

PM Gives Away Shanti Swarup Bhatnagar Awards

December 20, 2008
New Delhi

I am very pleased to be here in your midst today to give away the Shanti Swarup Bhatnagar Prizes for the years 2007 & 2008. I congratulate each one of the award winners. And I shall also like to congratulate their spouses because this creative pursuit is a joint enterprise which is not often recognized. This is the most prestigious award for scientific excellence and is given to scientists who are under 45 years of age. The awards recognize past work but are also an inspiration for the winners to achieve even greater successes in the years to come. I sincerely hope that while we celebrate the achievements of these scientists, best is yet to come.

The Shanti Swarup Bhatnagar awards are named after one of our scientific pioneers and institution builders. Shanti Swarup Bhatnagar, along with Homi Bhaba, P.C. Mahalanobis and Vikram Sarabhai among others created the scientific infrastructure of our country. He was a visionary and laid the foundation of the great institution that is today the Council for Scientific and Industrial Research, a pride of India. Pandit Jawaharlal Nehru said about Shanti Swarup Bhatnagar that:

‘Dr. Bhatnagar was a special combination of many things, added to which was a tremendous energy with an enthusiasm to achieve things. The result was he left a record of achievement which was truly remarkable. I can truly say that but for Dr. Bhatnagar you could not have seen today the chain of national laboratories.’

It is this energy and this enthusiasm of our scientists that we honour and celebrate each year on such events. The creativity and innovation of our scientists are a matter of great national pride for our country. They have pushed the frontiers of scientific knowledge to enable us to strengthen our defence capabilities; improve our healthcare and our agricultural economy; extend the reach of our communications and enable us to land on the moon.

The Diamond Jubilee Technology Award to Mahindra & Mahindra Ltd. symbolises the importance we attach to commercialization of scientific and technological research. The Rural Technology award given jointly to the National Research Centre on Yak for improvement of sustainable Yak husbandry practices in the Himalayan Region and to the Nimbkar Agricultural Research Institute along with the National Chemical Laboratory for genetic improvement of Deccani breed of sheep recognizes the difference these innovations have made to the livelihoods of the people in rural areas. My warm felicitations to these award winners.

I am happy that CSIR has undertaken a number of important initiatives over the past few years. We are the first country that has successfully mapped the entire genetic diversity of its population. This will lead to the identification of populations that are genetically at risk of various complex and infectious diseases including adverse drug responses. Another initiative that has immense economic importance for our farmers is a path breaking scientific discovery that enables mass propagation of even asexually produced seeds.

I convey my warm appreciation to Shri Kapil Sibal, our dynamic Minister for Science & Technology and to Dr. Samir Brahmachari, the Director General, CSIR for these achievements.

Even as we applaud these achievements, we have to address ourselves as a nation to the larger challenge before us. How can science, industry and government work as one efficient and integrated machine to deliver to the people the benefits of these scientific and technological advances?

This is an area where countries such as China and Japan have scored over us. Unless we apply ourselves to this task, the powerful scientific tools of social and economic change will remain confined to our laboratories and to our institutions. Our scientists, I suggest, should work to connect science to the daily lives of millions of our people. S&T based entrepreneurs and innovation in industry should be encouraged at all levels. And government should create a favourable enabling environment for this to take place.

Public-private partnerships should be used to commercialize the technologies emerging from R&D programmes being funded by various science departments. We should focus more on linking the lab with the market.

I urge CSIR to take the lead in this regard and define new strategies for translating cutting edge science and technology into globally competitive enterprises. To begin with, let CSIR work to commercially exploit its vast knowledge base, currently embodied in more than 3000 or so patents held nationally and globally.

The role of technology in supporting our counter terrorism and internal security efforts is I believe not adequately appreciated. Other countries have used modern science and technology in their security structures with great effect. It acts not only as a force multiplier but can also provide solutions to human problems relating to command, coordination and communication.

Some of the areas where greater work is required are surveillance systems, cryptography, near real time search and identification from distributed large data bases and computer simulation exercises to enhance our crisis tactics and responses.

We should use scientific interventions to neutralize weapons of terror and mass destruction. I believe that investment in security technologies is vital if our security systems are to keep pace with the increasing sophistication of international terrorism and crime.

This is also a time when the world is confronted with potentially devastating climatic changes. It is also a time when the world is faced with a growing economic recession. But with adversity comes opportunity. We can use the ingenuity and inventiveness of science to find ways to 'leapfrog' to future technologies, which are affordable and also sustainable. We can use some part of the public investment, which we will spend to stimulate our economies, in these new technologies that will help build sustainable pathways to development.

We have proposed the creation of a National Mission on Strategic Knowledge for Climate Change as part of the National Action Plan on Climate Change. I understand that the Ministry of Science and Technology is currently putting together a plan that will provide us the framework for research and investigation in this area. I think public policy should increasingly adopt strategic approaches based on science.

Our government has worked hard for the rejuvenation of the S&T establishment in our country, including through a huge expansion of the learning infrastructure. This is a very important national priority and we will spare no resource to ensure that we realize the huge potential of our Science & Technology capability.

Our budgetary support to the Ministry of Science & Technology during the XIth Five Year Plan is three times higher than during the Xth plan. I hope that our scientific departments will make judicious use of these enhanced allocations based on a new vision, a new work culture and a renewed focus on scientific solutions that impact on the lives of the common man.

I recognize that if our scientific institutions of higher learning and research laboratories are to flourish, they require high quality manpower particularly at entry levels. We have made strenuous efforts in this regard, which I hope will show visible results in the years to come. We cannot be satisfied becoming a back office for providing Research & Development solutions for multinational companies.

I am very happy that the scientific departments are making their own efforts to create a talent pool from which our scientific establishment can draw upon. In this regard, the STIO initiative of CSIR, the INSPIRE programme of the Department of Science & Technology and Welcome Trust Fellowship programme of the Department of Biotechnology are worthy of mention.

With these words, I once again congratulate the award winners and wish them many many years of stimulating and productive research career in the service of the country and in the service of humanity at large. Their intellectual drive and brilliance give us hope and confidence that Indian science can devise effective solutions for the many problems that confront our country and indeed the world.