

*So you are hopeful?*

Yes, I am quite hopeful.

### Others

*You have been the Founder Chairman of Solid State and Structural Chemistry Unit and the Materials Research Laboratory in the Indian Institute of Science, Bangalore. How has solid state chemistry in the country shaped up?*

Since I set up the Unit, the area of solid state chemistry is no longer called so but is called chemistry of materials. This subject has become important. I set up this Unit in Bangalore much before the subject became important in the world. Now chemistry has two major directions: chemical biology and materials chemistry. The Unit is well-known, but there are not enough young people. A lot of young people have gone abroad. I hope these people will come and work in India.

*You are a member of the scientific academies in the country and fellow, foreign member or honorary foreign member of several international Academies. Are our Academies doing enough?*

The Academies are doing well, but they can be much more active. They can do much more for the scientific community, in education and in popularization of science. They are doing something, but it is not sufficient. Secondly, our Academies should champion causes of S&T and ensure the relative importance of science in society. They can do much more.

*As President of the Third World Academy of Sciences, when is the postponed but much-awaited TWAS meeting in India to be held?*

It has been fixed for 19–23 October 2002.

*As President of the Chemical Research Society of India (CRSI), what do you feel about the state of chemistry in the country? Chemistry is an integral science, playing a central role in improving the quality of our life.*

We should have many more young chemists. We should improve the quality of our publications. I hope that a society like the CRSI would provide the necessary encouragement to young chemists.

We need better professional societies helping people. I feel that this is not happening.

*Your views on the state of chemistry education in the country?*

All of science education is going through a bad situation. I do not like the way we teach chemistry. I do not like the way we teach science. I think that it can be made much more exciting. I have tried my best wherever I could. But individual effort is not enough. We need a social revolution. We need lots of teacher-training programmes, summer schools, etc. Ours is a large country. We need a science celebration occurring for the next ten years, so that ten years from now we have lots of young people coming into science. India should not only be the storehouse of science, but also the provider of intellectual wisdom in the world.

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## Random selection

‘Octylphenol and UV-B radiation alter larval development and hypothalamic gene expression in the leopard frog (*Rana pipiens*)’

Douglas Crump, David Lean and Vance L. Trudeau

*Environmental Health Perspectives*, 2002, **110**, 227–284

An increasing number of endocrine-dis-

rupting chemicals (EDCs) in the environment results in chronic exposures of humans and wildlife to low concentrations of contaminants such as dichlorodiphenyltrichloroethane, polychlorinated biphenyls and synthetic steroids. The paper in citation assesses octylphenol (OP), an estrogenic endocrine-disrupting chemical and UV-B radiation, a known stressor to amphibian development. The

experiments consisted of newly hatched tadpoles exposed to 10 days to OP alone at two different levels, subambient UV-B radiation, and later both combinations. From the results, the authors conclude that the levels of OP commonly found in the environment and subambient levels of UV-B alter the expression of hypothalamic genes and disrupt growth patterns.