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The unfathomable beauty of mathematics

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Although I come from a family of agricultural landlords from a remote part of South Kerala, the importance of good education, particularly for girls, has always been a top priority for all the family members. My father was a lawyer by profession, practicing at Alleppey, a small town in the erstwhile Travancore. My mother had graduated from Madras University, but decided to be a homemaker. The families of both my parents were very academically oriented and well educated. The environment in which I grew up instilled in me a sense of discipline to excel in whatever I did. I had my schooling in St. Antony's Girls High School and St. Joseph's College for women and my graduation and postgraduation in Mathematics from Sanatana Dharma College, Alleppey.

My love and fascination for Mathematics began very early and was kindled and nurtured by my parents. Even as a child, my father used to give me mental sums and gave me many hints on how to do mental arithmetic. This went a long way in kindling in me a life-long fascination and love for Mathematics which I continue to cherish.

I have been very fortunate in having excellent teachers both at school and college, who nurtured my interest in Mathematics. I had great teachers at St Joseph's who nurtured my love for Mathematics after spotting my keen interest in the subject. It was under their tutelage that I appeared for National Science Talent Search Examination conducted by NCERT, New Delhi.

Highly inspired by reading books like *Principia Mathematica*, a three volume work on Foundations of Mathematics, which threw light on the attempts to derive mathematical truths from a well defined set of axioms and inference rules in symbolic logic, I was keen to pursue a doctoral programme in Mathematics. My family was apprehensive about my higher studies in an abstract subject like Mathematics and my being away from home for the first time when I went to Chennai to pursue my Ph.D. at MATSCIENCE, now referred to as IMSc, under the able guidance of Dr. K. R. Unni, in Functional Analysis.

Half way through my doctoral programme, I married Mr K. S. Narayanaswamy, a Chartered Accountant who was working for a Bank in Ahmedabad. I had unconditional support from him to pursue my studies and I used to make frequent visits to MATSCIENCE to meet my guide for discussions. With the support from my husband's parents also who were residing in Chennai and for whom education and knowledge were invaluable, I could complete my studies and submit my thesis.

After completing my Ph.D., I went on a postdoctoral fellowship to the University of Pittsburgh, where I worked on smoothing of curves and surfaces using spline functions.

I then, joined Aeronautical Development Agency (ADA) at Bangalore, an autonomous body under the Ministry of Defense, as a scientist. ADA is the nodal agency for the design and development of the multi-role supersonic fighter Light Combat Aircraft (LCA), now christened as TEJAS, to primarily meet the requirements of Indian Air Force and Indian Navy.

My becoming a mathematician and a scientist was purely out of my choice and innate passion for science. I have been fortunate to get undaunted support and encouragement from my fam-

ily members. I personally feel that science offers excellent career for women who are capable of multiple handling roles with dexterity.

Our policy makers should look into the possibility of offering flexi-time working hours for women with small children, thereby giving them more flexibility to combine the family and career, thus helping them reach greater heights in their pursuit of science.