



Ministry of Science & Technology  
and Earth Sciences  
Government of India

Organisers



Vijnana Bharati



# INDIA INTERNATIONAL SCIENCE FESTIVAL

4-8th December 2015, IIT, New Delhi



Host Institution



IIT Delhi

Co-ordinated by



NISCAIR

# INDIA INTERNATIONAL SCIENCE FESTIVAL



## **SCIENCE IS NOTHING BUT THE FINDING OF UNITY.**

As soon as science would reach perfect unity, it would stop from further progress, because it would reach the goal. Thus Chemistry could not progress farther when it would discover one element out of which all other could be made. Physics would stop when it would be able to fulfill its services in discovering one energy of which all others are but manifestations,... Thus is it, through multiplicity and duality, that the ultimate unity is reached....

This is the goal of all science.

*Swami Vivekananda*



## THE KEY TO INNOVATION

Scientific temper is fundamental to innovation. An all-encompassing scientific temper in a society is far more essential than the spread of science and technology.



Scientific temper is neither a collection of knowledge or facts, although it promotes such more. It is an attitude of mind, which calls for a particular pattern of behavior (using scientific method) influencing the way we think and approach our problems. This attitude is required to be promoted and preserved in order to achieve great heights as a people and as a country.

Section V of our Constitution, Article 51A on 'Fundamental Duties' begins by saying: "It shall be the duty of every citizen of India..." In the enumeration of such duties, sub-clause (h) says: "To develop the scientific temper, humanism and the spirit of inquiry and reform".

## INDIA'S ACHIEVEMENTS

India has made invaluable contribution in generating and distributing scientific knowledge and has made many landmark scientific achievements. The advances in astronomy and mathematics were, indeed, path-breaking.

In the present day scenario, India has a huge number of technically qualified professionals, yet scientific temper is not absolutely evident across the nation. Hence, fostering scientific temper is considered far more relevant today than ever before. Diffusion of science and technology across the entire societal fabric shall help foster scientific temper and reinforce a rational attitude.

# INDIA INTERNATIONAL SCIENCE FESTIVAL

Today we need path-breaking inventions to also support flagship programs initiated by the Hon'ble Prime Minister, such as Make in India, Digital India, Start-ups, Smart Villages and Smart Cities.

Listening to the voice of young scientists within the country, on issues of relevance to our global world is a key goal of the meeting.

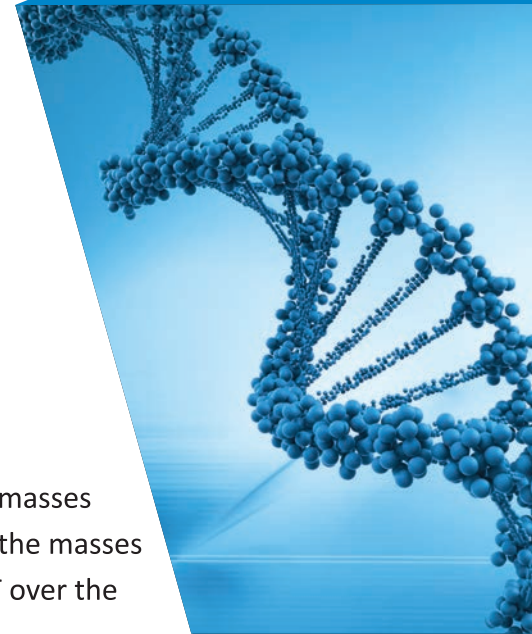
**Ministry of Science & Technology and Earth Sciences, Government of India and Vijnana Bharati, are organizing 'India International Science Festival (IISF)' from 4th to 8th December 2015 with the following objectives:**

- Exposing the fruits of Science & Technology to the masses
- Building strategy to instill scientific temper among the masses
- Showcasing Indian contributions in the field of S&T over the years
- Providing platform to young scientists from SAARC and neighbouring countries for exchange of knowledge& ideas
- Supporting flagship programs like Make in India, Digital India, Start-ups, Smart Villages, Smart Cities, etc. initiated by the Hon'ble Prime Minister



We need a new generation of creative scientists. For that, we need an environment for research and challenging missions.

*-APJ Abdul Kalam*



## INDIA INTERNATIONAL SCIENCE FESTIVAL (IISF) 2015

Finding ways to instill scientific temper as a dominant ethos of our collective being..

