Bal Dattatreya Tilak – An obituary

Bal Dattatreya Tilak (1918–1999) was born at Karanja (Vidharbha) in Maharashtra. His father, Dattatreya Damodar Tilak, was a textile engineer. He rose through the ranks and retired as the chief engineer and manager at Khandesh Mills in Jalgaon, Maharashtra.

B. D. Tilak had his early education at Jalgaon. After completing his matriculation in 1933, he received his undergraduate training at S. P. College, Pune. He graduated in 1937 with a B Sc securing first class and 1st rank. Tilak enrolled at the Royal Institute of Science (Bombay) for a study of dyes used for textile industry and obtained a B Sc Tech Degree in 1939. For his doctoral work, he joined the illustrious school of dyestuff chemistry of K. Venkataraman at the Department of Chemical Technology (BUDCT), Bombay University. After receiving Ph D (Tech) in 1943, Tilak pursued his training in research with Sir Robert Robinson, Nobel Laureate and the 'Grandfather of modern organic chemistry' at Oxford University. Tilak received D Phil in 1946 at Oxford. The Oxford University also awarded him the Doctor of Science (D Sc) degree in 1960s.

Tilak worked with several outstanding scientists in his career. For example, he worked with Woodward, another Nobel Laureate in chemistry at Harvard University in 1960 during his sabbatical leave from Bombay University.

Upon returning from Oxford in 1946, Tilak rejoined BUDCT to pursue research in heterocyclic chemistry at Matunga, Bombay. He taught and guided research in chemistry of dyes, heterocyclic compounds and steroids. A chemical reaction in sulphur chemistry was named after Tilak. He published over 200 scientific papers in Indian and International scientific journals and guided over 95 students for M Sc, M Sc (Tech), Ph D and Ph D (Tech) degrees. Most of them have reached the pinacle in their chosen careers. Many of his students are holding key positions in chemical industries and national laboratories.

Apart from his outstanding research, Tilak also contributed significantly to India's march towards self-reliance in chemical technology. Thus, industrial research carried out under his leadership has led to the establishment of several small, medium and large-scale industries which are producing organic intermediates, dyes, pesticides and textile auxillaries.

As a result of the dynamic R&D policies and programmes initiated by Tilak during his tenure between 1966 and 1978 as the Director of National Chemical Laboratories (NCL), the value of commercial production based on NCL know-how increased phenomenally from 15 lakhs (1965) to more than Rs 81 crores by the time he retired in 1978. While at NCL, as well as after his retirement, Tilak served as a consultant to several chemical industries. He travelled widely and delivered lectures

on his research work at a number of leading universities and industrial R&D laboratories through out the world. Tilak led several delegations to many countries on behalf of India and visited various institutions in these countries for the continued development and progress of Indian Chemical Industry.

Tilak was elected to various academic bodies like Indian National Science Academy, Maharashtra Academy of Sciences and the Indian Academy of Sciences. He served as the Chairman of Hindustan Organic Chemicals for nine years. He was also on the board of directors of not only several large public limited companies such as HAL, EIL and IPCL but also many other small and medium scale industries. He was very active in guiding these industries for a number of years well beyond his retirement from the Directorship of NCL in 1978.

Tilak served on various National and State Committees. He was the Chairman of the National Committee of Science and Technology (NCST) and directed the Maharashtra State's Science and Technology Cell. He was involved in various projects for development of ecosystems in Maharashtra. Tilak believed that the lives of the rural and tribal communities in India can be vastly improved by the application of science and technology. With this conviction, he visited and studied problems of the adivasis in remote areas of Bastar and earned their trust.

Several prestigeous awards have been conferred on Tilak in recognition of his outstanding work in organic and dyestuff chemistry and in research and development for chemical and dyestuff industries. He was the recipient of Shantiswaroop Bhatnagar Award, P. C. Ray Award and K. G. Naik Gold Medal, etc. to name but a few. The crowning moment of glory came when he was honoured with the national award of Padmabhushan by the President of India in 1972.

Tilak remained active after his retirement from NCL, taking deep interest in India's national and social issues. He continued his work with a missionary zeal for the economic upliftment of rural people through application of Science and Technology. He founded Centre for Application Science and Technology for Research and Development (CASTFORD) and conducted a number of projects for the benefit of rural people. For example, CASTFORD helped develop energy efficient and safe, hazard-free chulas. Another project involved agricultural development by the use of slow release urea and diammonium phosphate. In this endeavour, Tilak served as the Chairman of Forum for Science and Technology for Rural Education and Development (FOSTERED) and guided its activities for development of rural people through application of modern science and technology.

During his last five years, Tilak developed a keen interest in ayurvedic medicine, particularly in anticancer and

antiviral compounds of natural origin. He was involved in performing a survey of Indian medicinal plants which are used for geriatric patients in Ayurvedic medicine. Tilak was particularly interested in the use of medicinal plants for the purpose of promoting healthy ageing.

Tilak remained active till his last illness at the age of 81. On 25 May 1999, he breathed his last following a cardiac illness and the scientific community lost a doyen of Indian chemistry and chemical technology. He is survived by his wife and three children.

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MEETINGS/SYMPOSIA/SEMINARS

IV International Symposium on Innovations in Pharmaceutical Sciences and Technology

Date: 4–6 February 2000
Place: Ahmedabad

Recent advances in the areas of pharmaceutical technology, biological sciences, chemical sciences, biotechnology and natural products pertaining to the designing and discovery of new drug molecules as well as development of novel drug delivery system for oral transdermal and other non-parenteral route and regulatory requirements, will be discussed. There will be two pre-symposium workshops on Emerging Trends and Directions in Drug Discovery and Transdermal and Pulmonary Drug Delivery.

Contact: Symposium Secretariat
B. V. Patel PERD Centre
Thaltej
Ahmedabad 380 054
Tel: 079-743-9375; 745 0449
Fax: 079-745 0449
E-mail: perd@wilnetonline.net

Indian Science Congress

Date: 3–7 January 2000
Place: Pune

The focal theme will be – Indian S&T into the Next Millennium. Symposia on specialized topics will also take place. Other deliberations will include presidential addresses, lectures on subjects of special interests and also presentation of research papers as posters.

Contact: The General Secretary/The Executive Secretary,
The Indian Science Congress Association,
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