

# INDIA INTERNATIONAL SCIENCE FESTIVAL 2019

5-8 NOVEMBER, 2019

BISWA BANGLA CONVENTION CENTRE  
& SCIENCE CITY  
KOLKATA

REGISTRATION ONLINE AT:  
[www.scienceindiafest.org](http://www.scienceindiafest.org)



Ministry of Science and Technology  
Ministry of Earth Sciences  
Ministry of Health and Family Welfare  
GOVERNMENT OF INDIA



VIJNANA BHARATI



वि P  
व प्र  
VIGYAN  
PRASAR



### **DR M RAJEEVAN**

#### **Secretary, Ministry of Earth Sciences**

A nation's development and prosperity is judged to a large extent by the status of science and technology of that nation. The India International Science Festival (IISF) aims to strengthen and integrate the scientific knowledge in accordance with the changing conditions. It also aims to promote to build scientific temper among the masses and the young children.

---

### **PROF SHEKHAR C MANDE**

#### **Secretary, DSIR & Director General, CSIR**

The relationship between Science and Society has always led to the development of new frontiers of growth both scientifically and economically. India International Science Festival (IISF) over the years has established itself as a unique platform for connecting science, technology & innovation with the masses – be they students, entrepreneurs, teachers or the general public.

---



### **DR RENU SWAROOP**

#### **Secretary, Department of Bio-Technology**

To strengthen nation and to achieve inclusive and sustainable growth in the coming decades, it is very important to translate the scientific knowledge into innovations through start-ups and industry. This goal can be achieved through developing scientific temper among the masses and by strengthening science and technology institutions & furthering their basic research.

---

### **PROF BALRAM BHARGAVA**

#### **Secretary, DHR & Director General, ICMR**

India International Science Festival (IISF) has emerged as a unique platform to celebrate the achievements of science and technology for national development. With the grand success of IISF from 2015 till 2018, we are now looking forward to scintillating success of IISF 2019 in the historic city of Kolkata.

---



### **DR VIJAY P BHATKAR**

#### **President, Vijnana Bharati**

The achievements in science and technology at national level are being celebrated through “India International Science Festival (IISF)” since 2015. IISF is a unique platform where the joy of scientific activities has been observed. With the grand success of last four IISF since 2015, we are looking forward to scintillating success of IISF 2019 in Kolkata.



डॉ. हर्ष वर्धन  
DR. HARSH VARDHAN



मंत्री  
विज्ञान और प्रौद्योगिकी एवं पृथ्वी विज्ञान  
भारत सरकार  
नई दिल्ली - 110001

MINISTER  
SCIENCE & TECHNOLOGY AND EARTH SCIENCES  
GOVERNMENT OF INDIA  
NEW DELHI - 110001

### MESSAGE

India has been enriched over the ages by great thinkers who have always taken an integrated view of life as a fusion of mind, body and intellect. India has also been a land of knowledge-seekers. In recent years, India has successfully made transition from a traditional economy to a knowledge economy. By 2030, India aims to be one of the world's leading nations in S&T and also one of the world's three largest economies. The economic and scientific growth that we are aspiring for, needs to be sustainable and inclusive.

India is facing various challenges in the key sectors of clean air and water, food, environment, climate, security and healthcare. It is important to translate the scientific knowledge into innovations so as to build a strategy for rural India. Only this will facilitate India to achieve inclusive and sustainable growth in the coming decades.

Ever since its inception in 2015, the India International Science Festival (IISF) has been providing an encouraging platform for scientists, technocrats, young students and others from across India and abroad for exchange of knowledge and ideas. The grand success of the past four IISFs stand testimony to this fact. The IISF is an integral part of India's long term vision in developing and widening the spectrum of scientific temper for sustainable development and new technological innovations in India and abroad. IISF-2019 aims to take the legacy of the festival forward and also to play its role in making India a leading S&T nation.

I appreciate the collaborative efforts of the Ministries of Science & Technology and Earth Sciences and the Department of Health Research together with Vijnana Bharati in ongoing the 5<sup>th</sup> edition of IISF.

I invite IIT Kharagpur, Jadavpur University and all other academic as well as R&D institutions in Kolkata to participate in organizing IISF-2019 for making it a historic event.

I extend a very warm welcome to all dignitaries from India and abroad and request you to make this event a grand success.

  
(Dr. Harsh Vardhan)

মমতা বানার্জী  
মমতা বৈনজী  
ممتا بنرجی

Mamata Banerjee



মুখ্যমন্ত্রী, পশ্চিমবঙ্গ  
मुख्यमंत्री, पश्चिम बंगाल  
وزیراعلیٰ مغربی بنگال

CHIEF MINISTER, WEST BENGAL



1<sup>st</sup> October, 2019

### MESSAGE

I am happy to know that **Department of Science and Technology** under the **Ministry of Science & Technology**, Government of India, in association with **Vijnana Bharati (VIBHA)**, will organize the fifth edition of **India International Science Festival (IISF)** in Kolkata, from 5<sup>th</sup> to 8<sup>th</sup> November, 2019.

Scientific knowledge is fundamental in modern society. We need science and technology in every sphere of our life. It is also an essential component of the growing up process of the youth and provides them with insights and ideas that are indispensable for the growth of a scientific mind.

I am happy to know that IISF aims to create a platform that seeks to empower our youth with scientific knowledge and creative thinking.

My heartiest greetings and best wishes to the organizers on the occasion. I wish the event a grand success.

(Mamata Banerjee)

Organizing Committee  
India International Science Festival  
(IISF)

Nabanna, West Bengal Secretariat, Howrah -711 102  
West Bengal, India

Tel : +91-33-22145555, +91-33-22143101

Fax : +91-33-22144046, +91-33-22143528



प्रो. आशुतोष शर्मा  
Prof. Ashutosh Sharma



सचिव  
भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
Secretary  
Government of India  
Ministry of Science and Technology  
Department of Science and Technology

### MESSAGE

I am happy to announce that the Fifth India International Science Festival will be held during 5-8 November 2019 at Kolkata under the joint patronage of Ministry of Science & Technology, Ministry of Earth Sciences and Department of Health Research in association with Vijnana Bharati (VIBHA). This year, Department of Science & Technology is coordinating the event.

