

OCTOBER 5-8,2018 Indira Gandhi Pratishthan, Lucknow

# PROGRAMME GUIDE



Ministry of Science and Technology

Ministry of Earth Sciences



Vijnana Bharati

# "जय जवान, जय किसान, जय विज्ञान" श्री अटल बिहारी वाजपेयी





# \_\_\_\_\_A TRIBUTE TO \_\_\_\_\_\_ SHRI ATAL BIHARI VAJPAYEE

# **STEERING COMMITTEE**

Chief Patron **Dr. Harsh Vardhan** Hon'ble Union Minister for Science

& Technology and Earth Sciences & Union Minister for Environment, Forest and Climate Change

Chair **Dr. Renu Swarup** Secretary, DBT

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**Dr. Vijay P. Bhatkar** President, Vijnana Bharati

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**Prof. Balram Bhargava** DG, ICMR & Secretary DHR

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Dr. Garima Gupta Scientist-E,DBT

**Sh. Praveen Ramdas** National Secretary, Vijnana Bharati



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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

Emphasizing the role of technologies and innovation, India has declared 2010-2020 as the "Decade of Innovation". By 2030 India is aiming to be the world's leading nation in S & T. As the fastest growing economy with a steady growth rate, with the advantages of a large demographic dividend and huge talent pool, India aspires for sustainable and inclusive growth. India is facing various challenges and opportunities some of these important challenges are in the key sectors of clean air & water, food, environment, climate, security and healthcare. It is important to translate the scientific knowledge into innovations through start-ups and industry so as to facilitate India to achieve inclusive and sustainable growth in coming decades. This goal can be achieved through developing scientific temper among the masses and by strengthening India's science and technology and their basic research further.

The series of India international Science Festival (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 & abroad. It aims to build a strategy for rural India through the advancement of science & technology. Moreover, it also aims to provide a platform to young students, scientists & technologis from across India for exchange of knowledge and ideas and also supporting flagship programs like "Swach Bharat Abhiyan", "Swasth Bharat Abhiyan", 'Make in India', 'Digital India', 'Smart Villages', 'Smart Cities', 'Namani Gange', 'Unnat Bharat Abhiyan', etc. initiated by the Hon'ble Prime Minister of India.

The India International Science Festival (IISF) has created a platform, which is the integral part of India's path to create an innovative knowledge society. Previously, the festival has been organized thrice in the year 2015, 2016 & 2017 respectively which were a grand success. This splendid success has set a unique example of holding an inimitable festival of science for serving the nation. The IISF 2018, therefore, aims to communicate science & technology to the masses and search for their partnership in deploying it.

I appreciate the collaborative efforts of the Ministries of the Science & Technology & Earth Sciences together with Vijnana Bharati in organizing the 4th edition of IISF.

T invite CDRI, NBRI, Birbal Sahni Institute of Palaeosciences and ITRC as well as R&D institutions in Lucknow to involve in organizing IISF 2018 for making an extraordinary and unforgettable event.

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

With best wishes,

Nars

(Dr. Harsh Vardhan)

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योगी आदित्यनाथ

## संदेश

मुझे यह जानकर अत्यन्त प्रसन्नता की अनुभूति हो रही है कि इस वर्ष भारतीय अन्तर्राष्ट्रीय विज्ञान महोत्सव (आई0आई0एस0एफ0–2018) का आयोजन उत्तर प्रदेश में किया जा रहा है।

सीमित संसाधनों के बावजूद भारत ने विज्ञान तथा प्रौद्योगिकी के क्षेत्र में महत्वपूर्ण उपलब्धियां हासिल की हैं। देश और प्रदेश की समग्र प्रगति एवं समृद्धि के लिए समाज विशेषकर युवा पीढ़ी में वैज्ञानिक सोच का विकास आवश्यक है। इसके दृष्टिगत प्रदेश में भारतीय अन्तर्राष्ट्रीय विज्ञान महोत्सव का आयोजन एक सराहनीय प्रयास है। मुझे विश्वास है कि विज्ञान महोत्सव के आयोजन से राज्य में विज्ञान एवं तकनीकी के उत्तरोत्तर विकास के असीम अवसर उत्पन्न होंगे।

भारतीय अन्तर्राष्ट्रीय विज्ञान महोत्सव–2018 के सफल आयोजन हेतु मेरी हार्दिक शुभकामनाएं

(योगी आदित्यनाथ)

लाल बहादुर शास्त्री भवन, लखनऊ



DR. RENU SWARUP



सचिव भारत सरकार विज्ञान और प्रौद्योगिकी मंत्रालय जैव प्रौद्योगिकी विभाग ब्लॉक-2, 7वां तल, सीं0 जी0 ओ0 काण्यलेक्स लोधी रोड, नई दिल्ली-110003 SECRETARY GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY Block-2, 7th Floor, C.G.O. Complex Lodhi Road, New Delhi-110003

#### MESSAGE

Science and Technology has tremendous power to contribute to the economic development and growth of society. Science and Technology offers enormous solutions for addressing societal problems, it is important to have a platform for convergence of all the stakeholders to discuss the contributions of science & technology to Society.

The India International Science Festival (IISF) has created such a platform which is an integral part of India's march to create a better and developed society through the impact of science & technology on the lives of the common man. The Ministry of Science & Technology and Ministry of Earth Sciences are organizing the 4<sup>th</sup> HSF at Lucknow, Utar Pradesh in October, 2018 coordinated by Department of Biotechnology. Ministry of Science & Technology together with Vijnana Bharati, the theme for this year's IISF is "Science & Technology: Building Partnerships, Impacting Society". It will be an extraordinary amalgamation of scientific ideas and innovations and bring together students, young scientists, researchers, key experts, technocrats, policy makers, industry leaders and entrepreneurs both national & international.

The Global Indian Science & Technology Stakeholders Meet (GIST), Industry Academia Meet and Science & Technology for Harnessing Innovations (SATHI)- A National startup & entrepreneurship summit are some of the important events planned. A "Foreign Ministers' conclave" & "State S&T Ministers' conclave" would be held as a part of IISF 2018. Through this festival we hope to bring all stakeholders together to discuss the contributions of Science & Technology to the flagship programmes of the Government. Inculcating the curiosity of Science amongst school children and engaging science teachers across the country is a unique feature of the IISF 2018. The special role of Women Scientists and Entrepreneurs in the shaping the scientific growth trajectory will be another highlight of this Festival. There will be a special effort to engage with stakeholders of the North East and also the Aspirational districts.

We would like to sincerely thank our Hon'ble Minister Science & Technology, Earth Sciences, Environment, Forests and Climate Change Dr. Harsh Vardhan for his constant guidance, encouragement and vision which has been instrumental in the planning of this event. On behalf of the organizing Ministry, I look forward to the cooperation and support from all Departments and Ministries and complete support from the State Government of Uttar Pradesh and all national laboratories and academic institutions in Lucknow to make this large festival a huge success.

We look forward to welcoming our entire scientific research fraternity and all stakeholders at IISF, Lucknow.

(Renu Swarup)



Dr. Vijay P. Bhatkar National President Vijnana Bharati



VIJNANA BHARATI C-486, Defence Colony New Delhi-110024

### MESSAGE

Knowledge of science quenches the thirst of curious minds and advancement in technology provides for the needs of man. To make this knowledge available, exchange and encouragement of ideas is necessary. Young minds need to ignited and inspired. India International science Festival is one such attempt.

