



Press Brief

**INDIA LAUNCHES BLACK CARBON RESEARCH INITIATIVE
UNDER ITS NATIONAL CARBONACEOUS AEROSOLS PROGRAMME**

New Delhi, March 29, 2011

India today launched the **Black Carbon Research Initiative** as part of the **National Carbonaceous Aerosols Programme (NCAP)**. This is a joint initiative of several government ministries and leading research institutions. It will be headed by Prof. J Srinivasan of the Indian Institute of Science, India's leading authority on black carbon.

Present at the launch was **Prof. V. Ramanathan**, Director of the Center for Clouds, Chemistry and Climate at Scripps Institute of Oceanography, and one of the world's leading authorities on Black Carbon. He congratulated the Ministry on this initiative and said, "This is one of the most ambitious programmes in the world on aerosol research and black carbon. Today is a culmination of over 25 years research from pioneering Indian scientists. India has positioned itself to be second to none in this area of research. Decades from now this programme will be recognized as giving India protection from natural and manmade disasters alike."

In his remarks, **Shri Jairam Ramesh**, Minister of State (I/C), Environment and Forests, acknowledged the efforts of all those involved in the Black Carbon Research Initiative. The minister said, "This is an important step forward, not just for India but for the international community" and also impressed upon the audience the importance of building the next generation of scientific researchers to continue such research.

With the launch of the Indian Network for Climate Change Assessment (INCCA) in October 2009, the Minister of Environment & Forests had announced a comprehensive study on Black carbon, not only to enhance the knowledge and understanding of the role of Black carbon in the context of global warming but also to address the sources and impacts of the black carbon on melting of glaciers. Black carbon is an aerosol or suspended particulate matter that is created through various anthropogenic and organic processes.

The **Black Carbon Research Initiative** builds on the existing work and sets out the science programme to respond to the scientific questions surrounding Black carbon. The science plan has been developed through an intensive consultative process and with the involvement of experts in the subject and builds upon the work of ISRO, MoES and other experts countrywide. The initiative is visualized as an ambitious programme with the involvement of over 101 institutions with 65 observatories nationwide.



The study will lead to long-term monitoring of aerosols; monitoring of impact of BC on snow and; estimating magnitude of BC sources using inventory (bottom-up) and inverse modeling (top-down) approaches and modeling BC atmospheric transport and climate impact. The major expected outcomes are understanding the effect of change in albedo due to black carbon on seasonal snow and glacier melt; estimation of albedo and; reflectance of seasonal snow and glacier, glacier depth and mass balance, using airborne sensors like laser altimeter, ground penetrating radar and pyranometer; modeling effect of enhanced melting on glacier mass balance and retreat and; development of snow/glacier melt runoff models to understand the influence of changes in snow and glacier melt patterns.