The India International Science Festival aims to generate curiosity and scientific temper amongst general public and ignite the minds of the students and youth through the means of expos, exhibitions, publishing of popular scientific literature, science film festival, etc. The Festival also provides a platform for bringing together scientific-minded people from different walks of life, and pave the way for fruitful exchange of ideas through conferences, meets and conclaves.

The world in general, and India in particular, are facing challenges in the key sectors of clean air and water, food, environment, climate, security and healthcare. It is important to translate available scientific knowledge into innovations so as to provide solutions in these areas. I expect that the meeting of scientific minds during the Festival will throw up simple and sustainable answers to overcome them.

I extend a very warm welcome to one and all from India and abroad. Your participation will make this event a grand success.


With best wishes,

(Ashutosh Sharma)

# MISSION STATEMENT

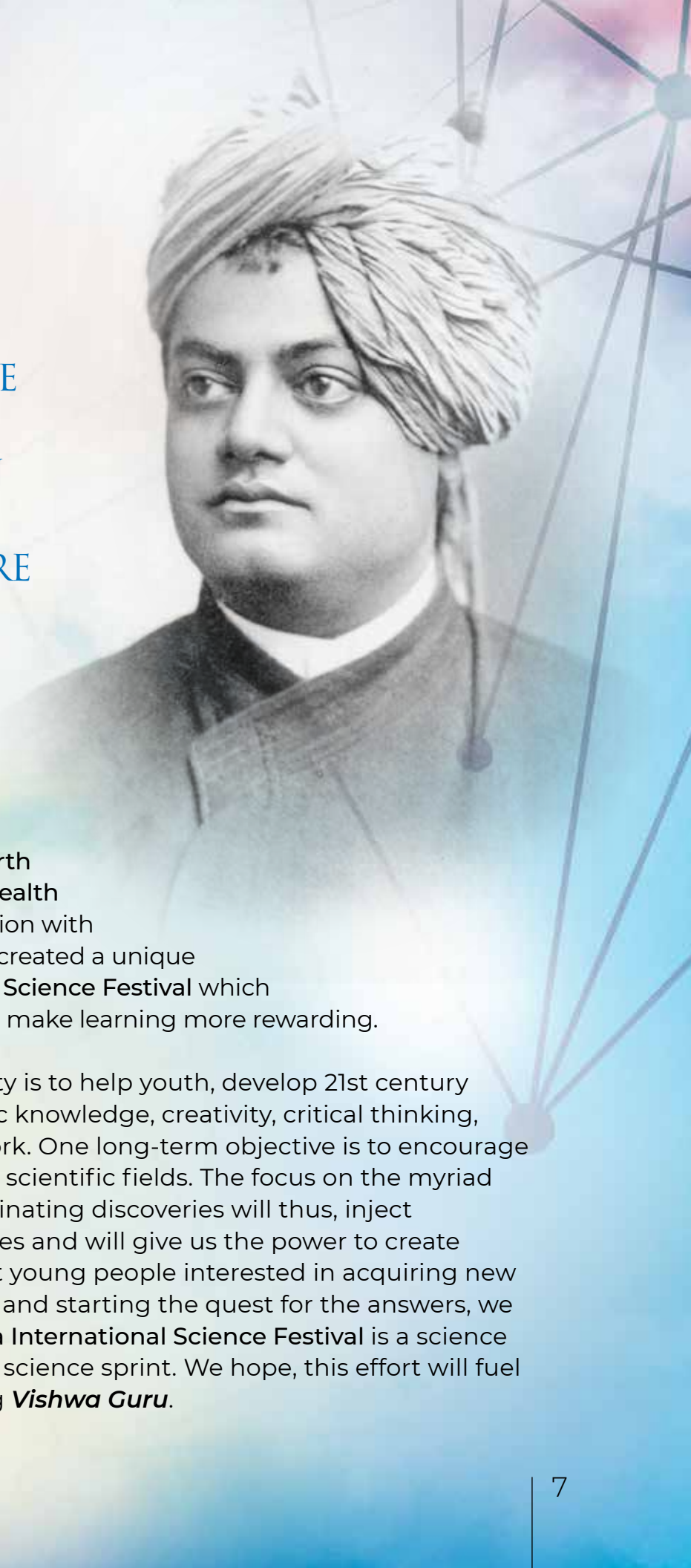
Science festivals are vibrant expression of the cultural importance of science and technology of a nation. It gives scientists, inventors and researchers a chance to interact closely with students and citizens from all walks of life. Science festivals offer many different forms of engagement such as, lectures, dialogues, panel discussions and debates; through handson demonstrations, shows, exhibitions, and workshops; in form of science-related theatre, cafes, music, and stand-up comedy. The goal of the science festivals is to engage citizens with science in ways that are inspirational and empowering. Science festivals are the inspiring celebrations of the fascinating world of science and technology.

**India International Science Festival (IISF)** launched in 2015 is a celebration to promote Science and Technology and demonstrate how science could lead India towards a developed nation within a short span of time. The aim is to engage public with science and celebrate the joy of science. It shows how **Science, Technology, Engineering and Mathematics (STEM)** provide us with the solutions to improve our lives.

A black and white portrait of Sir CV Raman, a prominent Indian physicist, wearing a white turban and a dark jacket. The portrait is positioned on the left side of the page, partially overlapping the text.

WE MUST TEACH  
SCIENCE IN THE MOTHER  
TONGUE. OTHERWISE,  
SCIENCE WILL BECOME  
A Highbrow activity.  
IT WILL NOT BE AN  
ACTIVITY IN WHICH ALL  
PEOPLE CAN PARTICIPATE.