After the success of IISF previously, this year we are hoping to create a bigger impact than the last three years. Programmes like Science Village open the doors of latest advancements and scientific knowledge to those students who are unreached and need this exposure the most. Young scientists, especially female scientists will get a platform to showcase their work in the Young Scientists' Conference and Women Scientists' and Entrepreneurs' Conclave. International and national science communicators will be discussing the importance and the creative means of public engagement in the field of science in the International Science Literature and Film Festival. I believe that useful solutions to combat environmental pollution and climate change will be a result of the Green Good Deeds and Clean Air programmes. There is so much to feel excited about in this year's IISF. The Mega Science and Technology Expo is promising and is definitely a wonderful opportunity for the public to learn about the achievements of the R&D institutes of our country.

It is certain that India's voyage towards scientific self reliance shall receive a sturdy leap with the joint participation of all the stakeholders including the common masses.

I would like to sincerely thank the Hon'ble Minister, Science & Technology, Earth Sciences, Environment, Forest and Climate Change, Dr Harsh Vardhan Ji for his constant guidance and support.

I congratulate on behalf of Vijnana Bharati everyone who is a part of this celebration and for their efforts in working towards this historic event.

Dr. Vijay P. Bhatkar National President, Vijnana Bharati

# **About India International Science Festival**

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 hands-on demonstrations, 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 can lead India towards a developed nation within a short span of time. The aim is to engage public and show how Science, Technology, Engineering and Mathematics (STEM) provide us with the solutions to improve our lives. Ministry of Science and Technology and Ministry of Earth Sciences in association with Vijnana Bharati (VIBHA) has created a unique platform of IISF which intends to inspire curiosity and make learning more rewarding.

The goal of the Science festival is to help youth develop 21st century skills, with a focus on scientific knowledge, creativity, critical thinking, problem-solving and teamwork. One of the long-term objectives is to encourage students to study and work in various emerging scientific fields. The focus on the myriad faces behind some of the fascinating discoveries will enthuse masses with scientific attitude and will give us the power to create new possibilities. IISF is a science outreach marathon not a science sprint thereby propelling the scientific attitude for the countless years to come.

IISF 2018 is being coordinated by Department of Biotechnology (DBT), and the nodal agency is National Institute of Immunology (NII), Delhi.

# Name of Consultants for Different Event

S. N.	Event Name	Name of Consultant
1	Global Indian Science & Technology Stakeholders Meet	
2	Students Science Village: Reaching the Unreached	Sh. Arun Pandey
3	Agriculture Conclave	Sh. Arun Pandey
4	Green Good Deeds	
5	S & T Mission: A key Stakeholders & Partners Summit	
6	National Social Organisations& Institutions Meet	Sh. Navin Prasad
7	Clean Air Campaign	
8	Women Scientists' & Entrepreneur Conclave	
9	Industry Academia Interaction Meet	Ms. Meetali Bharti
10	North East Students Conclave	
11	Young Scientists' Conference	
12	Science & Technology for Harnessing Innovations	Sh Amit Singh
13	Health Conclave Sh. Amit Singh	
14	Guinness World Records	
15	National Science Teachers' Congress	
16	Crafts & Artisans demo	Sh. Suraj Pandey
17	Nav Bharat Nirman	
18	International Science Literature & Film Festival	
19	Mega Science, Technology & Industry Expo	Ms. Sonal Katyal
20	Outreach Program	
21	Students Engineering Models Competition	Sh. K. V. Madhavan
22	Face to Face with New Frontiers in Science	Sn. K. v. waanavan
23	Overall Event Co-ordination	Sh. Rajat Aggarwal

# Global Indian Science & Technology Stakeholders' Meet (GIST Meet)

5-6 October, 2018 • Venue: Pluto Hall, IGP

#### **COORDINATORS:**

**Dr. Shailja V Gupta Sc 'G', DBT** Ph. No. 011-24363748 Ms Anju Bhalla Joint Secretary, DST Ph. No. 011-26516077 Prof. Y K. Gupta, Former Dean, AIIMS & Principal Adviser, THSTI Ph. No. 98688 68457

The eminent group of Indian Scientists & Technocrats' diaspora would be invited for brain storming sessions on critical areas that shall contribute for the development of India. As India is making rapid economic progress, the way for inclusive development covering the larger fraction of our population is the prime objective of this event.

#### **PROGRAMME SCHEDULE**

DAYI	5 OCIOBER, 2018
01:00 - 2:30	Interactive Lunch
	Welcome : Prof. Y. K. Gupta (Moderator)
	Background of GIST: Sh. Jayant Sahastrabudhe
	Address by: Dr. Renu Swarup, Secretary DBT
	Address by: Dr. Madhavan Nair Rajeevan, Secretary, MoES
	Inaugural Address by: Dr. Harsh Vardhan, Hon'ble Minister S&T and ES
	PANEL DISCUSSION -1
	Theme: Potential Role of NRI Scientists in Development of India
02:30 - 5:30	Trigger talks: (15 Minutes each)
	1. Dr. Vijay Saraswat, USA
	2. Prof. Suresh K. Bhargava, Australia
	3. Dr. Amitabh Prakash, New Zealand
	4. Prof. Anil Gulati, USA
	5. Dr. Balram Bhargava, DG-ICMR, New Delhi
	6. Sh. Adam Szigeti, Dy. State Secretary, Ministry of Innovation and Technology, Hungary
	Open house discussion ( 60 Minutes)

DAY 2	6 OCTOBER, 2018 Time: 10:00	01:00
10:00 - 01:00	PANEL DISCUSSION -2 Theme: Positioning India as a Global leader in Science and Technology: A Catalytic Approach by GIST	
	Welcome by Prof. Y. K. Gupta (Moderator)	
	Philosophy behind GIST <b>Sh. Jaykumar</b>	
	Address by: Prof. Ashutosh Sharma, Secretary, DST	
	Key note talk by: Prof. K. VijayRaghavan, PSA to Gol	
	Trigger talks: (15 Minutes each)	
	1. Prof. Ramesh Jain, USA	
	2. Sh. Anil Srivastava, USA	
	3. Dr. Mone Zaidi,USA	
	4. Dr. Sarvajna Dwivedi,USA	
	5. Dr. Manu Prakash,USA	
	Open house discussion (60 Minutes)	
	Concluding Remark: Dr. Renu Swarup, Secretary, DBT	
1:00 - 2:00	Interactive Lunch	

## Science & Technology Mission: A Key Stakeholders and Partners Summit

7 - 8 October, 2018 • Venue: Earth Moon Hall-1, IGP

#### **COORDINATORS:**

**Dr. Manoj Kumar Modi** Sc.'E', DBT Phone: 9999879979 **Dr. Neeraj Sharma** Head of Scientific Division, DST Phone:+91 9810941887

**Er Ravinder Gaur** Sc'D', DST Phone: +91 9818385649 **Prof Pramod K Verma** Vikram University, Ujjain Phone: +91 9826013067

The main goal of the **"Science and Technology Mission: A key Stakeholders and Partners Summit"** is to understand the impact of Science and Technology on National Missions, primarily on National Mission 'Transforming India through Scientific & Technological Interventions', including focus of individual states on this aspect. The event will have a series of scientific activities including invited talks by eminent scientists and policy makers and deliberations of S&T activities of State Councils. It will provide an opportunity to key stakeholders for showcasing their contributions through application of S&T.

