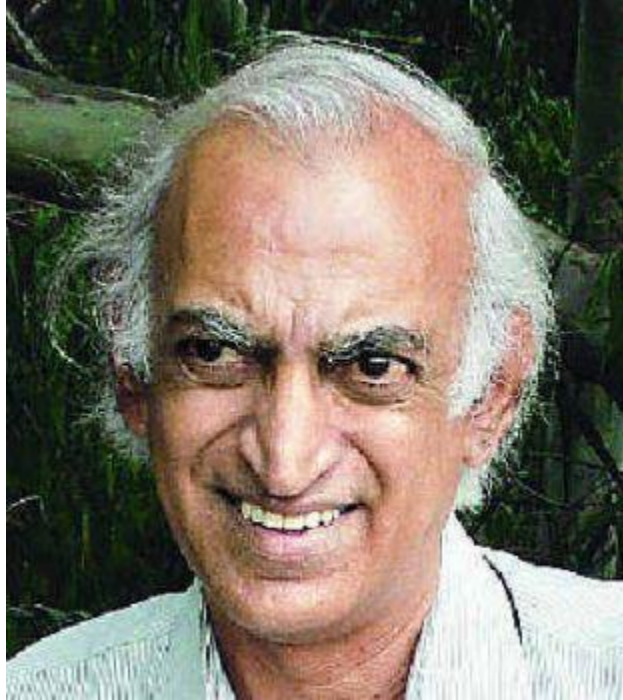


## 'I use astronomy as a Trojan horse'

ANAND SANKAR

How to make teaching interesting.

PHOTO: ANAND SANKAR



**IMAGINATIVE TEACHER: G. Srinivasan of Raman Research Institute, Bangalore.**

THERE IS no excitement in the syllabus. There is a feeling that whatever you learn in college is irrelevant, says G. Srinivasan, Scientist, Raman Research Institute. Though he has retired from active research, Prof. Srinivasan still has the glow in his eyes. His objective now is to make his chosen subject, Physics, more interesting for the present generation of students.

"The Physics that you learn is different from what you use. To make it interesting, you must apply it to interesting problems. You study the same Newton's rings from pre-university. I can't blame the students if they are bored," he adds.

To make Physics more engaging, Prof. Srinivasan has conceptualised a one-year course in Space Sciences and it is into its third year at St. Joseph's College. He believes that the notes and classroom approach has to change because the students are different now.

"You have to show contemporary success stories. If you want to inspire a kid to play cricket, you need to show him Sachin Tendulkar, not Don Bradman or Vijay Hazare. The same way in Physics. We shouldn't go on about C.V. Raman, show the kids success stories today," he argues.

The show and tell method, he says, is the best especially if you don't have to go far to see the success stories. He chooses ISRO to show how what you just studied in textbooks have been transformed into reality.

"ISRO has had many spectacular successes. They are building Astrosat, a world-class satellite, and have GMRT, the world's largest radio telescope. The international community knows these things but not our student community. I don't try to sell science. I tell them there are exciting things to do even in India. I take the students to Sriharikota to

see rockets, then go to satellite tracking centres and satellite making centres. I make them listen to people there. The facilities there seem to students right out of a James Bond movie."

Prof. Srinivasan wants to use his course as means to not just generate interest in Physics but all sciences. He says nothing generates more curiosity than stars and galaxies. "I use astronomy as a Trojan horse. I show them galaxies and they ask how this is possible. Then you tell them about atomic physics. So, what you learn becomes meaningful."

Another aim of his course is to get the research institutes in Bangalore work more closely with colleges in the city, and the course is open to students from all engineering and science colleges. "My main idea was to kickstart interaction between research institutes and colleges. Abroad, scientists teach students. Any subject has to be taught by practitioners."

Prof. Srinivasan's course is not limited to students. He also welcomes teachers. He has had student-teachers coming to him all the way from Madurai.

"My lectures are three-hours-long. I start with something about the sun and finish with why the sky is blue. I like to ask lecturers to attend my lectures because they are just used to distributing notes given by someone else. This is different for them."

The professor's advice to parents is to let their children choose their own paths. They just need some motivation.

"I met six kids chosen by NASA for the Mars Red Rover programme. I spent a day with them. They were geniuses, but not one of them you hear of later on. Because they were being made to pass this hurdle. They are special, you must let them loose."

You can email Prof. Srinivasan at [srini@rri.res.in](mailto:srini@rri.res.in). To know more about the course, call the Physics Department, St. Joseph's College, on Ph: 22211429.