SIR CV RAMAN  
1888-1970

A portrait of Swami Vivekananda, a prominent Indian Hindu monk, is shown on the right side of the page. He is wearing a traditional white turban and a dark, high-collared jacket. The background of the entire page features a soft, abstract design with geometric lines and a color gradient from light yellow to light blue.

IF EDUCATION IS  
IDENTICAL WITH  
INFORMATION, THE  
LIBRARIES ARE THE  
GREATEST SAGES IN  
THE WORLD, AND  
ENCYCLOPEDIAS ARE  
THE RISHIS.

SWAMI VIVEKANANDA  
1863-1902

The Ministry of Science and Technology, the Ministry of Earth Sciences and the Ministry of Health and Family Welfare in association with Vijnana Bharati (VIBHA), have created a unique platform of **India International Science Festival** which intends to inspire curiosity and make learning more rewarding.

The goal of the science festivity is to help youth, develop 21st century skills, with a focus on scientific knowledge, creativity, critical thinking, problem-solving, and teamwork. One long-term objective is to encourage students to study and work in scientific fields. The focus on the myriad faces behind some of the fascinating discoveries will thus, inject scientific attitude in the masses and will give us the power to create new possibilities. Once we get young people interested in acquiring new knowledge, asking questions, and starting the quest for the answers, we will accomplish our goal. **India International Science Festival** is a science outreach marathon and not a science sprint. We hope, this effort will fuel India's drive toward becoming **Vishwa Guru**.



# BACKGROUND & GLIMPSES

The previous editions of **India International Science Festival (IISF)** have been a great success.

The first edition of **IISF** was held during 4-8 December, 2015 at the Indian Institute of Technology, New Delhi. Ministry of Science and Technology, Ministry of Earth Sciences and Vijnana Bharati collectively organized it with Department of Science and Technology as the nodal organisers and TIFAC as the coordinating department.

The second edition of **IISF** was held at CSIR-NPL, New Delhi during 7-11 December 2016. Ministry of Science and Technology, Ministry of Earth Sciences and Vijnana Bharati jointly organized the event along with CSIR as the nodal organisations and National Physical Laboratory (NPL) acted as coordinating department for the edition.







The third edition of IISF was held between 13-16 October 2017 at the Indian Institute of Technology, Madras and Anna University, Chennai. The event was a collective effort of Ministry of Science and Technology, Ministry of Earth Sciences and Vijnana Bharati. Coordinated by MOES, National Institute of Ocean Technology.

The fourth edition of IISF was held from 5-8 October, 2018 at Indira Gandhi Pratishthan, Lucknow. It was organized by Ministry of Science and Technology, Ministry of Earth Sciences in association with Vijnana Bharati. It was coordinated by Department of Biotechnology (DBT), and the nodal agency was National Institute of Immunology (NII).

# IISF 2019 PROGRAMMES AT A GLANCE

THE PURPOSE  
OF A SCIENTIFIC  
INSTITUTION  
IS TO GIVE A  
STRONGER  
IMPULSE  
AND A MORE  
SYSTEMATIC  
DIRECTION  
TO SCIENTIFIC  
ENQUIRY.

SIR ASHUTOSH  
MUKHERJEE



## Global Indian Scientists & Technocrats Meet

An eminent group of Indian Scientists & Technocrats' diaspora would be invited to have brainstorming sessions on "Disruptive technologies and opportunities of artificial intelligence and its applications." during IISF 2019. This will provide them opportunity to connect more with Indian Science and thus, contribute in India's growth through philanthropy, knowledge of exchange etc.

**DATE:** 6 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 2

**COORDINATING AGENCIES:** DST, Bose Institute & Vijnana Bharati

### COORDINATORS

<b>SK Varshney</b>	<b>Sulakshana Jain</b>	<b>Gautam Basu</b>	<b>Sanjay Ghosh</b>
DST	DST	Bose Institute	Bose Institute
011 26961912	98736 01904	92318 74575	98312 96681
<b>YK Gupta</b>	<b>Rajnish Chaturvedi</b>		
Vijnana Bharati	Vijnana Bharati		
98688 68457	94504 18445		

**Email:** [gist@scienceindiafest.org](mailto:gist@scienceindiafest.org)



## Young Scientists' Conference (YSC)

YSC are for the scientists and innovators below the age of 45 years. They should belong to Universities, Institutes and R&D Labs. It makes the young scientists aware about Government's policies and success stories such as Swachh Bharat, Make in India, Digital India etc. YSC is an opportunity for young scientists, scholars and faculties to showcase their scientific contributions and innovations for the benefit of masses.

**DATE:** 5-6 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 1, 3 & 4

**COORDINATING AGENCIES:** IACS & Vijnana Bharati

### COORDINATORS

<b>Ayan Datta</b>	<b>Jajati K Nayak</b>
IACS	Vijnana Bharati
98742 95938	75969 98193

**Email:** [ysc@scienceindiafest.org](mailto:ysc@scienceindiafest.org)



## Students Science Village (SSV)

Hon'ble Members of the Parliament will nominate students and teachers from their respective adopted villages under Pradhan Mantri Sansad Adarsh Gram Yojana. Activities such as scientist-student interaction, hands-on experiments, visit to labs and S&T Expo, popular talks etc. will make the event more vibrant. It will provide innovative solutions to the diverse challenges that our society faces today, particularly in rural India.

**DATE:** 5-8 November, 2019

**VENUE:** Science City

**COORDINATING AGENCIES:** CSIR-CGCRI & Vijnana Bharati

### COORDINATORS

<b>Sitendu Mondal</b>	<b>BB Jha</b>	<b>Pradip Tarafdar</b>	<b>S Sudhakar</b>
CSIR-CGCRI	CSIR-CGCRI	Vijnana Bharati	Vijnana Bharati
98305 87856	94326 73626	97485 30552	73974 79860

**Email:** [student@scienceindiafest.org](mailto:student@scienceindiafest.org)





### Women Scientists & Entrepreneurs Conclave

This Conclave aims to encourage science education and entrepreneurship among women. It also inculcates scientific and technological temperament among women. The conclave motivates women to become the players of science, technology and innovation.

