

Dr. B. Vaijyanthi



- 1. Name:** Dr. B. Vaijyanthi
- 2. Department:** Chemistry
- 3. Designation:** Associate Professor
- 4. Date of Joining:** 27th March, 1995 (Gargi)
25th August, 1992 (Teaching; without break)
- 5. Phone Numbers:** **Land Line No.:**
Mobile No.: 9810585242
- 6. E-mail i.d.:** bvaijyanthi@yahoo.com
- 7. Educational Qualifications:**

Qualification	Title/Course	University	Year
Ph.D.	Spectroscopic investigations on the interaction of the antitumor alkaloid ellipticine and its derivatives with DNA and polynucleotides.	Univ. of Delhi	1992
Post Graduate	M.Sc. Chemistry	IIT(Delhi)	1987
Under Graduate	B.Sc (Hons.) Chemistry	Miranda House, D.U.	1985
Any other	Diploma in French	Delhi Univ.	1990
	Post-doctoral research on Conformational studies of Photoresponsive oligonucleotides	IGIB, Mall Road, Delhi	Aug., 2002 to May, 2003

- 8. Positions Held / Career Profile:** Teaching since August 1992
- 9. Teaching Experience:** 23 Years
- 10. Area of Specialization:** Physical Chemistry
- 11. Courses and Subjects Taught:**

Courses	Subjects
B.Sc(Hons.) Chemistry I,II and III yr	Physical chemistry, Analytical chemistry, Computer applications to chemistry
B.Sc(Gen.)/B.Sc(Prog.), I ,II and IIIyr	
B.Sc (Hons.) Botany/Zoology/Microbiology I and II yr	

12. Publications:

1. Vaijayanthi, B., Atreyi, M., Rao, M.V.R., Schwaller, M.A., Aubard, J. & Dodin, G., *Indian Journal of Chemistry*, 30B, 153-157 (1991)
2. B. Vaijayanthi, P. Kumar, P.K. Ghosh & K.C. Gupta, Recent Advances in Oligonucleotide Synthesis and their applications, *Ind. J. Biochem. Biophys.* Vol. 40, 377-391 (2003)
3. P. Kumar, B. Vaijayanthi and K.C. Gupta, Strategies for development of Universal polymer supports for oligonucleotide syntheses in **Heterocyclic Chem.** Chapter 3; Ed. D.C. Gautam, RBSA Publishers, Jaipur, pp 26-54 (2004)
4. Jyoti Choitani, B. Vaijayanthi, Pradeep Kumar, K.C. Gupta, Construction of Oligonucleotide Microarrays (Biochip) using heterobifunctional Reagents, *Microarrays: Methods and Protocols (Methods Mol. Biol.)* (2007) 381, 133-164.
5. B. Vaijayanthi, S. Mahajan, G. Rembhotkar, K.C. Gupta, P. Kumar, Choice of Polymer Matrix, its Functionalization and Estimation of Functional Group Density for Preparation of Biochips, *Microarrays: Methods and Protocols (Methods Mol Biol.)* (2007) 381, 165-88.
6. V.K.Ahluwalia, Sushmita Chowdhury, B. Vaijayanthi (2008) Basic chemistry for class 11, Bharati Bhawan Publishers and Distributors. ISBN-13: 9788177098518
7. N. Ojha, Sushmita Chowdhury, B. Vaijayanthi (2011) Basic chemistry for class 12, Bharati Bhawan Publishers and Distributors. ISBN 13:9789350270226

13. Conference/Symposia/Workshops Attended /Organised

- a) Participated in the workshop on “*How to attract and retain meritorious students in Maths and Science*” organized by National Knowledge Commission on 10th September, 2007.
- b) Participated in the workshop on “*Development of Web based Value Addition Material in Inorganic Chemistry for B.Sc. Programme I yr* ” at ILL, University of Delhi, held on 2nd and 3rd May, 2009.
- c) Attended a workshop on “*Developing Champions for ICT Capacity Building in DU*” held by ILL in collaboration with Microsoft, from 10th to 28th August, 2009.