The **"Science and Technology Mission: A key Stakeholders and Partners Summit"** is divided into the following thematic areas:

## Theme 1: Presentation on Role plays by Institutions in development of S&T in States

This Session will have a keynote by the Directors/Head of the Institutions to deliberate on looking for S&T policy to be better connected to broader economic policy at the institutional and operational levels as well as linking S&T policy to institutional infrastructure, research funding, S&T investment, international research collaboration etc. at public-private-academia-industry sectors.

## **Theme 2: Plenary Talks**

The Session will have a Plenary Talks that will address fostering National S&T capacity and knowledge sharing through region specific approach for inter-regional collaboration and cooperation.

# Theme 3: Deliberations/Presentation by Director Generals/ Directors of State S&T Councils on the Councils' activities of last two years

This session will provide an opportunity to see how S&T can impact the National Missions and to also to analyze the focus of individual states on these. The deliberations will pave way to align the scientific and

technological priorities according to the policies of State Governments, augmenting support and active participation of the States in S&T development and to evolve joint action plans of mutual interest.

# Theme 4: S&T Ministers Conclave: Way forward State S&T Councils play the role in development of S&T in States

This Conclave will provide the opportunity to S&T Ministers of various States & Union Territories to interact with other stakeholders and discuss the possible interventions of S&T in achieving the objectives of various National Missions.

DAY 1	7 OCTOBER, 2018 (Sunday)
Time	Activities
09:45 - 10:15	Registration
10:15 - 11:15	Inauguration Session
10:15	Arrival of Dignitaries
10:16	Lighting of Lamp
10:16 - 10:18	Invocation
10:18 - 10:45	Welcome Address: Dr. Neeraj Sharma, Adviser, DST: 'Expectations from Conclave deliberations'
10:45 - 11:10	Inaugural Address: Dr. Harsh Vardhan, Hon'ble Minister of Science and Technology, & Earth Sciences, and Environment, Forest and Climate Change
11:10 - 11:15	Vote of Thanks: by Er. Ravinder Gaur, Scientist-D, TDT-SSTP, Department of Science & Technology
11:15 - 12:00	High Tea
	Presentation on Role plays by Institutions in development of S&T in States: (15 Minutes each)
	Dr. S. Barik, CSIR-NBRI, Lucknow
12:00 - 01:15	Dr. R. K. Sinha, Director, CSIO, Chandigarh
	Dr. K. K. Singh, Director, CIAE Bhopal
	Dr. A. K. Misra, Vice Chancellor, GB Pant University
	Dr. M. K. Surappa, Vice Chancellor, Anna University, Chennai
01:15 - 02:30	Lunch Break

## **PROGRAMME SCHEDULE**

02:30 - 03:00	Plenary Talks: (15 Minutes each)
	Dr. Pawan Kumar Agarwal, ADG, ICAR, New Delhi
	<b>Dr. S. Solomon</b> , Vice Chancellor, Chandra Shekhar Azad University of Agriculture and Technology, Kanpur
03:00 - 05:00	Deliberations/Presentation by Director Generals/ Directors of Some State S&T Councils on the Councils activities of last two years Punjab, UP, MP, Assam, Arunachal Pradesh, Tamilnadu, Karnataka, Gujarat
05:00 - 05:30	Open Forum Discussion

DAY 2	8 OCTOBER, 2018 (Monday)
Time	Activities
•	ide an opportunity to S&T Ministers of all States & Union Territories to interact rs and discuss the possible interventions of S&T in achieving the objectives of
10:00 - 12:30	Presentation & Way forward State S&T Councils play the role in development of S&T in States by:
	Meeting of S&T Ministers of various States
	Panel Discussion/Views of State S&T Ministers
12:30 - 01:00	Summit Concluding Remarks: Dr. M Rajeevan Nair, Secretary, MoES
01:00 - 01:15	Vote of Thanks <b>Prof. Pramod K. Verma</b> Ex-National Vice President, <b>Vijnana Bharati</b> , Delhi

# North East Students' Conclave

7 - 8 October, 2018 • Venue: Pluto Hall, IGP

#### **COORDINATORS:**

**Dr. Md. Aslam** Sc. 'G', DBT Phone: +91 9871935454 Krishna Kumar Scientist, NECTAR Phone: +91 9899192757 **Er Ravinder Gaur** Sc. 'D', DST Phone: +91 9818385649

North East Students' Conclave will bring 200 bright students from NE Region along with 50 teachers, on a single platform to share their experiences and put forth the new dimensions of passion with science. This event shall help the participating students to broaden their horizon of knowledge about science, technology and scientific principles.

- Northeast Teachers' and Students Pedagogy Training session with eminent experts' viz. Padma Shri Dr. M.S. Sodha and Prof. Pramod Tandon will enhance their interest and temperament on Science and Technology.
- The visit to CSIR Labs and interaction with the eminent scientist as part of Outreach Programme of IISF shall fuel their curiosity.
- Northeast Development Plan Presentation (Students will present their ideas on development prospects of northeast region either by oral, poster, modal presentations.
- The conclave will conclude with Northeast Cultural Fest by the students.

#### **PROGRAMME SCHEDULE**

DAY 1	7 OCTOBER, 2018 (Sunday)
Time	Programme
09:00 - 01:00	Visit to CSIR Labs (CDRI) and interact with the scientists as part of OUTREACH PROGRAMME of IISF.
01:00 - 02:00	Lunch
01:30 - 02:00	Registration
02:00 - 03:00	Inauguration
02:00 - 02:05	Arrival of Chief Guest Dr. Harsh Vardhan, Hon'ble Union Minister for Science & Technology, & Earth Sciences, and Environment, Forests and Climate Change, Govt. of India
02:05 - 02:15	Welcome: Dr. Mohd. Aslam, Adviser, DBT, New Delhi

02:15 - 02:25	Address: Dr. T. Madhan Mohan, Consultant Adviser, NER-BPMC, DBT, New Delhi
02:25 - 02:35	Address: Sh. A. Jayakumar, Special Adviser, VIBHA
02:35 - 02:55	Inaugural Address: Dr. Harsh Vardhan, Hon'ble Union Minister
02:55 - 03:00	Vote of Thanks: Dr. Krishna Kumar, NECTAR, New Delhi
03:30 - 05:30	Northeast Teachers' and Students Pedagogy Training session to enhance their interest and temperament on science and technology, with experts:
	<ul> <li>Padma Shri Prof. M.S. Sodha, Former VC, Lucknow University and Devi Ahilya University, Indore</li> </ul>
	• Padma Shri Prof. Pramod Tandon, CEO, Biotech Park, Lucknow
	• Prof. S. K. Srivastava, Vice Chancellor, NEHU, Shillong
	• Prof. H.C. Verma, Former Professor, IIT Kanpur
	Panel Discussion

DAY 2	8 OCTOBER, 2018 (Monday)
Time	Programme
09:30 - 01:00	Northeast Development Plan Presentation in front of the Panel (Students will present their ideas on development prospects of northeast region either by speech with ppt or poster/model presentations.
	<b>Members of the Panel:</b> Experts of the institutions located in the North East Region of India
01:00 - 02:00	Lunch
02:00 - 02:30	Northeast Cultural Fest
03:00 - 03:30	Valedictory Address Prize Distribution of Poster/model Exhibition by Dr. Renu Swarup, Secretary, DBT Vote of Thanks – Dr. Vaishali Punjabi, Sc 'E', DBT

# Young Scientists' Conference

## 5 - 6 October, 2018 • Venue: Jupiter Hall & Neptune Hall, IGP

#### **COORDINATORS:**

**Dr. Meenakshi Munshi** Sc. 'G', DBT Phone: +91-11-24361035 **Dr. Debasis Chattopadhyay** Staff Scientist VII, NIPGR Phone: +91-11-26735189 **Dr. Jajati K. Nayak** Scientific Officer (E), VECC Phone: +91-9038864186

The main aim of Young Scientists' Conference is to provide an enabling ecosystem to young scientists/ entrepreneurs/researchers (below the age of 40 years) where they can discuss and present their research findings and innovative ideas on the identified research themes. It will give an ample opportunity to the budding scientists to come up with interdisciplinary research models/programs keeping in view of national flagship programs such as Make in India, Digital India, Swachh Bharat, Swasth Bharat, Biodiversity and Environment and various Frontier areas in Science.

