

# Prof. Vijay Bhushan Aggarwal (28-09-1948 to 16-04-2024)

**Prof. Vijay Bhushan Aggarwal** (affectionately called **VBA Sir** by his colleagues and his students) was a distinguished academic and a pioneering figure in establishing and advancing computer science education in Delhi and other states. His career was marked by academic excellence, influential teaching roles in the US, and monumental institution-building in India.

## Early Life and Global Academic Excellence

- **Exceptional Start:** He achieved a **First Class First** in M.Sc. Mathematics (1969) from St. Stephen's College, University of Delhi.
- **US Education and Research:** He obtained his **Ph.D.** (1973) from the University of Illinois, Champaign-Urbana, USA, under the mentorship of Prof. David Mueller, a renowned figure in coding theory.
- **Teaching and Recognition:** He taught at the Computer Science Departments of **Colorado State University** and the **University of Vermont** in the USA. His research publications appeared in prestigious journals, including *BIT* and the *SIAM Journal of Computing*.
- **Invited Talks:** He delivered invited talks at several top universities, including **Johns Hopkins University** (1975), **Carnegie Mellon University** (1976), and the School of EE & CS, **MIT** (1976).

## Foundational Contributions in India (University of Delhi)

Driven by a commitment to national service, Prof. Aggarwal returned to India and was appointed in June 1981 as **Professor and Founder Head** of the Department of Computer Science, University of Delhi (DU). He also served as Dean of the Faculty of Mathematical Sciences.

His foundational contributions at DU included:

- **Establishing Programs:** He introduced a **Ph.D. Program** in Computer Science, initiating students from Physics and Mathematics backgrounds into research.
- **Pioneering MCA:** In 1982, he launched **India's first Master of Computer Applications (MCA)** program, a groundbreaking model subsequently replicated by over 5,000 institutions.
- **Curriculum Expansion:** He later introduced a B.Sc. program and a PG Diploma in Computer Applications for colleges affiliated with the University of Delhi.
- **Continued Research:** He continued his research on Hypercube Supercomputers, following a stint as a Visiting Faculty at the EECS Dept., University of Oklahoma, USA (1984-85).

## Spreading Computer Literacy and Awareness

After his tenure at the University of Delhi (1990–2000), Prof. Aggarwal undertook the crucial mission of spreading computer literacy across the country, primarily through the **CLASS project** launched by NCERT under the MHRD, Govt. of India.

- **Infrastructure and Training:** He directly assisted approximately **75 schools** in Delhi and NCR in setting up computer laboratories, selecting hardware, and training teachers.
- **Curriculum Development:** Collaborating with Prof. Bagga and Prof. Kulkarni, he developed textbooks for Class 11 and 12, and planned and published a series of graded textbooks, *Learning Computers Book VI to X*, which successfully encouraged school teachers to develop their writing skills.
- **National Impact:** He advised the Human Resources Development Department (HRDD) of 8 to 9 states (including Delhi) on implementing the CLASS project. Furthermore, at the request of the Navodaya Vidyalaya Samiti (1992–97), he provided expertise to establish labs and train staff for 43 Navodaya Vidyalayas. Through these activities, Prof. Aggarwal significantly impacted the lives of an estimated **6 to 7 lakh students** over the past decade.

## Later Career and Continuing Legacy

In his later years, Prof. Aggarwal pioneered initiatives around robotics education at schools, which he saw as the natural next step to computer education. He also continued to advise and help multiple technical institutes such as Jagan Institute of Management Studies (JIMS), Rohini, Banarasidas Chandiwalla Institute of Information Technology and Tecnia Institute of Advanced Studies, and University School of Information Technology at GGSIPU. Prof. Aggarwal continued his research activities, guiding several students to their Ph.D. degrees.

---

## Prof. V. B. Aggarwal Memorial Initiatives

To honor his enduring legacy in computer science education and student support, Prof. Aggarwal's family has instituted two initiatives:

1. **Prof. V. B. Aggarwal Memorial Scholarship:** This scholarship is established for two financially needy students, providing a **laptop** and **INR 50,000** in cash support. For the inaugural year, 2025, three MCA I Year students will be identified to receive the scholarship.
2. **Prof. V. B. Aggarwal Memorial Prize:** This prize recognizes academic merit and is awarded to the student who achieves the highest grades in the **MCA I Year examination**.