The culture of science needs to be shared and spread through active interaction. It is important to open the doors to diverse ideas and discoveries by other people and nations. There are several visible and invisible links which connect the South Asian nations and define their identity. They share a common heritage in all indicators of historical and contemporary development. Their history indicated vibrant scientific traditions. In order to undo a legacy of poverty, parochialism and seemingly disparate levels of regional development the nations require to often converge on a common platform.

IISF aims to provide a platform to people and scientists from all South Asian countries to share and spread their scientific ideas and discoveries.

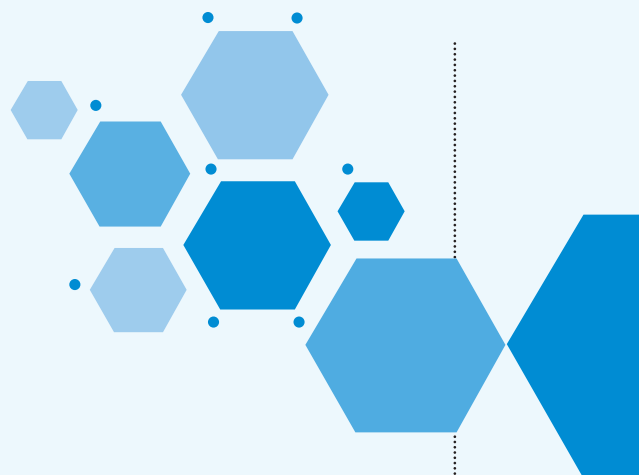
### IISF HIGHLIGHTS

#### ● YOUNG INDIA INTERNATIONAL SCIENCE MEET

Young people are the innovators, creators, builders and leaders of the future. Youth can transform the future only if they have the required skills, health, decision-making abilities and real choices in life.

According to United Nations Population Fund's (UNFPA) report, today's world is home to 1.8 billion young people between the ages of 10 and 24 years, of which 356 million people are in India, the largest when compared to other nations. Further, 26% of the global youth population lives within the SAARC region. Many countries in South Asia have large youth populations that present a "demographic window of opportunity" for development. These young people present an enormous opportunity to transform the future.

The Young India International Science Conclave is an effort to provide an opportunity for Young Scientists from all over the country to showcase their research.



The Conclave has the following specific objectives:

- Prioritize research for the future
- Generation of appropriate and affordable technologies for the farmers and common people
- Interaction among young scientists from SAARC countries
- Improve the degree of commercialization of the Innovation or research outputs
- Network and handhold young scientists from all over the country
- Develop rigorous scientific exchange programs amongst young scientists
- Develop region-specific collaborative science and technology (S&T) programs
- Hunt for innovations that offer appropriate and affordable technology
- Roundtable on traditional S&T wisdom and practices
- Interact with Indian scientific doyens

# INDIA INTERNATIONAL SCIENCE FESTIVAL

The Young India International Science Meet 2015 will address the following themes:

- Agriculture
- Innovations for Integrated and Affordable Healthcare
- Innovative and Newer Diagnostic Aids
- Remote sensing and climate change
- Indigenous Knowledge
- Smart Designs and Manufacturing
- Green Energy Mission
- Vector Control and Mitigation
- Waste Management, including Waste-to-Wealth Programs
- Water Conservation, Augmentation and Management
- Intellectual property rights
- Make in India
- Pollution Control and Environmental Safety
- Water Conservation, Augmentation and Management
- Ocean Resources and Management



Dr. Harsh Vardhan, Hon'ble Minister for Science & Technology and Earth Sciences, Dr. Jitendra Singh, Hon'ble Minister of State for Atomic Energy and Space, releasing the logo of India International Science Festival at Delhi on 8th April 2015. Prof. R Chidambaram, Principal Scientific Advisor, Govt. of India, Prof. VK Saraswat, Member, NITI Ayog, Prof. AS Kiran Kumar, Chairman, ISRO, Prof. Ashutosh Sharma, Secretary, Dept. of Science & Technology and Dr. Vijay P Bhatkar, Chairman, Board of Governors, IIT, Delhi & National President, Vijnana Bharati were also present.