Young Scientists/Faculties/Ph.D. students from Universities, R&D Organizations, National Institutes, NGOs, Post-graduate colleges and Industries shall participate through nominations by the heads of the organizations or through direct participation.

The conference activities will be spread over two days (5<sup>th</sup> - 6<sup>th</sup> October, 2018) including plenary, oral and poster sessions on the mentioned themes, besides interactive panel discussions on entrepreneurship and various aspects related to career progression and opportunities for the young scientists.

#### **PROGRAMME SCHEDULE**

5 OCTOBER, 2018 (Friday)

Time	Programme
09:00 - 10:00	Registration (Jupiter Hall)
10:00 - 10:30	Inaugural Session (Jupiter Hall)
10:00 - 10:02	Arrival of Dignitaries
10:02 - 10:05	Lighting of Lamp
10.05 - 10.10	Welcome and Introduction of YSC: Dr. Meenakshi Munshi
10:10 - 10:15	Opening Remarks by Secretary, DBT
10:15 - 10:25	Inaugural Address: Hon'ble Union Minister S&T
10:25 - 10:30	Vote of Thanks: Dr. Ramesh V. Sonti, Director NIPGR

## DAY 1

10:30 - 11:00	Break
11:00 - 01:00	Poster Session (Jupiter Corridor)
01:00 - 02:30	LUNCH
02:30 - 03:30	Plenary Session(Jupiter Hall), Chairman: Dr. Shekhar Mande
02:30 - 03:10	Plenary Talk: Dr. D. Balasubramanian, Res. Director LVPEI, Former Director, CCMB
03:10 - 03:30	Keynote address: Prof. G.R. Desiraju, IISc
03:30 - 03:45	Break
03:45 - 05:45	Technical Session (Jupiter Hall) Invited Talks by Young Achievers (Chairman: Prof. Anil Tripathi)
03:45 - 04:05	Prof. Kantesh Balani, IIT-Kanpur
04:05 - 04:25	Dr. Dhananjay Dendikuri, Founder-Achira Lab
04:25 - 04:45	Dr. C. Malla Reddy, IISER-Kolkata
04:45 - 05:05	Dr. Hardik Makkar, KIIT Incubator-BBSR
05:05 - 05:25	Dr. Arun K. Shukla, IIT-Kanpur
05:25 - 05:45	Dr. Nitin Sisodia, Founder-Sohum Innovation
04:00 - 05:00	Oral Presentation of selected Posters   Parallel Session
	Theme: Swachh Bharat Session Chair: <b>Prof. Pallab Banerjee</b> , IIT-KGP <b>Venue: VIP Lounge: Earth</b>
	Theme: Swasth Bharat Session Chair: Prof. P. M. Padole, Director, VNIT Venue: VVIP Lounge: Earth
	Theme: Make in India Session Chair: <b>Dr. B. B. Jha</b> , Director, CGCRI <b>Venue: Earth Moon 2</b>
	Theme: Digital India Session Chair: <b>Prof. S. K. Tiwari</b> , Raipur <b>Venue: Earth Moon 3</b>
	Theme: Biodiversity and environment Session Chair Prof. L.S. Rathore, Former DG IMD, Venue: Earth Moon 4
	Theme: Frontiers in Science Session Chair Dr. Tapas Kundu, Director, CDRI Venue: Earth Moon 5

DAY 2	6 OCTOBER, 2018 (Saturday)	
Time	Programme	
10:00 - 12:00	Panel Discussion (Jupiter Hall) Opportunities for Career Development Moderator: Dr. Shailja Gupta, DBT	
	Counsellors from EU nations-;DG, ICGEB	
10:00 - 11:00	Panel Discussion (Neptune 2) Parallel Session Entrepreneurship Moderator: Dr. Taslim Arif Sd. (C-CAMP) Paneliste: Dr. Girish Sahni, Ex.DG. CSIP. Dr. Dhananiay Dendikuri (Achira Labs)	
	Panelists: Dr. Girish Sahni, Ex-DG, CSIR, Dr. Dhananjay Dendikuri (Achira Labs), Prof. Mrutyunjay Suar (KIIT-Incubator), Dr. Sunil D. Dhole (Technorbital), Dr. Sandip Patil (E-spin nanotech)	
12:00 - 12:15	Break	
12.15 - 01.30	Valedictory Session: Session Chair: Vaidya Rajesh Kotecha, Secretary Ministry of Ayush	
12.15 - 12.25	Chairman's remark	
12:25 - 12:35	Guest of Honour: Dr. G. Satheesh Reddy, Chairman DRDO	
12:35 - 12:45	Chief Guest: Prof. Sudhir K. Sopory, Former VC, JNU	
12:45 - 01:30	Giving away of prizes for best three posters in each theme	

# **Green Good Deeds**

### 6 October, 2018 • Venue: Neptune Hall 1, IGP

#### **COORDINATORS:**

**Dr. Onkar Tiwari** Sc. 'E', DBT Phone: +91 11-24361290 Dr. A Senthil Vel Adviser, MoEFCC

**Sh. Ravi Shankar Prasad** Joint Secretary, MoEFCC Phone: +91 8130676464 **Dr. Ranjana Arya** Assistant Professor, JNU Phone: +91 9811325080

Green Good Deed (GGD) is a social initiative launched by Hon'ble Minister for Environment, Forest and Climate Change, Dr Harsh Vardhan, during January 2018. The initiative is aimed to inculcate behavioural changes among the citizens of the country especially school students and encourage them to take up small environment friendly deeds to conserve nature and its resources.

The mission of this nation-wide initiative is to promote environmental conservation, sustainable use of resources, and promotion of environment friendly lifestyle. The range of GGD is infinite, from a small step of switching off lights when not in use to rain water harvesting. Each act which benefits the life of inhabitants of earth including plant and animal is considered as GGD.

This social movement has been accepted by BRICS nations during the Environment Ministers' meeting which took place during May 2018 in South Africa. The BRICS nations have agreed to include it in their agenda for their next meetings scheduled in Brazil and Russia respectively.

With an aim of global revolution with local impact GGD will help in the ongoing efforts across the country and internationally to protect, preserve, conserve, restore and revitalize "Mother Nature" by bringing in behavioral change among citizens of the country to realize the goal of Swachh India. The idea is to implement the environmental proceedings/decisions generated during International/Local meetings into action through individual/organizational efforts and recognition.

GGD is a platform wherein individuals/organizations will be encouraged to take up green deeds to fulfill their green social responsibility.

