experiments.
7. ELISA and Western blotting
8. Isolation of antioxidant Enzymes and its activity assay by spectrophotometer and Native PAGE.

Also I have completed a project on Effect of Phosphorus and molybdenum on Growth, Nodulation, biomass production and Nitrogen fixation in *S.rostrata*. During this project I learnt the following techniques.

Enzymatic and Biochemical Assays

Enzyme activity assay of Glutamate Synthase, Glutamate dehydrogenase, Nitrate reductase, Glutamine Synthetase, Nitrogen, Phosphorus, Potassium, Chlorophyll, Allantoin and Amino nitrogen.

Future Research Interests

To explore on Microbial Pathogenesis further with molecular biology techniques like Transposon mutagenesis

Computer expertise

Graphing and Statistical

Analysis, Slide and Photo Production and Word Processing