**DATE:** 7-8 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 7

**COORDINATING AGENCIES:** Vigyan Prasara, CSIR-NISTADS, CSIR-IICB & Vijnana Bharati

#### COORDINATORS

<b>Kinkini Misra</b>	<b>Snehasikta Swranakar</b>	<b>Sucheta Tripathi</b>	<b>Kasturi Mandal</b>
Vigyan Prasara	CSIR-IICB	CSIR-IICB	CSIR-NISTADS
98109 41887	98314 99093	98309 99740	93132 45343
<b>Ranjana Agrawal</b>	<b>Shiny Suresh</b>		
Vijnana Bharati	Vijnana Bharati		
98967 40740	96542 56770		

**Email:** [wsec@scienceindiafest.org](mailto:wsec@scienceindiafest.org)



### National Science Teachers Congress (NSTC)

NSTC brings many passionate teachers on a single platform to showcase their innovative methods of science teaching. This programme also emphasizes the learning of Science, Technology, Engineering and Mathematics (STEM) for nation building. NSTC inspires future policy-making process and educational reforms.

**DATE:** 7-8 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 6

**COORDINATING AGENCIES:** Vigyan Prasara, IACS & Vijnana Bharati

#### COORDINATORS

<b>Arvind C Ranade</b>	<b>Prashant Singh</b>	<b>Prasenjit Sen</b>	<b>C Malla Reddy</b>
Vigyan Prasara	IACS	IACS	Vijnana Bharati
98714 39594	88209 52191	89812 44884	99303 70458
<b>Manoj Sawalkar</b>			
Vijnana Bharati			
94044 54324			

**Email:** [nstc@scienceindiafest.org](mailto:nstc@scienceindiafest.org)



### National Social Organisations & Institutions Meet

In order to engage the science-oriented organisations & institutions, especially grassroots voluntary developmental organizations, in nation building through the intervention of science and technology, a three-day national summit would be conducted. The program aims to deliberate on innovative ideas and technologies, methodologies and products developed by R&D institutions that are beneficial for the masses.

**DATE:** 6-8 November, 2019

**VENUE:** Science City, Mini Auditorium

**COORDINATING AGENCIES:** DST, CSIR-CGCRI & Vijnana Bharati

#### COORDINATORS

<b>Sunil Agarwal</b>	<b>HS Tripathi</b>	<b>BB Jha</b>	<b>NP Rajive</b>
DST	CSIR-CGCRI	CSIR-CGCRI	Vijnana Bharati
99996 89732	94334 57546	94326 73626	90203 36500

**Sadananda Chakrabarty**

Vijnana Bharati  
70442 21898

**Email:** [nsoim@scienceindiafest.org](mailto:nsoim@scienceindiafest.org)



THE TRUE  
LABORATORY  
IS THE MIND,  
WHERE BEHIND  
ILLUSIONS WE  
UNCOVER THE  
LAWS OF TRUTH.

ACHARYA  
JAGADISH  
CHANDRA BOSE

# IISF 2019 PROGRAMMES AT A GLANCE

SCIENCE AND  
TECHNOLOGY  
ARE AS  
IMPORTANT FOR  
ADMINISTRATION  
NOW-A-DAYS AS  
LAW AND ORDER.  
MEGHNAD SAHA



## International Science Literature Festival – VIGYANIKA

Vigyan Manthan (Lectures & Discussions), Vigyan Spandan (Scientoon/ Storytelling/Extempore), Vigyan Manchana (Vigyan Kavi Sammelan, Science Drama, Folk Art), Vigyan Prakashan (Book Fair, Book Release, Meet the author) will be the major attractions of Vigyanika.

**DATE:** 5-7 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 5

**COORDINATING AGENCIES:** Vigyan Prasar, CSIR-NISCAIR, Bose Institute & Vijnana Bharati

### COORDINATORS

<b>Kapil Tripathi</b> Vigyan Prasar 98180 11474	<b>HJ Khan</b> CSIR-NISCAIR 98714 34447	<b>Pallab Banerjee</b> Vijnana Bharati 94347 22493	<b>Ratnesh Pandey</b> Vijnana Bharati 98312 84325
<b>Gaurav Gangopadhyay</b> Bose Institute 98027 81646			

**Email:** [vigyanika@scienceindiafest.org](mailto:vigyanika@scienceindiafest.org)



## International Science Film Festival of India (ISFFI)

ISFFI promotes science popularization among citizens and attracts talented young science filmmakers and enthusiasts. The aim is to showcase the S&T contributions of India. It has the largest potential to attract students and layman towards science with the cinematic creativity and experience. In addition to films, workshops, interactions with filmmakers are other major attractions of this festival.

**DATE:** 6-8 November, 2019

**VENUE:** SRFTI Campus

**COORDINATING AGENCIES:** Vigyan Prasar, CSIR-NISCAIR, SRFTI & Vijnana Bharati

### COORDINATORS

<b>Nimish Kapoor</b> Vigyan Prasar 98102 15648	<b>Shobhna Chaudhary</b> CSIR-NISCAIR 93514 96965	<b>Saugata Bhattacharyya</b> SRFTI 98305 30596	<b>Abhay Bhamaiakar</b> Vijnana Bharati 99237 95140
<b>Debasish Iyer</b> Vijnana Bharati 98300 70911			

**Email:** [filmfestival@scienceindiafest.org](mailto:filmfestival@scienceindiafest.org)



## Industry Academia Conclave

Efficient interaction between Industries, Institutions and R&D Labs has been the backbone of technological growth in advanced countries. Despite producing qualified S&T manpower, India still requires thrust in tech applications. Industry Academy R&D Lab (IARL) will address these issues and bring industry leaders, MSMEs, academicians, R&D labs & incubation centres together.