- d) Gave a talk on “*Formalising the non formal* “ at the Delhi University ACADEMIC CONGRESS titled “Enabling the Young: Rethinking Education”, 6 & 7th September 2012.
- e) One of the *coordinators* for the Summer workshop on “Recent trends in Scientific Research” held under the star college scheme of Gargi College from 15th to 30th June, 2009. Also *resource person* for the session on “ **Computers in Chemistry**”
- f) *Member of the organizing committee* for a one day Seminar on “Criminology and Forensic Science” held at Gargi College in 1998.
- g) *Member of the organizing committee* for a seminar on “Chemistry, Environment and You (Challenges for future)” held on 26th and 27th Sept., 2007.
- h) *Coordinator* of WikiEducator Gargi 2009 workshop on open educational resources held on 12th, 13th and 15th Jan., 09.
- i) One of the *coordinators* for the Summer workshop on “Recent trends in Scientific Research” held under the star college scheme of Gargi College from 15th to 30th June, 2009. Also resource person for the session on “**Computers in Chemistry**”
- j) Member of organising committee of Summer Workshop under Star College Scheme from 6th to 9th July, 2010
- k) *Member of organizing committee* for a one day seminar on “New Frontiers in Biotechnology” held on 2nd December, 2009 under the Star College Scheme at Gargi College.
- l) *Member of the organizing committee* for an add on course in “Advances in Forensic Science” being conducted in collaboration with Directorate of Forensic Science, Ministry of Home Affairs; 2010-11
- m) Member of the committee which organised “*International Year of Chemistry*” with the theme “Chemistry in our lives”; held by Chemistry department, Gargi College, 18th and 19th October, 2011.
- n) Member of organising committee for the seminar on “Role of e-technology in academic research and teaching-learning interactions”, 8-9 Dec., 2011.
- o) Member of organising committee for the Technical session “Commerce and Value Building” in the conference “*Convergence in Higher Education: Building Holistic Perceptions*” held on 7th and 8th Nov., 2012 at Gargi College.

14. Staff training by University/other Institutions

- a. Attended a workshop on “*Developing Champions for ICT Capacity Building in DU*” held by ILLI in collaboration with Microsoft, from 17th to 28th August, 2009.

- b. In continuation to the above workshop, ILLL organised workshops for the Gargi faculty from March 9th to 16th and April 12th to 16th, 2010; was member of the organising committee within the college, *coordinator* for one batch and *resource person* for all the batches.

15. Participation in Curriculum Restructuring :

- Design of curriculum: Attended several meetings called by the in-charge of restructured courses and offered suggestions for the improvement of the syllabus of environmental science papers of B.Sc(Gen) EVS course during 1994-95
- Attended a workshop on revision of B.Sc Programme syllabus for the year 2009-10, held at Chemistry department, University of Delhi.
- Member of the committee for designing syllabus for the applied course in chemistry for the FYUP during March 2013.
- *Development of Teaching aids:* From time to time, became voluntary member of a team of college teachers which was assigned the job of preparing a common question bank for circulation to all colleges. As part of this, contributed significantly to the question banks on
 - (i) Gaseous state for B.Sc.(Hons.) Chemistry, I yr.
 - (ii) Phase equilibria for B.Sc.(Hons.) Chemistry, II yr during the year 1993-94.
 - (iii) Quantum chemistry for B.Sc.(Hons.) Chemistry, III yr which is presently in circulation.
 - (iv) Analytical chemistry for B.Sc(Hons.) Chemistry I yr, 2012

16. Corporate Participation at the College Level:

- Deputy superintendent of examination in theory papers in 1998, alongwith a colleague.
- Superintendent of Chemistry Practical examination in 2001-02 and 2004-05.
- Member of the committee of restructured courses during 2005-06.
- Convenor of computer lab committee from April, 2005-2012.
- As convenor of the computer lab committee, set up a central computer facility (with other committee members) in the college consisting of 21 computers in 2005.
- Was instrumental (with other committee members) in setting up a second computer lab in 2007 for the computers provided by the University of Delhi.
- Coordinated in finalization of the Annual report of the college, which involved tasks like compilation of the matter given by various departments to close supervision of the printing work.
- Prepared the annual report of the college for five successive academic years 2006-07, 07-08, 08-09, 09-10 and 10-11. Also assisted in the preparation of the power point presentation of the Annual report for the four years.

- Convenor of the prospectus committee during the year 2008-09; Coordinated the production of the prospectus for the year 2009-10.
- Member of the “notebook purchase committee” which purchased notebooks (laptops) for issuing to teachers during 2010-11.
- Member of the pathfinder award committee (science) in 2011-12 and convenor in 2012-13.
- Member of the star college committee from 2009 - 2013.

17. Areas of Interest:

Academic	Instrumental methods of analysis – in particular , spectroscopic studies of biomolecules.
Non Academic	Sports – volley ball, badminton, throw ball

- 18. Any Other:** Accompanied the students of Gargi college in the **Gyanodaya express** journey organized by DU from 8th July 2012 to 19th July 2012
