

A life devoted to Science

T R Seshadri (3 Feb 1900 – 27 Sep 1975)

In this edition of Personalities we look back at a scientific giant who contributed immensely to the field of natural products chemistry. Thiruvenkata Rajendra Seshadri was born in Kulitaiai, a small town near Trichy in the erstwhile presidency of Madras. After completing his schooling in the temple towns of Srirangam and Trichy, Seshadri moved to Presidency College, Madras to study B.Sc. (H) chemistry and followed this with a Master's degree at the University of Madras. His interest in research arose early, as is evident from the fact that he worked in the laboratory of his teacher B B Dey immediately after finishing his Master's course, instead of searching for a job, which was the norm in those days of the Raj.

In 1927, Seshadri won an overseas scholarship to study new antimalarials and synthesize anthocyanins with Sir Robert Robinson's group at the University of Manchester. After obtaining a doctorate degree there, he learned organic microanalysis with Nobel laureate Fritz Pregl and studied the alkaloid Retrorsine with G Barger at the University of Glasgow. Seshadri returned to India in 1930 and started his studies on plant chemistry at Coimbatore. In 1934, he joined Andhra University to establish an internationally reputed research school on flavonoids. On the invitation of the visionary Sir Maurice Gwyer, Seshadri joined the University of Delhi as the Head of the Department of chemistry. In very short time and on minimal resources, he established a world leading research school on natural products, with special attention to terpenoids, alkaloids and quinonoids. The University's first Emeritus Professor, Seshadri continued active



T.R. Seshadri

research after retirement, inspite of suffering a heart attack, for seven years till 1972. For the next three years of his life, Seshadri battled heart problems and petty politics.

Seshadri had a special interest in flower pigments and studies flowers from places as disparate as Ranikhet, Hyderabad and Darjeeling. One of his papers¹ also studied red sandalwood obtained from Burma. He also had a clear sense of nomenclature, as is evident in his naming of a brownish-red, crystalline pigment in the flowers of *Butea frondosa* as Palasitrin, after the Indian name of the tree, Palas².

Seshadri presided over the Indian Science Congress held at Hyderabad, in 1967. In his presidential address, he stressed on the role of Universities as research centres and nation builders, and asserted that the two functions could be moulded with their regular teaching function. He also emphasized the moral conditioning of the scientific mind so as to utilize science and its results in a constructive manner. Seshadri held that science and spirituality were perfectly compatible and both were indispensable for the evolution of human life.

Seshadri had an eye for every single detail and combined analytical and degradative approaches to research and, late in his career, supplemented them with spectroscopic methods. His career spanned around half a century and yielded almost 1000 publications and two world-class schools at Andhra Pradesh and Delhi.

References:

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- 2) Puri, B.; Seshadri, T. R. Part VIII, *J. Sci. Ind. Res. India*, 1955, 14, B, 93.

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