**DATE:** 5-6 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 6

**COORDINATING AGENCIES:** IACS & Vijnana Bharati

### COORDINATORS

<b>Deepak Sinha</b> IACS 89024 77366	<b>Sunil Bhat</b> Vijnana Bharati 90498 00298	<b>Mithlesh Tiwari</b> Vijnana Bharati 90497 02999
--------------------------------------------	-----------------------------------------------------	----------------------------------------------------------

**Email:** [iac@scienceindiafest.org](mailto:iac@scienceindiafest.org)





## National Start-up Conclave & Expo

This Conclave aims to provide a common platform for various stakeholders from policymakers to innovators, students and researchers. About 100 innovative and socially relevant technologies from all states of the country will be showcased in the exhibition. Seminars and round-table discussions on innovations, incubation and entrepreneurship will also be organized during this Conclave.

**DATE:** 6-7 November, 2019

**VENUE:** Science City, S18 A&B

**COORDINATING AGENCIES:** CSIR-IICB, ISBA & Vijnana Bharati

### COORDINATORS

<b>Arindam Talukdar</b>	<b>SN Bhattacharya</b>	<b>Anil Kothari</b>	<b>Sameer Vohra</b>
CSIR-IICB	CSIR-IICB	Vijnana Bharati	Vijnana Bharati
90516 46141	98316 33460	94251 48662	94191 97672
<b>K Suresh Kumar</b>	<b>Mrutunjay Suar</b>		
ISBA	ISBA		
99524 27232	70080 99439		

**Email:** [nsuc@scienceindiafest.org](mailto:nsuc@scienceindiafest.org)



## State S&T Ministers Conclave (SSTMC)

SSTMC will be organized to harness the views of S&T Ministers of all States & Union Territories. This will provide an opportunity to S&T Ministers of all States & Union Territories to interact with each other and stakeholders. This forum will synergize S&T policy interventions to address state specific issues, national priorities and SDGs.

**DATE:** 6 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 4

**COORDINATING AGENCIES:** DST, IACS & Vijnana Bharati

### COORDINATORS

<b>Debapriya Dutta</b>	<b>Ravinder Gaur</b>	<b>Jyotirmoyee Dash</b>	<b>NP Shukla</b>
DST	DST	IACS	Vijnana Bharati
81305 45765	98183 85649	96353 50592	94244 10811
<b>PK Verma</b>			
Vijnana Bharati			
98260 13067			

**Email:** [sstmc@scienceindiafest.org](mailto:sstmc@scienceindiafest.org)



## Overseas Ministers & Diplomats Conclave

Global challenges can be addressed and solved collectively through the application of science and technology. By leveraging collaborations with India's key partner countries, this Conclave will provide us an opportunity to exchange the science policies imperative to each others' country.

**DATE:** 5 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 2

**COORDINATING AGENCIES:** DST, Bose Institute & Vijnana Bharati

### COORDINATORS

<b>SK Varshney</b>	<b>Somshubhro Bandyopadhyay</b>	<b>Kaushik Biswas</b>	<b>Ajit Bikram Datta</b>
DST	Bose Institute	Bose Institute	Bose Institute
011 26961912	90513 74195	90071 91031	89618 36341
<b>Rupesh Chaturvedi</b>			
Vijnana Bharati			
99710 18697			

**Email:** [OMDC@scienceindiafest.org](mailto:OMDC@scienceindiafest.org)



NEVER ACCEPT  
AN IDEA AS  
LONG AS YOU,  
YOURSELF, ARE  
NOT SATISFIED  
WITH ITS  
CONSISTENCY  
AND LOGICAL  
STRUCTURE ON  
WHICH THE  
CONCEPTS ARE  
BASED.

SATYENDRA  
NATH BOSE

# IISF 2019 PROGRAMMES AT A GLANCE



I DREAMT A  
DREAM THAT,  
GOD WILLING,  
A TIME WOULD  
COME WHEN  
INDIA TOO  
WOULD  
CONTRIBUTE TO  
THE WORLD'S  
STOCK OF  
KNOWLEDGE.

ACHARYA PRAFULLA  
CHANDRA RAY



## Traditional Crafts and Artisan Meet & Expo

A National level meet of Artisans and Craftsmen along with Handicrafts and Handlooms Expo will be the special attraction of IISF 2019. The program will be a conglomeration of artisans and craftsman from across the country showcasing their skills and work. Around 300 craftsmen and artisans shall be invited to display their fascinating ingenuity along with some unique eco-friendly sustainable products.

**DATE:** 5-7 November, 2019

**VENUE:** Science City

**COORDINATING AGENCIES:** NCSM & Vijnana Bharati

### COORDINATORS

<b>Samarendra Kumar</b>	<b>Rajeev Singh</b>	<b>Anu Singh</b>
NCSM	Vijnana Bharati	Vijnana Bharati
96740 04704	93112 25501	97175 19898

**Email:** [traditional@scienceindiafest.org](mailto:traditional@scienceindiafest.org)



## Face-to-Face with New Frontiers in Science

Interaction among researchers is a key to scientific knowledge. "Face to Face with New Frontiers in Science" is an initiation of cordial interaction and short discussion-based sessions of students/researchers with excellence in various disciplines of S&T. This will certainly inspire students to pursue scientific study and research as his/her career.

**DATE:** 6-7 November, 2019

**VENUE:** Science City, Main Auditorium

**COORDINATING AGENCIES:** CSIR-IICB & Vijnana Bharati

### COORDINATORS

<b>Sibsankar Roy</b>	<b>Krishnananda Chattopadhyay</b>	<b>Apala Chakraborty</b>
CSIR-IICB	CSIR-IICB	Vijnana Bharati
94334 14568	99030 46826	98303 73216

**Padmaja Prasad Misra**

Vijnana Bharati  
84204 25144

**Email:** [facetoface@scienceindiafest.org](mailto:facetoface@scienceindiafest.org)



## Students' Engineering Model Competition

Engineering turns science to a tangible artefact which is useful to make human life safe and convenient. The expo will demonstrate some modern engineering models, germinated by the bright young minds, which have societal impact. This expo ignites engineering acumen among children as well as gives an opportunity to students and innovators to showcase their talents.