## PROGRAMME SCHEDULE

DAY 1	6 OCTOBER, 2018 Plenary Session		
Time	Program		
10:15 - 10:20	Inauguration of Exhibition by Hon'ble Minister for Environment, Forest and Climate Change		
10:20 -10:30	Visit to Exhibition counters by all	officials concerned	
10:30 - 10:35	Inauguration of Plenary Session (Diya Lighting) by Hon'ble Minister for Environment, Forest and Climate Change and Hon'ble Chief Minister of Uttar Pradesh		
10:35 - 10:45	Felicitation of officials / resource	persons on dais	
10:45 - 10:50	Inaugural address by Additional S	Secretary, Dr. A.K. Mehta	
10:50 - 11:00	Address by Secretary (EF&CC), Sh	n. C.K. Mishra	
11:00 - 11:15	Address by Hon'ble Chief Minister, Uttar Pradesh		
11:15 - 11:35	Address by Hon'ble Minister for Environment, Forest and Climate Change		
11:35 - 01:00	Address by Panel speakers		
15 minutes speech each	Panel Discussion Panel Speakers		
	<ul> <li>Environment conservation and Protection</li> </ul>	Dr Anil Prakash Joshi, HESCO	
	• Energy conservation	<b>Sh. Abhay Bakre</b> , DG Bureau of Energy Efficiency	
	<ul> <li>Sanitation and Hygiene</li> </ul>	Sh. Rajender Singh, Water Conservationist	
	Water Conservation	Prof C R Babu, University of Delhi	
		<b>Dr S P Yadav</b> , Secretary Uttar Pradesh Biodiversity Board	
1:00 - 1:05	Vote of thanks		
1:05 - 2:00	Lunch Break		
Exhibition			
10:15 - 10:20	Inauguration of Exhibition by Hon'ble Minister for Environment, Forest and Climate Change		
10:20 - 10:30	Visit to counters by all officials concerned		
10:30 - 01:00	Exhibition on the success stories under Eco-club programme, open to all visitors		

# **Agriculture Conclave**

#### 5 October, 2018 • Venue: Inaugural Hall, IGP

#### COORDINATORS:

Dr Mohd Aslam Sc. 'G', DBT Phone: 011-24363057 Dr. A. K. Singh DDG (Ag Extension) ICAR

S. K. Singh Project Director, ICAR Phone: 011-25842787

**Prof. Randhir Singh** ICAR Phone: 7015672158

Hon'ble Prime Minister has a vision of "doubling farmers' income by the year 2022", and the three key variables, namely, productivity gains, reduction in the cost of cultivation and remunerative price need to be addressed scientifically. In order to achieve this, the strategy platform focuses on sustainability of production, monetization of farmers' produce, re-strengthening of extension services, recognizing agriculture as an enterprise and enabling it to operate smoothly by addressing various structural weaknesses.

Agriculture Conclave will address the above-mentioned concerns through a conference and exhibition to be held during the India International Science Festival 2018. Diversification of agriculture, Animal & fisheries based enterprises, Natural Resource Management including organic farming, Post-harvest and value chain management and Mechanization including residue burning shall be addressed.

#### **PROGRAMME SCHEDULE**

DAY 1	5 OCTOBER, 2018	
Time	Programme	
10:00	Lamp lighting by all dignitaries	
10:00 - 10:05	Welcome & overview by <b>Dr AK Singh</b> , DDG (AE), ICAR	
10:05 - 10:10	Sh. Jayakumar, Special Adviser, <b>Vijnana Bharati</b>	
10:10 - 10:20	Special Address by Dr T Mohapatra, Secretary DARE & DG, ICAR	
10:20 - 10:30	Special address by Minister of Agriculture, Uttar Pradesh	
10:30 - 10:55	Inaugural Address by Minister of Agriculture & FW, GOI	
10:55 - 11:00	Vote of Thanks by <b>Dr Mohd. Aslam</b> , DBT	

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Technical Session-I: Enhancing income through diversification			
Moderator: Dr. Gopal Krishna, Dir. CIFE			
	Panel Discussion	Panel Members	
11:00 - 12:00	Cropping Systems Fisheries Enterprises Dairy/ Veterinary Enterprise Horticulture Production Dairy, Veterinary and Fisheries based enterprises	Dr Bijendra Singh, Dir. IIVR, Varanasi Dr RK Singh, Dir. IVRI Dr RRB Singh, Dir. NDRI Dr KK Lal, Dir. NBFGR Dr Shailendra Rajan, Dir. CISH	
	Technical Session-II: Mechaniza	ation	
	Moderator: Dr MM Pandey, Former D	DDG (Engg)	
	Panel Discussion	Panel Members	
12:00- 01:00	Improving efficiency and drudgery reduction through mechanization	Dr KK Singh, Dir. CIAE Dr IM Mishra, Head, Engg, IARI Dr AK Singh, Head (A) Engg, IISR	
01:00 - 02:00	Lunch		
	Technical Session-IV: Natural Resource	Management	
	Moderator : Prof. Jeet Singh Sandhu, VC, N	IDUAT, Faizabad	
	Panel Discussion	Panel Members	
02:00 - 03:00	Managing natural resources and producing healthy food	Dr Krishna Chandra, Dir. NCOF Dr RK Awasthee, Dir. NOFRI Dr KK Singh, Sc 'F' IMD Dr Mishra, Head, RS – CSSRI	
03:00 - 03:15	Tea Break		
Те	chnical Session-V: Post harvest management	t and value addition	
	Moderator: Prof. S. Solomon, VC, CSAU	A&T, Kanpur	
	Panel Discussion	Panel Members	
03:15 - 04:15	Reducing post harvest losses through management and value addition	Dr. Bhardwaj, Dir. CIPHET Dr. AD Pathak, Dir. IISR Dr. Lata Sabiki, Head, DT, NDRI	
	Concluding Session		
04:15 - 05:00	Welcome by <b>Dr. SK Singh</b> , Dir. DKMA Remarks by <b>Dr. AK Singh</b> , DDG (AE), ICAR <b>Sh. S.P. Singh Baghel</b> , Hon`ble Minister, Animal Husbandry		
	Vote of Thanks by <b>Dr. Randhir Singh</b> , ADG	•	

## **Health Conclave**

7 October, 2018 • Venue: Pluto Hall, IGP

#### **COORDINATORS:**

**Dr. Alka Sharma** Sc 'G', DBT 011-24363699 **Dr. Neeraj Tandon** Sc 'G', ICMR 011-26589599, 9811462137 **Dr. Asha Latha** Professor, SCTIMST 9847416321

#### Life Style Diseases: Risk Factors and Preventive Strategies

The life expectancy in India has increased to 70.3 years in females and 66.9 years in males in 2016. The per person disease burden measured as DALYs( Disability Adjusted Life Years) due to communicable, maternal, neonatal, and nutritional diseases (CMNNDs) has dropped from 61% in 1990 to 33% in 2016. However, there has been a corresponding increase in the contribution of non-communicable diseases (NCDs) from 30% of the total disease burden in 1990 to 55% in 2016. There is a wide variation between states in this epidemiological transition, ranging from 48% to 75% for NCDs. Among NCDs, the largest contribution to disease burden was due to cardiovascular diseases (CVDs), diabetes, chronic respiratory diseases, mental health and neurological disorders, cancers, musculoskeletal disorders, and chronic kidney disease. From 1990 to 2016, the highest increase in DALY rates was observed due to diabetes, at 80%, and ischemic heart disease (IHD), at 36%. Across India With population aging, there was a 9 fold increase in DALYs for ischemic heart disease, 4 fold for chronic obstructive pulmonary disease, 6 fold for stroke and 4 fold for diabetes. Risk factors including unhealthy diet, high blood pressure, high blood sugar, high cholesterol, and overweight were responsible for guarter of the disease burden in 2016 as compared to 10% in 1990. Though the risk factor contribution has increased in all the States, the combination of these risks was found to be highest in Punjab, Tamil Nadu, Kerala, Andhra Pradesh, and Maharashtra in 2016. The death rates due to NCDs were twice that of CMNNDs. In above-40 age group, NCDs are the dominant cause of death. The leading individual cause of death in India in 2016 was ischemic heart disease, the death rate from which was twice as much as the next leading cause. The other NCDs in the top 10 individual causes of death included chronic obstructive pulmonary disease (COPD), stroke, diabetes, and chronic kidney disease.