## ● MEGA SCIENCE, TECHNOLOGY AND INDUSTRIAL EXPO

Showcasing success is the best way to motivate others. The Mega Science Expo aims to showcase innovations, achievements, advancements and futuristic models related to science and technology.

- Showcase Indian achievements in Science and Technology
- Highlight art, culture and traditions depicting scientific temper
- Emphasize inter-dependence of science-technology-innovation and society
- Interactive platform for scientists, artists, innovators

## ● INTERNATIONAL SCIENCE FILM FESTIVAL

It is said, "Seeing is believing". Film is the most effective medium of communication. This session is being organised with the following objectives:

- Films as a tool for science education
- Films of scientific innovations and success stories
- Screening of contemporary and globally acclaimed science films
- Developing Digital Tools to reach Science & Technology to rural areas
- Science Film making competition for college students
- Exploring modern science communication techniques

## ● INDUSTRY ACADEMY CONCLAVE

The objective is to provide a post-academic knowledge environment and industry exposure, thus enabling students to become career-ready.



Sir. C.V. Raman with students explaining the Raman effect.

# INDIA INTERNATIONAL SCIENCE FESTIVAL

## ● SHOWCASING INNOVATIVE MODELS AND 'INSPIRE' PRESENTATIONS

IISF shall showcase innovative science models and presentations created by students as part of 'Innovation in Science Pursuit for Inspired Research (INSPIRE)' - a programme sponsored and managed by the Department of Science & Technology for attracting young talent and encouraging the pursuit of science.

### Tentative Schedule of the Festival

Date /Time					
04.12.2015	IISF & Mega Exhibition Inauguration	Science Film Festival Inauguration	Interactions with Eminent Scientists	Industry academy conclave	Cultural Programs
05.12.2015	Young Scientists Meet Inauguration	Mega Exhibition	Science Film Festival	Showcasing innovative models and 'INSPIRE' presentations	Cultural Programs
06.12.2015	Young Scientists Meet	Mega Exhibition	Science Film Festival	Showcasing innovative models and 'INSPIRE' presentations	Cultural Programs
07.12.2015	Young Scientists Meet Valedictory	Mega Exhibition	Science Film Festival	Showcasing innovative models and 'INSPIRE' presentations	Cultural Programs
08.12.2015	-	Mega Exhibition	Expo awards function	-	-



India International Science Festival, 4-8 December 2015, IIT, Delhi, India.

### Delegate Registration Form

Title: Dr  Mr  Ms  Other

First Name ..... Last Name.....

Gender: Male  Female  Other  Category : Scientist  Student

Organization .....

Position/Title .....

Postal Address .....

Pin/Zip..... Country ..... Mobile Number .....

Fax ..... (Including Country Code)

Email ..... Website .....

Whether accommodation\* required Yes  No

\*On additional payment. Please refer to [www.iisfindia.com](http://www.iisfindia.com) for details

Cheque / Demand draft\*\* to be made favouring 'India International Science Festival' payable at Delhi.

Amount paid: ..... Amount in words .....

This form may be photocopied or downloaded from the website [www.iisfindia.com](http://www.iisfindia.com)  
 You can send your form to us by post, fax or email with Cheque / DD or register online at [www.iisfindia.com](http://www.iisfindia.com)

\*\*Fee structure overleaf.

Date:

Signature

#### Bank details for Wire Transfer

Name of the account :  
 SWIFT code :  
 Account Number :  
 Name of the Bank :  
 IFSC Code :  
 Branch :

#### Address for communication

IISF Secretariat, Technology Information  
 Forecasting and Assessment Council (TIFAC)  
 Department of Science and Technology (DST)  
 'A' Wing, Vishwakarma Bhavan  
 Shaheed Jeet Singh Marg, New Delhi 110016, India  
 Ph: +91 11 42525805  
 Email: [info@iisfindia.com](mailto:info@iisfindia.com), [www.iisfindia.com](http://www.iisfindia.com)

## INSTRUCTION TO AUTHORS FOR PAPER PRESENTATION AT THE FIRST INDIA INTERNATIONAL SCIENCE FESTIVAL (IISF)

### Paper Presentation (Oral/Poster)

Abstracts of all papers/posters for presentation at the IISF must be submitted online at [www.iisfindia.com](http://www.iisfindia.com). The abstracts must be within 100 words, without any sketches, tables, etc. The model format for abstract and guidelines are given below:

- Each author is entitled to submit only two papers
- All authors must register for IISF
- Corresponding author must give a declaration that authors/co-authors will be registering for IISF
- Papers should reach on or before September 25, 2015
- The abstracts of these papers if approved will be printed in the Proceedings of IISF
- Papers (along with abstracts) received after September 25, 2015 will not be considered
- Abstracts of papers selected for Oral presentation would be presented primarily by way of PPTs
- Authors of the accepted papers will be advised by the IISF Organising Committee about preparation of PPTs/Posters
- Size of each poster should be 3 ft (width) x 4 ft (height) and should be clearly readable from a distance of 3 feet

### CALL FOR PAPERS – DATES TO REMEMBER

Last date for Submission of Abstracts	25th September 2015
Confirmation of Abstract acceptance	15th October 2015
Last date for Submission of full paper/ppt/poster	5th November 2015

### FEE STRUCTURE FOR IISF

Delegate Type	On or before 2nd November 2015	Spot Registration
General Delegate	₹2000/-	₹2500/-
Student Delegate (upto PG)	₹1000/-	₹1,500/-
Institutional Delegates (minimum 5 delegates)	₹3000/- per delegate	N/A
Foreign Delegate	\$250	N/A

## NATIONAL STEERING COMMITTEE

### CHIEF PATRON

**Dr. Harsh Vardhan**

Hon'ble Union Minister for Science & Technology and Earth Sciences, Govt. of India

### PATRON

**Shri Y. S. Chowdary**

Hon'ble Minister of State for Science & Technology and Earth Sciences, Govt. of India

### CHAIR

**Prof. Ashutosh Sharma**

Secretary, Department of Science & Technology

### MEMBERS

**Dr. Shailesh Nayak**

Secretary, Ministry of Earth Sciences

**Prof K Vijay Raghavan**

Secretary, Department of Biotechnology

**Dr. Vijay P Bhatkar**

Chair, Board of Governors, IIT, Delhi

**Dr. Girish Sahni**

Director General, CSIR

**Shri. A Jayakumar**

Secretary General, Vijnana Bharati

## CONTACT US

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Young Scientists Meet : ysc@iisfindia.com  
Exhibition : expo@iisfindia.com  
Accommodation : accommodation@iisfindia.com

## SUPPORTED BY



Indian Space Research Organisation



Defence R&D Organisation



Indian Council of Medical Research



Department of Atomic Energy



Indian Council of Agricultural Research



University Grants Commission



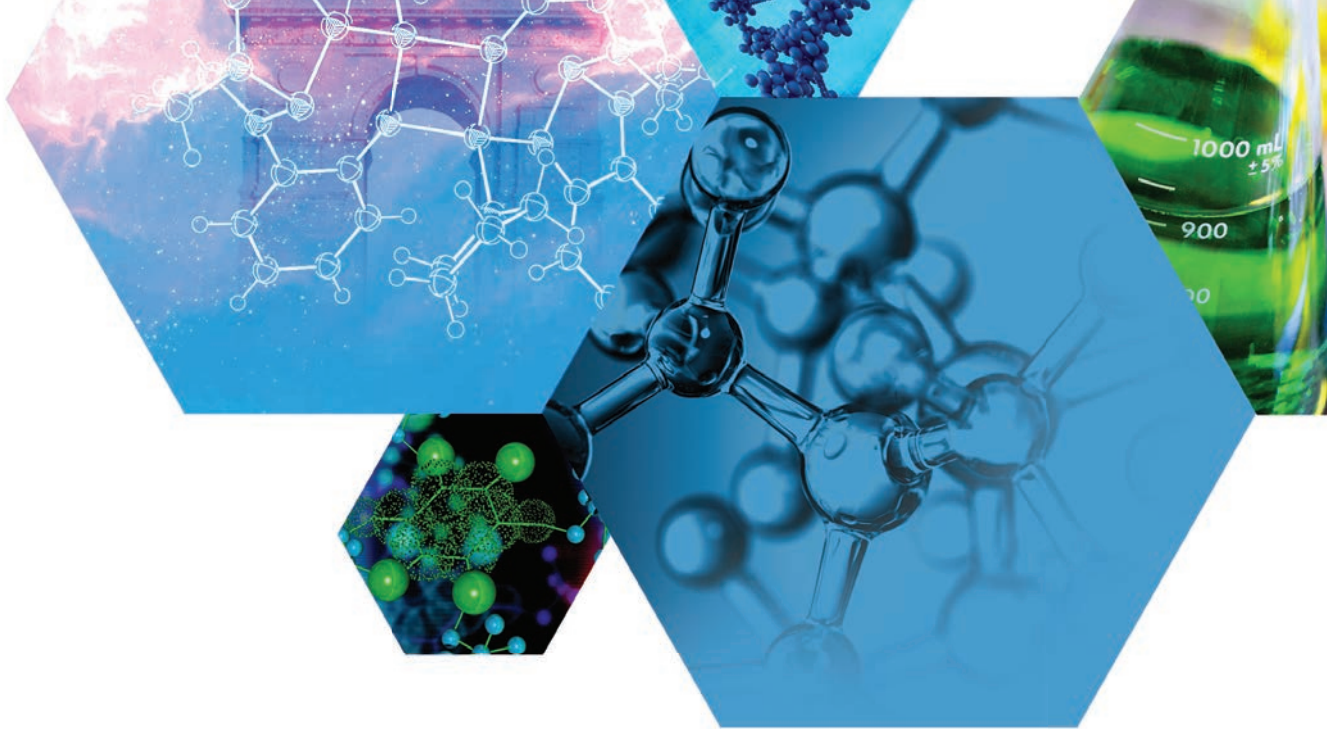
All India Council for Technical Education