**DATE:** 6-7 November, 2019

**VENUE:** IICB-Salt Lake Campus

**COORDINATING AGENCIES:** NIT-Durgapur, CSIR-IICB & Vijnana Bharati

### COORDINATORS

<b>Indu Bhusan Deb</b>	<b>Rupak Bhadra</b>	<b>Hirok Chaudhuri</b>	<b>Meghendra Sharma</b>
CSIR-IICB	CSIR-IICB	NIT-Durgapur	Vijnana Bharati
98362 97770	92316 25622	94347 89019	98290 21975

**Hemendra Pandey**

Vijnana Bharati  
94322 98357

**Email:** [engineering@scienceindiafest.org](mailto:engineering@scienceindiafest.org)





### North-East Students' Conclave

During IISF 2019, a special exposure will be given to selected students of India's North-East States. They will also get the opportunity to interact with eminent Indian scientists. This programme will boost their scientific temperament and help them become not only the future scientific leaders of India but also motivate scientific disposition among local students.

**DATE:** 7-8 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 3

**COORDINATING AGENCIES:** Vigyan Prasar, SN Bose National Centre for Basic Sciences & Vijnana Bharati

#### COORDINATORS

<b>Sachin Narwadiya</b>	<b>Soumen Adhikari</b>	<b>Rajib Sarma</b>	<b>Krishna Kumar</b>
Vigyan Prasar	SN Bose	Vijnana Bharati	Vijnana Bharati
78273 38158	94335 80990	70027 00057	98991 92757

**Email:** [northeast@scienceindiafest.org](mailto:northeast@scienceindiafest.org)



### Wellness Conclave & Expo

Health is the best wealth. At present, many circumstances including our lifestyle are leading us towards non-communicable diseases. The Ayurveda is an Indian legacy which makes us aware about health. It also tells about the wellness, prevention and cure from diseases. Wellness Conclave is conceptualized as an attempt to project how alternative systems of medicine are capable making our society disease free.

**DATE:** 6-7 November, 2019

**VENUE:** IICB-Jadavpur Campus

**COORDINATING AGENCIES:** CSIR-IICB & Vijnana Bharati

#### COORDINATORS

<b>P Jaisankar</b>	<b>Arun Bandyopadhyay</b>	<b>Preeti Chhabra</b>	<b>Abhijit Ghosh</b>
CSIR-IICB	CSIR-IICB	Vijnana Bharati	Vijnana Bharati
90517 58339	94335 16720	98910 08498	99457 04400

**Email:** [wellness@scienceindiafest.org](mailto:wellness@scienceindiafest.org)



### Agricultural Scientists' Meet

The Agricultural Scientists' Meet will deliberate upon salient thematic areas including Grassroots innovation in agriculture, stakeholders' perspective, Integrated Farming System models, Value chains and business models, an alternative farming system for sustainable agriculture as well as smart agriculture policy for scaling up innovations. Honourable PM's vision of "Doubling the Farmers Income" and "Per Drop More Crop" are the key ideas of this meet.

**DATE:** 6 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 7

**COORDINATING AGENCIES:** Bose Institutes, Vijnana Bharati, ICAR-NINFET (Kolkata), ICAR-ATARI (Kolkata), ICAR-DKMA (New Delhi)

#### COORDINATORS

<b>Debabrata Basu</b>	<b>JP Sharma</b>	<b>Arun Pandey</b>	<b>SS Singh</b>
Bose Institute	Vijnana Bharati	Vijnana Bharati	ICAR-ATARI
98304 28987	98117 21815	88007 78376	78974 63399
<b>Nimai Chandra Pan</b>	<b>SK Singh</b>		
ICAR-NINFET	ICAR-DKMA		
94331 44587	92059 43200		

**Email:** [agriculture@scienceindiafest.org](mailto:agriculture@scienceindiafest.org)



A SCIENTIFIC  
INSTITUTION, BE  
IT A LABORATORY  
OR AN ACADEMY,  
HAS TO BE  
GROWN WITH  
GREAT CARE LIKE  
A TREE.

DR HOMI  
JEHANGIR BHABHA

# IISF 2019 PROGRAMMES AT A GLANCE



THE RATE OF  
ECONOMIC  
GROWTH IN  
EVERY COUNTRY  
IS DETERMINED  
BOTH DIRECTLY  
AND INDIRECTLY  
BY THE RATE OF  
PROGRESS OF  
SCIENCE AND  
TECHNOLOGY.

PRASANTA  
CHANDRA  
MAHALANOBIS



## Mega Science, Technology & Industry Expo

This Mega Expo will showcase the outstanding contributions in S&T and Industry. Achievements in Defence, Space, Atomic Energy, Agriculture, Medical etc. will be exhibited in the Expo. GoI missions like Swachh Bharat, Digital India, Make in India, Swasth Bharat etc. will be portrayed.

**DATE:** 5-8 November, 2019

**VENUE:** Science City

**COORDINATING AGENCIES:** Vijnana Bharati

### COORDINATORS

<b>Omkar Rai</b>	<b>Narendra Sharma</b>
Vijnana Bharati	Vijnana Bharati
98682 18614	99581 88770

**Email:** [expo.iisf2019@scienceindiafest.org](mailto:expo.iisf2019@scienceindiafest.org)



## Nav Bharat Nirman – Building of the New India

'Nav Bharat Nirman' provides a platform to Farmers, Agronomists, Grass-root Innovators, Cyber experts, Technologists etc. to share their innovative ideas and emerging skills with a focus to engage them together for this Nation reforming convention.

**DATE:** 7 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 4

**COORDINATING AGENCIES:** IACS & Vijnana Bharati

### COORDINATORS

<b>Somabrata Acharya</b>	<b>Ruchita Pal</b>	<b>Rahul Singhal</b>
IACS	Vijnana Bharati	Vijnana Bharati
96097 63012	95602 40196	98111 47676

**Email:** [navbharat@scienceindiafest.org](mailto:navbharat@scienceindiafest.org)



## New Age Technology Show

The technological advancements have changed our everyday life. Quantum Computing, Cloud Computing, Robotics and Process Automation, Data Science, AR, MR & VR, AI, IoT and Smart Cities are some major facets of New Age Technologies.

