

1947 - A love story (with maths!) 3-8-1999

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DH News Service

THE year was 1947. A seven year old girl from Punjab silently accompanied her parents and family members to seek shelter in Hyderabad. Where they would be far removed from the disturbances being caused by the Indo-Pak divide.

From then on, for four years, the family had to struggle to eke out a living, in their new surroundings. Hard work in a business venture en-

PROFILE

sured that they were well-placed once more. The young girl joined a school in Hyderabad along with her brothers and sisters. And excelled in mathematics!

Thus started Chanchal Uberoi's intense fascination with mathematics. So much so that she took it up as a main subject during her matriculation studies. After overcoming some opposition among the family members.

"In those days mathematics was not considered to be a subject that girls took up. There was more demand for medicine and teaching," she explains.

Soon, Chanchal found herself yielding meekly to her father's wishes, by taking up biology as a subject for her matriculation studies.

"I hated biology and felt miserable" she reminisces. "So I went up to Dr.

Sreedevi, the college principal and poured out my misery."

Finally, after much perseverance, she won the academic battle with the elders and took up mathematics. "I had to make up for the first year of matriculation all by myself. And I succeeded!"

Later on, she pursued maths in her graduate and postgraduate studies.

Subsequently, she joined the Indian Institute of Science and obtained a PhD in mathematics. And finally, after a stint abroad, she rejoined the illustrious institute as a faculty member.

member.

"My passion has always been to apply mathematics to different fields," explains the lady professor. Which is why her problem relates to plasma dynamics, a border area between Astro and Space physics.

Recently, Professor Uberoi has taken up the prestigious position as Dean of Sciences, at the Indian Institute of Science. After ninety long years, the Institute has seen a woman being appointed as Dean.

Professor Chanchal Uberoi spoke to Deccan Herald, after her appointment as Dean of Sciences.

DH: Through the years, have you seen an increase in the number of women in the field of science?

Chanchal Uberoi: Definitely, there has been an increase in the number of



Prof Chanchal Uberoi along with her colleagues at an International conference in Rio de Janeiro

women joining the scientific field. During my time, there were just two women PhD scholars in the campus! In 1965, the number increased to sixteen. Today, there are a number of hostels for women on this campus. This speaks volumes about their involvement of women!

DH: Do you feel that there is a discrimination against women in science?

CU: Certainly there exists a discrimination against women in all fields. It is present all over the world.

DH: What reasons do you attribute for this kind of discrimination?

CU: I think it tantamounts to plain

prejudice against women. The way I see it, there are hardly any women occupying higher positions in the country. But this certainly does not mean that there are no lady scientists in research in India.

DH: What, in your opinion is the scope for research in mathematics in India today? Particularly since the information technology industry has given a wider scope for youth to carve a better career graph?

CU: Let's face it. Science is not looked upon with the same glamour as other careers. How many students take up mathematics in their higher studies? After all, a discovery in basic science today becomes technological innovation

tomorrow. How long can a nation survive on borrowed technology?

First of all, we need to develop a scientific spirit. This can be done by developing a scientific attitude in all.

DH: But in order to inculcate an interest among the youth to basic sciences, we need to target the children in the smaller classes. Now, in your opinion, how good is the curriculum of schools in nurturing this interest? Do you think that our country relies on good teaching methods to attract children to science and math?

CU: There is nothing wrong with the school curricula in India. What needs to be improved upon are our methods to train children to think independently. Free thinking and less memorising, to be precise. Developing a child's creativity towards designing experiments is also very crucial to nurture future scientists and technologists..

Professor Chanchal Uberoi has seen thirty eight years at the IISc. "I enjoyed every moment of my stay" she says, with a twinkle in her eyes. Professor Uberoi has helped many lady scientists to pursue science, by employing them in her research projects, and providing flexibility of timings in their work schedules. "Their family life should not curb their interest in science and their employers must help them in it," she says emphatically, before turning back to her papers.

I left her thus and walked out of the room. The room with a panoramic view of the lush greenery that the institute is so famous for.