Vijnana Bharati or VIBHA is a national movement dedicated to the integrated development of Bharat through the intervention of science, engineering, and technology. Launched in 1991 by a group of thinkers and scientists, VIBHA has, today, 29 active units and 6 overseas units. Eminent scientists, academicians, policy makers and social workers are the torch bearers of this movement.

VIBHA takes the spirit of 'Swadeshi' along with the ethos of our culture. It emphasizes that science and spirituality should go hand in hand. VIBHA works towards rural development, technology transfer, and social empowerment so as to bring the fruits of advancement of science and technology for the benefit of the society. It has received two national awards for popularizing science and technology: one in 2006 from Dr Manmohan Singh, Hon'ble Prime Minister of India, and the other in 2007 from Mr Kapil Sibal, Hon'ble Minister for Science and Technology, Government of India.

VIBHA works towards national self-reliance and a developed India. Towards this mission, VIBHA adopts, adapts, and assimilates the best from everywhere and associates with the best of universities, R&D organizations and other movements.



**MINISTRY OF SCIENCE & TECHNOLOGY  
GOVERNMENT OF INDIA**

Since its establishment in 1971, the Ministry has emerged as a nodal agency of the Government of India for promotion of scientific research in the country. The Ministry has been readjusting its programmes and plans to suit the changing needs of the S&T sector of the country with the Vision.

“India becoming a global knowledge power with strong capabilities in basic research, development and innovation for globally competitive and inclusive growth to power technology-led economic progress of the society.”

Ministry of Science & Technology consists of three departments:

**Department of Science & Technology** for Strengthening National Capacity, Capability in S&T with Nodal function in the promotion of Indian R&D.

**Department of Biotechnology** to Develop Life Sciences and Biotechnology for the Nation with node for promotion of Life Sciences and Biotech.

**Department of Scientific & Industrial Research** to Promote industrial research through enabling policy environment Supporting R&D.



**MINISTRY OF EARTH SCIENCES  
GOVERNMENT OF INDIA**

The erstwhile Ministry of Ocean Development was reorganised and the new Ministry of Earth Sciences (MoES) came into being in July, 2006 bringing under its administrative control India Meteorological Department (IMD), Indian Institute of Tropical Meteorology (IITM) and National Centre for Medium Range Weather Forecasting (NCMRWF).

The Ministry of Earth Sciences (MoES) is mandated to provide the nation with best possible services in forecasting the monsoons and other weather/climate parameters, ocean state, earthquakes, tsunamis and other phenomena related to earth systems through well integrated programmes.

The Ministry also deals with science and technology for exploration and exploitation of ocean resources (living and non-living), and plays nodal role for Antarctic/Arctic and Southern Ocean research.

**Address for communication**

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