**DATE:** 5-8 November, 2019

**VENUE:** Science City

**COORDINATING AGENCIES:** Vigyan Prasara & Vijnana Bharati

### COORDINATORS

<b>Bharat Bhushan</b>	<b>Gaurav Jain</b>	<b>Sumit K Mishra</b>	<b>Sanghamitra Poddar</b>
Vigyan Prasara	Vigyan Prasara	Vijnana Bharati	Vijnana Bharati
85279 57529	98112 21166	99119 20419	94333 80970

**Email:** [newage@scienceindiafest.org](mailto:newage@scienceindiafest.org)



## Assistive Technologies Conclave & Expo for Divyangjan

In this symposium, Assistive Technology professionals will discuss challenges of effective technological intervention, opportunities and obstacles to adoption of solutions by Divyangjan.

**DATE:** 7-8 November, 2019

**VENUE:** Science City, S19 A&B

**COORDINATING AGENCIES:** NIT-Durgapur, DEPWD, DST & Vijnana Bharati

### COORDINATORS

<b>Anupam Basu</b>	<b>Sarbari Sen</b>	<b>Vivek Kumar</b>	<b>Debapriya Dutta</b>
NIT Durgapur	Vijnana Bharati	Vijnana Bharati	DST
83358 81836	94333 47904	94126 19735	81305 45765
<b>K Gopikrishna</b>	<b>PK Lenka</b>		
DST	DEPWD		
88602 42402	94331 75340		

**Email:** [assistivetech@scienceindiafest.org](mailto:assistivetech@scienceindiafest.org)



## **Health Research Conclave (HRC)**

Health Research is an important area for translating best health care practices. The Govt. of India has launched an ambitious Aayushman Bharat in this regard. ICMR is coordinating HRC with the theme 'Translating Research in to Action for Improving Health of the Population'. Eminent health experts will speak on Tribal Health, Nutrition, Medical Innovations and Emerging Infections.

**DATE:** 7-8 November, 2019

**VENUE:** Biswa Bangla Convention Centre, Hall No. 2

**COORDINATING AGENCIES:** ICMR, ICMR-NICED, Bose Institute & Vijnana Bharati

### **COORDINATORS**

<b>Rajnikant Srivastav</b> ICMR 98912 74684	<b>Neeraj Tandon</b> ICMR 98114 62137	<b>Ranjan Nandy</b> ICMR-NICED 94335 25652	<b>Sujoy Dasgupta</b> Bose Institute 98302 27751
<b>Punit Mishra</b> Vijnana Bharati 98106 96386	<b>Uma Kumar</b> Vijnana Bharati 98682 17040		

**Email:** [health@scienceindiafest.org](mailto:health@scienceindiafest.org)

## **Science & Technology Media Conclave**

S&T Media Conclave aims to provide a platform to science journalists in print, electronic, digital and social media to communicate science & technology with the public. It will be a two day congregation of about 250 journalists from PAN-India.

**DATE:** 6-7 November, 2019

**VENUE:** Bose Institute, Salt Lake

**COORDINATING AGENCIES:** Vigyan Prasar, SRFTI & Vijnana Bharati

### **COORDINATORS**

<b>Saurav Sen</b> Vigyan Prasar 98107 00920	<b>Amar Choudhary</b> SRFTI 98311 12156	<b>Debashish Chaudhary</b> Vijnana Bharati 98746 77009	<b>Sridathan</b> Vijnana Bharati 98914 12119
---------------------------------------------------	-----------------------------------------------	--------------------------------------------------------------	----------------------------------------------------

**Email:** [STMC@scienceindiafest.org](mailto:STMC@scienceindiafest.org)

## **Vigyan Yatra**

As part of promotional activities of IISF 2019 a yatra of the mobile science exhibition van will be flagged off from three different cities:

**Siliguri: J C Bose Yatra | Dhanbad: P C Ray Yatra | Kharagpur: S N Bose Yatra**

The motive behind this yatra is to ignite the minds of the viewers while on its journey through various districts with a stopover at selected venues. The science exhibition mobile van can be viewed by all local school/university students, which will create interest and awareness about IISF 2019. Eminent science communicators, innovators, teachers, students and research scholars of the locality will be felicitated. During the yatra IISF leaflet will also be distributed.

LED wall van will display and show promotional videos related to IISF. All the yatra will converge at Science City, Kolkata in the evening of 4th November 2019.


**VENUE:** Science City

**COORDINATING AGENCIES:** Vijnana Bharati

### **COORDINATORS**

<b>Animesh Kumar Dey</b> Vijnana Bharati 89108 83623	<b>Kanak Kanti Baisya</b> Vijnana Bharati 70637 91772	<b>Radha Raman Pandey</b> Vijnana Bharati 96173 32247
------------------------------------------------------------	-------------------------------------------------------------	-------------------------------------------------------------

**Email:** [vigyanyatra@scienceindiafest.org](mailto:vigyanyatra@scienceindiafest.org)



THE WHOLE  
HISTORY OF  
THE WORLD  
SHOWS THAT  
THE INDIAN  
INTELLECT IS  
SECOND TO  
NONE.

BHAGINI  
NIVEDITA

# IISF 2019 PROGRAMMES AT A GLANCE



IN THE HISTORY  
OF SCIENCE,  
WE OFTEN  
FIND THAT  
THE STUDY OF  
SOME NATURAL  
PHENOMENON  
HAS BEEN THE  
STARTING  
POINT IN THE  
DEVELOPMENT  
OF A NEW  
BRANCH OF  
KNOWLEDGE.  
SIR CV RAMAN



## Outreach Programme & Satellite Communication Event

This is IISF 2019 pre launch popularization programme. All the government Institutions and Organizations will organize a one day program with a press meet, exhibition, scientist-public interactions and lectures on the importance of IISF. Satellite communication services will be harnessed for the online lecture delivery. This is to highlight the Digital India Campaign initiated by our Hon'ble Prime Minister Shri Narendra Modi.