## **PROGRAMME SCHEDULE**

Time	Technical Session	
10:00 - 10:10	Welcome Address: <b>Dr. Alka Sharma</b> , Adviser, DBT	
10:10 - 10:20	About the Theme by <b>Dr. Neeraj Tandon</b> , Scientist 'G', ICMR	
10:20 - 11:20	Key Note Address: by the Chief Guest: <b>Prof. Balram Bhargava</b> , Secretary, DHR & DG, ICMR, New Delhi – Focus on Cardiovascular Diseases	
11:20 - 11:55	High Tea	
11:55 - 12:15	<b>Prof. S. K. Dwivedi</b> , Department of Cardiology, KGMU, Lucknow - Myocardial Infarction	
12:15 - 12:35	<b>Prof. Vasantha Padma Srivastava</b> , Department of Neurology, AIIMS, New Delhi - Stroke Prevention	
12:35 - 12:55	<b>Prof. Eash Bhatia</b> , Department of Endocrinology and Metabolism SGPGI, Lucknow - Diabetes : Rising Epidemic	
12:55 - 01:15	Prof. Anurag Srivastava, Head, Department of Surgery, AIIMS, New Delhi	
01:15 - 01:35	<b>Dr. S. C. Tiwari</b> , Formerly, Prof & Head, Department of Geriatric Mental Health KGMU, Lucknow - Stress and Depression	
01:35 - 01:55	<b>Dr. R. M. Acharya</b> , Department of Integrated Medicine AIIMS, New Delhi -Life Style Intervention	
01:55 - 02:00	Vote of Thanks by Dr. Asha Latha, Professor, SCTIMST	

# **Health Exhibition**

## 5 October, 2018 • Venue: Atal Bihari Vajpayee Scientific Convention Centre

Healthy lifestyle and high intake of nutritious food can provide good health throughout life to the humans. The poor nutrition and unawareness on the utilization of health facilities during their childhood and reproductive age are the major factors, by and large, responsible for the high maternal and child mortality. Though Government of India (GoI) has been taking several efforts to improve the health status of these vulnerable groups, in such a populous country as India more and more activities are the need of the hour to combat the existing lacunae. Poverty, gender discrimination and illiteracy in the population are the major hindrances causing bottlenecks in the implementation of appropriate interventions.

In this context, Expo for Women and Child Health is an attempt to improve the existing health conditions of these vulnerable groups in the society gains importance.

Time	Programme	
6:00 - 7:00	Inaugural Session	
6:00 - 6:05	Lighting of the lamp & prayer	
6:05 - 6:10	Honouring with Flowers	
6:10 - 6:15	Welcome Address: Prof. M. L. B. Bhatt, Vice Chancellor, K G M U, Lucknow	
6:15 - 6:20	Introduction: Dr. Ashalatha Radhakrishnan, Coordinator, Health Conclave	
6:20 - 6:25	Felicitations: Sh. Sidharth Nath Singh, Hon'ble Health Minister, Uttar Pradesh	
6:25 - 6:30	Felicitations: Sh. Sidharth Nath Singh, Hon'ble Health Minister, Uttar Pradesh	
6:30 - 6:45	Inaugural Address: Sh. Adityanath Yogi, Hon'ble Chief Minister, Uttar Pradesh	
6:45 - 6:55	<b>Presidential Address: Dr. Harsh Vardhan</b> , Hon'ble Union Minister for Science & Technology and Earth Sciences & Union Minister for Environment, Forest and Climate Change	
6:55 - 7:00	Vote of Thanks	
7:00	Documentary	

#### **PROGRAMME SCHEDULE**

#### Health Exhibition (5-20, October, 2018)

A 'Medical exhibition' named "Woman and Child Health Expo-2018" is going to enhance health awareness and exhibit the methodology of modern medical practices for the common man. The exhibition will thematically display original specimens of the human organ systems, multimedia narration of its functions; explains how various diseases and health hazards affect the human and demonstrate various treatment options available focusing on women and children.

#### Continuing Medical Education (6-7, October, 2018)

A two day Continuing Medical Education (CME) program for Medical Professionals and public separately including didactic lectures, debates, brain storming sessions etc on various health issues of women and children will be organized. During the CME experts from each of the sub-specialties (Gynecology/Obstetrics and Pediatrics) and allied super specialties, both nationally and internationally, medical students, and other health care workers etc. will participate.

#### Medical Camp - For Woman & Child (6-7 October, 2018)

Free medical camps will be organized for 2 days during the Conclave addressing the various issues of women and children by the experts in each field. Around 1000 people will be catered to each day and a group of 20 medical experts will guide them through their illness and the path to well-being. These beneficiaries will in turn be educated to take care of the various lacunae and misconceptions in their mind and in their immediate vicinity where they live. They will in turn be the torch bearers disseminating information back in their local community.

## **Industry Academia Interaction Meeting**

7 - 8 October, 2018 • Venue: Jupiter Hall, IGP

#### **COORDINATORS:**

**Dr. Sangita M Kasture** Sc. 'E', DBT Phone: +91 24365438 **Dr. Hemant R Kushwaha** Assistant Professor, JNU Phone: +91 8076369267

Ms. Shilpy Kochhar BIRAC Phone: +91 1124389663 **Dr. Prakash Itankar** Assistant Professor, Nagpur University Phone: +91 9766191818

The main goal of the Industry-Academia network is to provide support system for focused involvement of university and industry on product and application research. The nature of interaction proposed between industry and the university in the form of Panel discussion regarding Research support, Technology transfer and Collaborative research and Skill development. The various thematic sessions will have a keynote address, moderator talk followed by sharing of experiences by the Industry Academia leaders of India in the Food/Agriculture, Health, Information Technology, Rural Technology and Energy/Environment area. Encompassing the "Challenges and Opportunities: 2030". The sessions will also include a panel discussions/ interactions where participants can discuss and interact with the experts thereby highlighting the various challenges and opportunities in these areas. Success stories for innovative ideas with major impact are being invited and Awards would be given to selected success stories by Hon'ble Minister.

Broadly, the nature of interaction proposed between industry and the university in the form of Panel discussion regarding Academia- Industry partnership, Technology transfer & commercialization, facilitating innovation, Skill development & training and forecasting Future Technologies.

Also success stories for innovative ideas with major impact are being invited and Awards would be given to selected success stories by Hon'ble Minister of Science & Technology.

