

# ***THE EVOLUTION OF INDIA'S SCIENCE, TECHNOLOGY AND PUBLIC POLICY: PAST, PRESENT AND FUTURE***

S. Sivaram  
CSIR Bhatnagar Fellow  
A 201, Polymers and Advanced Materials Laboratory  
National Chemical Laboratory,  
Pune 411 008.

E mail: [s.sivaram@ncl.res.in](mailto:s.sivaram@ncl.res.in)  
[www.swaminathansivaram.in](http://www.swaminathansivaram.in)

## **ABSTRACT**

The enterprise of science is a social contract between those who practice science as a profession, the economic and political environment, which prioritizes and funds the scientists and the society which expects science and technology to deliver solutions to ameliorate their problems. This social contract is undergoing tectonic shifts in recent years. In a shrinking economy and greater competition for public and private funds, every stake holder in this contract is asking difficult questions that are becoming increasingly difficult to answer.

In this lecture, I will trace the evolution of science, technology and public policies in India post independence and illustrate how it has been shaped by a dominant post world war II tenet that "investment in research by a nation performed without thought of practical ends will lead to prosperity for its people" (Vannevar Bush, Science: The Endless Frontier, 1945). The public policy discourse on science and technology has gone through three distinct phases in India. From 1950 to 1975 India witnessed the grand vision of large organized science. In the period between 1975 to 1995 the dominant thought was "self reliance" and "indigenous development". Since 1995, India became progressively more focused on pursuit of globally competitive science and technology with emphasis on "excellence". We are witnessing early signs of further shifts in public policies under a new political dispensation which is likely to define the contours of this discourse for the next decade.

I will discuss the forces and personalities that shaped our past thoughts and its relevance for the future. I will speculate on what we can expect in the decades ahead based on the emerging social, political, economic and industrial headwinds that we are experiencing today.