**COORDINATING AGENCIES:** Vigyan Prasas & Vijnana Bharati

### COORDINATORS

<b>MM Gore</b>	<b>Sachin Mandavgane</b>	<b>Sanjay Tiwari</b>
Vigyan Prasas	Vijnana Bharati	Vijnana Bharati
99992 75292	98232 46329	94242 25771

**Email:** [opsc@scienceindiafest.org](mailto:opsc@scienceindiafest.org)



## Guinness World Records

World record attempts have been a key part of IISF since its inception, thus encouraging science popularisation through public participation. This year, we attempt to create four new World Records on each day of the event. Entries in the Guinness World Records serves as a motivational platform and an excellent opportunity for the young students to be part of the mega event.

**DATE:** 5-7 November, 2019

**VENUE:** Science City

**COORDINATING AGENCIES:** CSIR-CGCRI & Vijnana Bharati

### COORDINATORS

<b>Koushik Biswas</b>	<b>BB Jha</b>	<b>Vaisakh VS</b>	<b>Nayan Roy Chaudhuri</b>
CSIR-CGCRI	CSIR-CGCRI	Vijnana Bharati	Vijnana Bharati
97480 51040	94326 73626	97170 96659	91238 25498

**Email:** [guinness@scienceindiafest.org](mailto:guinness@scienceindiafest.org)



## Cultural Programs

Cultural Festivals and events are increasingly becoming an arena of discourse, enabling people to view movement and dance within a cultural frame of work. This year we will showcase variety of cultural activities e.g. Plays, Musical Yoga, Nukkad Natak, Dance & Recital performances to commemorate the essence of Vedic and Modern Science, with the theme "Ancient to Modern" (A reflexive Monism).

**DATE:** 5-7 November, 2019

**VENUE:** Biswa Bangla Convention Centre & Science City

**COORDINATING AGENCIES:** Vigyan Prasas, SRFTI & Vijnana Bharati

### COORDINATORS

<b>Saurav Sen</b>	<b>Amar Choudhary</b>	<b>S Das Sharma</b>	<b>Mayuri Dutt</b>
Vigyan Prasas	SRFTI	SRFTI	Vijnana Bharati
98107 00920	98311 12156	90071 92716	94330 06002

**Reeta Bhattacharya**

Vijnana Bharati  
93311 82189

**Email:** [cultural@scienceindiafest.org](mailto:cultural@scienceindiafest.org)



# STEERING COMMITTEE

## PATRON



**DR HARSH VARDHAN**  
Hon'ble Union Minister  
for Science & Technology  
and Earth Sciences  
Hon'ble Union Minister  
for Health & Family  
Welfare

## CHAIRMAN



**PROF ASHUTOSH SHARMA**  
Secretary, DST

## MEMBERS



**DR MN RAJEEVAN**  
Secretary, MoES



**DR SHEKHAR C MANDE**  
Secretary, DSIR &  
DG, CSIR



**DR RENU SWARUP**  
Secretary, DBT



**DR K SIVAN**  
Chairman, ISRO &  
Secretary, DOS



**SHRI KAMLESH N VYAS**  
Secretary, DAE;  
Chairman, AEC



**DR G SATHEESH REDDY**  
Chairman, DRDO;  
Secretary, DoD R&D



**SHRI ANAND KUMAR, IAS**  
Secretary, MNRE



**DR TRILOCHAN MOHAPATRA**  
DG, ICAR & Secretary, DARE



**SHRI CK MISHRA**  
Secretary, MoEF & CC



**PROF BALRAM BHARGAVA**  
DG, ICMR & Secretary, DHR



**SHRI RUOLKHUMLIEN BUHRIL**  
Secretary, DLR (MoRD)



**SMT ANJU BHALLA**  
Joint Secretary, DST



**DR VIJAY P BHATKAR**  
President,  
Vijnana Bharati



**SHRI A JAYAKUMAR**  
Special Advisor,  
Vijnana Bharati



**SHRI JAYANT SAHASRABUDDHE**  
National Organising Secretary,  
Vijnana Bharati



**DR NAKUL PARASHAR**  
Director,  
Vigyan Prasara

## CHIEF COORDINATORS



**SHRI G SRINIVASAN**  
Deputy Secretary, DST



**DR SUDHIR S BHADURIA**  
Secretary General,  
Vijnana Bharati

SUPPORTED BY



Ministry of New and  
Renewable Energy  
GOVERNMENT OF INDIA



Ministry of Environment,  
Forest and Climate Change  
GOVERNMENT OF INDIA



Ministry of  
Rural Development  
GOVERNMENT OF INDIA



Ministry of Information  
and Broadcasting  
GOVERNMENT OF INDIA

## IISF-2019 Secretariat

Fifth Floor, Ministry of Earth Sciences  
Prithvi Bhavan, Lodhi Road, New Delhi-110 003  
[www.scienceindiafest.org](http://www.scienceindiafest.org)  
Email: [iisf@scienceindiafest.org](mailto:iisf@scienceindiafest.org)  
Ph: 011-24608280/81/82/83/84

TO PARTICIPATE REGISTER ONLINE AT  
**[www.scienceindiafest.org](http://www.scienceindiafest.org)**



**Vigyan Prasar (VP)** is an autonomous organisation of the Department of Science and Technology. Objectives of VP are to take up large-scale science popularization tasks/activities, to promote and propagate scientific and rational outlook, to act as a resource-cum-facility centre for S&T communication in India.

**VISIT US AT  
IISF 2019  
SCIENCE EXPO**

Science City,  
Kolkata  
5-8 Nov, 2019



Biographies of Indian Scientists available with **VIGYAN PRASAR**  
Order your copy online  
[www.vigyanprasar.gov.in](http://www.vigyanprasar.gov.in)