## **PROGRAMME SCHEDULE**

## DAY 1

## **7 OCTOBER**, 2018

Inaugural Session			
Time			
10:00 - 10:05	Welcome by <b>Dr. Sangita M. Kasture</b> , Sc.E, DBT		
10:05 - 10:10	Special Address by <b>Dr. S. R. Rao</b> , Sc.	H, DBT	
10:10 - 10:15	Keynote Address by <b>Dr. Shekhar Ma</b>	nde, Vice President, VIBHA	
10:15 - 10:25	Inaugural Address by Dr. Anup Char	<b>dra Pandey</b> , Chief Secretary, Govt. of U.P	
10:25 - 10:30	Vote of Thanks		
T	THEME 1 - FOOD/AGRICULTURE 2030: CHALLENGES AND OPPORTUNITIES		
10:30 - 10:50	10:30 - 10:50       Keynote Speaker: Dr. Ramesh V. Sonti, Director, NIPGR, New Delhi         Moderator: Dr. S. R. Rao, Sc.H, DBT, New Delhi		
	Panel Discussion	Panel Members	
10:50 - 11:30	<ul> <li>Challenges in Enhancing Crop yield, productivity, Storage</li> <li>GM Crops - Present &amp; Future</li> <li>Import reduction and export promotion measures</li> </ul>	<ul> <li>Dr. D. N. Kulkarni, President, Jain Irrigation Systems Ltd., Jalgaon</li> <li>Dr. Prabodh S Halde, Head Global Regualtory Marico Ltd. &amp; Prestat Elect AFST India</li> <li>Dr. J. P. Sharma, IARI, New Delhi</li> <li>Dr. Abhay Shendye, Founder and Director, Swasti Agro Pvt. Ltd.</li> <li>Reporters: Dr. Hemant Kushwah, JNU</li> </ul>	
11:30 - 11:35	Vote of Thanks		
11:35 - 12:00	Tea Break		
	THEME 2 – HEALTH 2030: CHAI	LENGES AND OPPORTUNITIES	
12:00 - 12:10	Introductory Remarks		
12:10 - 12:30	<ul> <li>Keynote Speaker: Dr. Subash Kapre, Global Scientist, Director Emeritus, Serum</li> <li>Institute of India</li> <li>Moderator: Dr. Y. K. Gupta, Principal Adviser, THSTI -DBT (Projects), Former Dean and</li> <li>Head of Pharmacology, AIIMS, New Delhi</li> </ul>		

	Panel Discussion	Panel Members
12:30 - 01:30	<ul> <li>Scale up of potential projects from bench to bedside (industry focus)</li> <li>Harness innovation potential of academia (academia focus)</li> </ul>	<ul> <li>Dr. Rama Jayasundar, Professor Deptt. of NMR, AIIMS, New Delhi</li> <li>Dr. Navin Khanna, Group Leader ICGEB, New Delhi</li> <li>Dr Shanti Nair, Director Research Amrita, Kochi</li> <li>Dr. P. K. Seth, Former CEO Biotech Park, Lucknow</li> <li>Dr. Sushil Kumar Gupta, Professor Deptt. of Medical Endocrinology, SGPGIMS, Lucknow</li> <li>Prof. M. L. B.Bhatt, VC King George's Medical University, Lucknow</li> <li>Dr. GVS Manyam, Managing Director Panacea Medical Technologies</li> <li>Reporters: Prof. Prakash Itenker, NV</li> </ul>
01:30 - 01:35	Vote of Thanks	
01:35 - 02:00	Lunch Break	
THEN	/IE 3 – INFORMATION TECHNOLOGY2	2030: CHALLENGES AND OPPORTUNITIES
02:00 - 02:10	Introductory Remarks	
02:10 - 02:30	Keynote Address and Moderator: D	r <b>. Omkar Rai</b> , DG, STPI, New Delhi
	Panel Discussion	Panel Members
02:30 - 03:30	<ul> <li>Moving forward from Data Analytics to AI, ML, IoT</li> <li>From service provider to value creation</li> <li>India as hub of IT innovation</li> </ul>	<ul> <li>Sh. Yogesh Singh, VC, DTU</li> <li>Dr. Ethirajan Govinda Rajan, President, Pentagram Research Centre Pvt. Ltd., Hyderabad</li> <li>Prof. Amit Agarwal, UPES, Dehradun</li> <li>Prof. Sudip Misra, Professor, IIT, Kharagpur</li> <li>Dr. Abhay Jere, Persistent Systems</li> </ul>
03:30 - 03:35	Vote of thanks	
03:35 - 03:50	Tea Break	

THEME 4 – RURAL TECHNOLOGY 2030: CHALLENGES AND OPPORTUNITIES		
03:50 - 04:00	Introductory Remarks	
04:00 - 04:20	Keynote Address: Prof. Satyajit Majumdar, Professor, Tata Institute of Social Sciences, Mumbai Moderator: Dr. Vipin Kumar, CIO, NIF, Gujarat	
	Panel Discussion	Panel Members
04:20 - 05:20	<ul> <li>Creation of micro self- sustainable ecosystems for job creation based on local, regional strengths.</li> <li>Holistic development in Tier II, Tier III cities</li> <li>Reverse trend of Rural youth exodus to cities</li> <li>Harnessing Gharelu Nuskhe to scientific products</li> </ul>	<ul> <li>Dr. K. Vijayalakshmi, VC, Development Alternatives, New Delhi</li> <li>Ms. Anuradha Bhavnani, Regional Head, Shell Foundation, Gurugram</li> <li>Dr. Anil Joshi, HESCO, Dehradun</li> <li>Dr. Jagpal Singh, Secretary at Foundation for Agricultural Resources Management and Environmental Remediation (FARMER), New Delhi</li> <li>Dr. Vijay Kumar Chole, Vice President, BVG India Limited, Maharashtra</li> <li>Dr. Murugan Kottaisamy, Vel Natural Fibers Reportier: Dr. Hemant R Kushwaha JNU, New Delhi</li> </ul>
05:20 - 05:30	Vote of Thanks	·

## DAY 2

## 8 OCTOBER, 2018

ANNOUNCEMENT OF AWARDS		
10:00 - 10:05	Welcome by Dr. Mohd. Aslam, Managing Director, BIRAC	
10:05 - 10:15	Introductory Remarks by Dr. Renu Swarup, Secretary, DBT	
10:15 - 10:30	Talk on "Indirect Taxes & Customs" Central Excise, Service Tax and Legal	
10:30 - 10:45	<b>Special address</b> by <b>Dr. Harsh Vardhan</b> , Minister S&T, Environment & Forest, Climate Change & ES and interaction with Industry, Academia & Entrepreneurs	
10:45 - 10:55	Announcement and distribution of Awards for selected success stories in various thematic areas	
10:55 - 11:00	55 - 11:00 Vote of thanks by Dr. Sangita M Kasture, Sc.E, DBT	
тн	THEME 5 – ENERGY/ENVIRONMENT 2030: CHALLENGES AND OPPORTUNITIES	
11:00 -11:20	Keynote Speaker: Dr. Abhay Bakre, DG, Bureau of Energy Efficiency, New Delhi	

