

Vinod V. Modi (1929–2016)

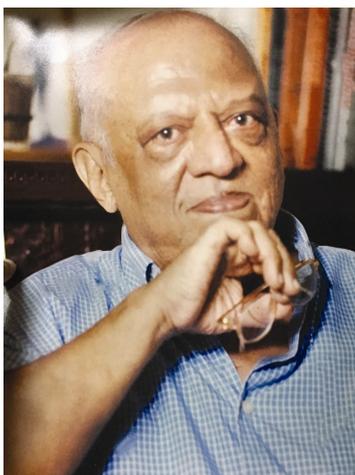
Vinod V. Modi – Founder Head, Department of Microbiology and Biotechnology Centre, Maharaja Sayajirao (M.S.) University of Baroda, Vadodara passed away on 18 June 2016 after a brief illness. His scientific tenure symbolizes the end of an era for scientists bred at the Department of Microbiology, M.S. University of Baroda, that came of age in Nehruvian India.

Modi was a veteran in the field of microbiology, well known nationally and internationally. After completing his undergraduate and postgraduate degrees in organic chemistry in Mumbai and Baroda respectively, Modi sought to complete his Ph D in the UK, where he joined the Department of Biochemistry at the University of Liverpool (which was the world's first department dedicated to the field of biochemistry then). He joined the young and dynamic group led by Trevor Goodwin that was actively involved in the study of carotenoids and their fundamental role as a precursor of Vitamin A. It was there that he absorbed the spirit of scientific inquiry, which he dreamt to perpetuate at his alma mater. He therefore returned to India despite having the opportunity to build his career abroad.

Modi's career was particularly remarkable. He joined the Department of Biochemistry, M.S. University of Baroda in 1957 after completing a postdoctoral stint at the Hannah Research Institute in Ayr, Scotland. The years 1961–62 proved particularly crucial as he spent them at the Department of Biochemistry, University of Illinois at Urbana Champaign, USA as a visiting scientist. This exposed his mind to the cutting-edge courses that could be part of a Master's curriculum.

Modi established the Department of Microbiology in 1964 at The M.S. University of Baroda, and introduced several avant-garde subjects like microbial genetics. He invited Hans Sadler (Director Max Plank Institute, Germany), Boyle (Dr Hay's Laboratory of Edinburgh) and late S. K. Mahajan and N. K. Notani (BARC, Mumbai) to structure the courses. He also introduced, for the first time in India, courses like biochemical engineering, fermentation technology and molecular biology in the M Sc Microbiology curriculum.

Modi had a passion for research and had developed a healthy research environment at the department. During his academic tenure, he guided about 46 students for Ph D and published more than 250 research papers in journals of international repute. He contributed in diverse



fields in biology: genetics and physiology of nitrogen-fixing organisms, e.g. *Rhizobia* and *Azospirillum*; carotene biogenesis; hydrocarbon degradation; wastewater treatment technology; mango ripening, etc. The mapping in *Rhizobia* by transformation and transduction was reported for the first time from his laboratory in the late sixties and early seventies.

Modi not only got many research programmes and research grants from government agencies such as PL480, ICAR, DBT, DST, CSIR, UGC, etc. during his tenure at the department, but also encouraged young faculty members to write research projects. In appreciation of the academic ambience, the Department was recognized as a Centre of Excellence by the Department of Biotechnology, Government of India, as one of the five centres to start the M Sc programme in Biotechnology in 1985, with full research and postdoctoral facilities. His practice of enlivening the academic routine with seminars, dissertations, special lectures, workshops and brain trusts sharpened the intellect of the Master's programme students as well as Ph D scholars of the Department, and also strengthened the confidence of young scientists. Modi had an intuitive knack of knowing the innate potential of his

young scientists and assigned to them projects in the field accordingly. He was the best event management specialist for building a module of participative governance for efficient functioning of the Department. This approach nurtured in the players a sense of belonging by giving their best and contributing to the well-being of the department. A strict disciplinarian but kind at heart, Modi instilled in young minds the value of punctuality and the importance of ethics in science, and urged them to achieve excellence and maintain a sense of duty and commitment. Years later, the scientific meeting organized by the Microbiology Department to commemorate 50 years of its establishment in 2013 was attended by a large number of alumni, who recounted how they owed Modi the credit for the instilling a value system that would help them achieve success in their scientific and professional endeavours.

A versatile personality, Modi was an institution-builder, an able administrator, a true mentor and a visionary with a compassionate world view. Post-retirement, he went on to lead many social and cultural ventures for another 25 years that led to the establishment of an environmental NGO, Society for Clean Environment (SOCLEEN); the Heritage Trust; Swar Vilas – the erstwhile classical music organization of Baroda Citizen's Council – and trusteeship of many higher secondary schools in Baroda.

The most befitting tribute to Modi would be to follow his footsteps and take research and academics of the Department of Microbiology and Biotechnology Centre at the M.S. University of Baroda to greater heights. He was respected in the scientific fraternity for his worthy contributions.

Modi is survived by his wife, two daughters and two grandchildren among his immediate family and a generation of students who were mentored by him and will continue to be inspired by his memories.

ANJANA DESAI

*Department of Microbiology and
Biotechnology Centre,
M.S. University of Baroda,
Vadodara 390 002, India
e-mail: anjana.desai48@yahoo.com*