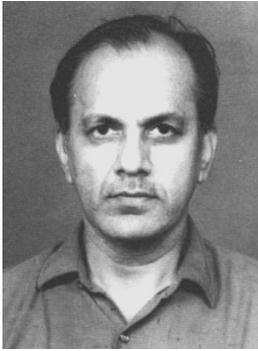


## C.S. Seshadri: Eminent Mathematician and Institution Builder



The passing of Professor Conjeevaram Srirangachari Seshadri on 17 July 2020 deprives India of one of its leading mathematical lights, and TIFR of one of the architects of its acclaimed School of Mathematics. Seshadri joined TIFR as a Research Scholar in 1953 and rose to the position of a Senior Professor, before he moved to Chennai in 1984. In all, he spent 32 fruitful years at TIFR as an academic member. He served the institute again from 1993 to 1998 as a member of its Council of Management.

Seshadri was born on 29 February 1932 in Kanchipuram, and had his early schooling in Chengalpattu, where his father had a flourishing practice as a lawyer. Seshadri then joined Loyola College in Chennai, from where he obtained his B.A.(Honours) degree in Mathematics in 1953. At Loyola, Seshadri had several influential teachers; one of them was Father Charles Racine, a student of Élie Cartan, who introduced Seshadri and his fellow student M.S. Narasimhan to modern developments in mathematics, and encouraged them to join TIFR. If Father Racine opened for Seshadri and Narasimhan a window into the thriving world of French mathematics, K. Chandrasekharan, the founder of the School of Mathematics, opened the floodgates. Soon after the young students joined the institute, they were met with wave after wave of eminent visiting European and American mathematicians — the most influential among them being the Fields medalist Laurent Schwartz. In 1957, after finishing his Ph.D. work, Seshadri left for Paris, where he met the leading mathematicians of France's famed Bourbaki era, including Alexander Grothendieck. Seshadri soon established a reputation for himself by solving a problem suggested by Claude Chevalley, from whom he also learnt algebraic geometry, and by making progress on a conjecture of Jean-Pierre Serre.

Seshadri returned to India in 1960. His collaboration with Narasimhan in the mid-1960s resulted in the path-breaking Seshadri-Narasimhan theorem about vector bundles on compact Riemann surfaces. In the 1960s and the 1970s, he made important contributions to several areas of algebraic geometry, especially geometric invariant theory, a field pioneered by David Mumford, who became a close friend, and standard monomial theory, with his students C Musili and V Lakshmibai. Seshadri trained many outstanding Ph.D. students at TIFR, notably Pavaman Murty and Madhav Nori. In the two decades after Seshadri and Narasimhan returned from Paris, the institute's formidable group of mathematicians had built for itself an outstanding international reputation. In 1984, Seshadri moved to the Institute of Mathematical Sciences (IMSc), Chennai, for personal reasons. After five years there, in a pioneering enterprise, he founded the School of Mathematics of the SPIC Science Foundation. In 1998, the school was renamed Chennai Mathematical Institute (CMI). Seshadri continued as its Director until 2010. Today, CMI is one of India's best institutions for research and undergraduate training in mathematics. Seshadri's contributions were recognised by several awards, including the Padma Bhushan, the S.S. Bhatnagar Prize and the Fellowship of the Royal Society, apart from several honorary doctorates.

Seshadri was an unassuming person who made friends easily. He had a reputation for absent-mindedness, but readily joined in the laughter when people narrated stories about him. In one of them, he is supposed to have absent-mindedly tried to purchase a bus ticket to Churchgate from a bemused TIFR canteen cashier, when he actually meant to pay for his coffee. Seshadri had a deep interest in Indian classical music, and was an accomplished Carnatic singer. He leaves behind a large extended family. He lost his beloved wife, Sundari, in 2019, and is survived by his sons, Narasimhan and Giridhar.

TIFR records with sadness Seshadri's passing; it remembers with gratitude his service, and with deep respect his sparkling multifaceted legacy of academic achievement, cultural and aesthetic sensitivity, and institution-building. The Institute offers its heartfelt condolences to Seshadri's colleagues and students, and to his family.