

## **FIRST TAPSUN CONFERENCE : NATIONAL PHYSICAL LABORATORY, NEW DELHI**

*Dr. S. Sivaram*  
*CSIR Bhatnagar Fellow*  
*A 201, Polymers and Advanced Materials Laboratory*  
*National Chemical laboratory*  
*Pune 411008 India*  
*Email: [s.sivaram@ncl.res.in](mailto:s.sivaram@ncl.res.in)*

**December 4, 2012, New Delhi**

Shri Farooq Abdullah, Hon'ble Minister for New and Renewable Energy and the Guest of Honor at today's function,;

Professor Samir Brahmachari, DGCSIR, the force and energy behind CSIR's TAPSUN Initiative,;

Professor Michael Graetzel from Lausanne, one of the world's foremost practioners of the science of energy harvesting from the sun,;

Professor Budhani, D(NPL) and Dr. S. Chand, Scientist, NPL, distinguished invitees, delegates to this Conference, ladies and gentlemen,

A very good morning

The TAP-SUN programme of CSIR was conceived about three years ago, as a flagship programme of CSIR, to focus on the critical technology needs of India with regard to harnessing the power of the sun to meet the energy needs of the country. The programme was formally launched in January 2010, coinciding with the launch of the Jawaharlal Nehru, National Solar Mission by the Govt. of India. CSIR, in its individual labs have been pursuing research in several areas of chemistry, physics, material science and engineering related to conversion of solar energy to electricity and heat, its storage and applications. However, it was felt that it CSIR has to make a mark and impact in this area, its vast collective strengths – both in its people and its research infrastructure - has to be harnessed in a synergistic manner. Thus was born the idea of NISE-The Network of Institutes for Solar Energy of CSIR. During the past eighteen months we have brought over eighty scientists of CSIR from fifteen of its laboratories together. We have gathered the best of minds from within and outside CSIR to mentor them; we have created new facilities for research. We have set for ourselves super-ordinate challenges. TAPSUN covers nine themes that encompass all the relevant and contemporary research areas related to solar energy. TAPSUN is also a platform for creating the next generation of scientists and engineers for India. Close to one hundred students are actively working on TAPSUN programmes across CSIR.

The objective of TAPSUN is, to both, advance the frontiers of existing knowledge as well as to creatively use existing knowledge to find solutions that are critical to the needs of India. True to the mandate of CSIR, we wish to go beyond discovery, towards, development, demonstration and eventually, deployment. India is one vast laboratory for solar energy technologies. It is in this crucible that several emerging technologies will be tested and validated in the years to come. The solutions found in India will be relevant to the needs of half of the world population living below the equator. CSIR-NISE will partner with multiple stakeholders, namely, government, NGO's, academic institutions and industries, both Indian and global, to bring the benefit of our efforts to our ultimate customers. We do not underestimate the challenges; success in energy technologies can be realized only when there is an alignment between science and technology based solutions, infrastructure and policies as well as consumer needs; and this alignment is not easy to secure. But given the passion and commitment of our scientists and engineers, I am confident we can succeed and CSIR can make a difference to the people of India.