	Moderator: Dr. Anjan Ray, Director, CSIR-Indian Institute of Petroleum, Dehradun		
11:20 - 12:20	Panel Discussion	Panel Members	
	<ul> <li>Clean Tech Energy Solutions</li> <li>Opportunities for partnership</li> <li>Challenges for Technology Transfer</li> <li>Scale up and Commercialization -Specific Skilled Manpower</li> </ul>	<ul> <li>Dr. G.D. Yadav, VC, ICT, Mumbai</li> <li>Dr. Rajani Hatti Kaul, Professor, Univ. of Lund, Sweden</li> <li>Dr. Sangita M Kasture, Sc.E, DBT</li> <li>Dr. Girish Sethi, Senior Director, TERI, New Delhi</li> <li>Dr Jayant Sawant, Asst. Vice President, Praj Matrix</li> <li>Dr. G. Ganesh Das, Head – Strategy, Business Excellence &amp; Collaborations, Digital &amp; Business Intelligence Tata Power DDL, New Delhi Reportier: Dr. Shilpy Kochhar</li> </ul>	
12:20 - 12:25	Vote of Thanks	BIRAC, New Delhi	
CONCLUDING SESSION			
12:25 - 12:30	Welcome by <b>Dr. Sangita M Kasture</b> , Sc.E, DBT		
12:30 - 12:45	Talk on "Way forward towards Entrepreneurship" by <b>Dr. Tripti Singhal Somani</b> , CEO & MD-KGS Advisers LLP		
12:45 - 01:30	Debriefing by Session Moderators Theme 1 - Food/Agriculture 2030: Challenges and Opportunities Moderator: Dr. Ramesh V. Sonti, Director NIPGR, New Delhi Theme 2 - Health 2030:Challenges and Opportunities Moderator : Dr. Y. K. Gupta, Principal Adviser, THSTI -DBT (Projects), Former Dean and Head Pharmacology, AIIMS New Delhi Theme 3 - Information Technology 2030: Challenges and Opportunities Moderator: Sh. Omkar Rai, DG, STPI, New Delhi Theme 4 - Rural Technology 2030: Challenges and Opportunities Moderator : Dr. Vipin Kumar, CIO, NIF, Gujarat Theme 5 - Energy/Environment 2030: Challenges and Opportunities Moderator: Dr. Anjan Ray, Director, CSIR-Indian Institute of Petroleum, Dehradun		
01:30 - 01:40		Concluding address by <b>Prof. Ashutosh Sharma</b> , Secretary, DST	
01:40 - 01:45	Vote of Thanks by <b>Dr. Manish Diwan</b> , BIRAC, New Delhi		
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## Women Scientists and Entrepreneurs: Contributing Towards Transforming India

7 - 8 October, 2018 • Venue: MARS Auditorium, IGP

#### **COORDINATORS:**

**Dr. Suraksha S. Diwan** Sc. 'E', DBT Phone: +91 1124363760 **Dr. Kinkini Das Gupta** Sc. 'F', Vigyan Prasar Phone: +91 9810941887

**Dr. D.S. Shyni** PMU- Swachh Bharat Mission-Gramin Ministry of Drinking Water and Sanitation Phone: +91 9654256770

**Dr. Chandrima Shaha** Former Director NII, New Delhi

As a unique programme of IISF 2018, a Women Scientists & Entrepreneurs Conclave titled "Women Scientists & Entrepreneurs: Contributing towards transforming India" is being organized to promote and encourage science education and entrepreneurship among the young women. The aim of the programme is to showcase the role/contribution of Women Scientists & Entrepreneurs in transforming India; to encourage &motivate the students to take Science as a career and make them aware of opportunities and encourage the participants towards Entrepreneurship to generate self-employment and job creations.

The Conclave would provide a platform for connecting and networking among young women scientists and entrepreneurs to discuss opportunities in their field of activities. The participants are drawn from science, technology, engineering and allied disciplines.

The focus of the Conclave would be on following thematic topics– 1) Women Leaders in Science & Technology;2) Role of Women in Transforming India; 3) Presentation by "Young Women Achievers"; 4) Policies for empowering women in Science-Initiatives of Govt. of India; 5) Journey of the Women Innovators and communicators and Interactive Sessions with Students – Open Forum/ Open House.

This Conclave would greatly motivate the young Women Scientists and budding Entrepreneurs and help in creation of a strong generation of leadership in Science and Technology that can accelerate transformation of India.

## **PROGRAMME SCHEDULE**

DAY 1

## 7 OCTOBER, 2018 (Sunday)

Time	Program		
08:30 - 10:00	Registration		
10:00 - 11:00	Inauguration		
10:00	Arrival of Chief Guest by Mrs. Rita Bahuguna Joshi, Hon'ble Cabinet Minister of Women's Welfare, Family Welfare, Maternal & Infant Welfare and Tourism, Govt. of Uttar Pradesh		
10:00 - 10:05	Welcome by Dr. Suraksha S. Diwan, Scientist 'E', DBT		
10:05 - 10:10	Felicitation of Dignitaries by Dr. Suraksha S. Diwan, Scientist 'E', DBT		
10:10 - 10:20	Key note address by Dr. Veena Tandon, NASI Senior Scientist Lucknow Biotech Park		
10:20 - 10:30	Special Address by Dr. Renu Swarup, Secretary, DBT		
10:30 - 10:45	Inaugural speech by Chief Guest		
10:45 - 10:55	Address by Smt. Bindu Suraj, National Governing Council, Member, VIBHA		
10:55 - 11:00	Vote of thanks Dr. Chandrima Shaha, Former Director, National Institute of Immunology, New Delhi.		
11:00 - 11:30	Inauguration of Exhibition by Chief Guest and interaction with Women Scientists		
11:00	Inauguration		
11:10	Chief Guest Departs		
	Women Leaders in Science & Technology		
	<b>Chair &amp; Lead Speaker – Dr. Swati Basu</b> , Former Scientific Secretary, Office of the Principal Scientific Adviser to Government of India		
	Presentations by Women Scientists in various fields		
	Agriculture - Dr. Shelly Praveen, NAAS		
11:30 - 01:00	Medical - Dr. Sujata Mohanty, AlIMS, Delhi		
	Physics - Dr. Shobhana Narsimha, JNCASR, Bengluru alore		
	Chemistry - Dr. Jyotirmoyee Dash, Associate Prof. Dept of Organic Chemistry, IACS		
	Computational Biology - Dr. Indira Ghosh, JNU, New Delhi		
	Nutrition - Dr. V. Vijayalakshmi, National Institute of Nutrition, Hyderabad		
01:00 - 02:00	Lunch and Poster Session		

02:00 - 03:00	Panel Discussion: Role of Women in Transforming India
	Session Moderator: Dr. Sudha Nair, Women Biotechnology Park, Chennai.
	Panelists: Scientists and Entrepreneurs
	<b>Dr. Shashi Bala Singh</b> , Former Director General Life Sciences, DRDO, Present Director, NIPER, Hyderabad
	Dr. Suchitra Banerjee, CIMAP, Lucknow
	Dr. S Asha Latha, Principle Scientist, CIFT, Kochi
	Dr. G. Latha, Scientist 'G', NIOT, Chennai
	Ms. Bincy Baby, Director, ERAM Scientific Solutions
	Romita Ghosh, MedSamaan and Admirus (delivers medical services to rural sectors)
03:00 - 04:00	Presentation by "Young Women Achievers"
	Moderator – Dr. Suraksha S. Diwan, Scientist 'E', DBT
	Young Scientists:
	<b>Dr. Shailja Singh</b> , Associate Professor, Special Centre for Molecular Medicine, JNU, Delhi
	Dr. Anupama Engineer, Agharkar Research Institute, Pune
	Dr. Keshani Bhushan, Punjab Agricultural University, Ludhiana
	Young Entrepreneurs:
	Dr. Jugnu Jain, BioBank,Hyderabad
	Dr. Nusrat Jahan M. Sanghamitra
04:00 - 04:30	Теа
04:30 - 05:30	Policies for empowering women in science-Initiatives of Govt. of India
	Moderator: Dr. Purnima Sharma, Managing Director,
	Biotech Consortium India Limited (BCIL)
	Best practices from Other countries
	Ms. Maria Lunander, Counsellor Innovation & Science, Embassy of Sweden
	Initiatives for Women Scientists and Women Entrepreneurs
	Dr. Anita Gupta, Scientist 'G', DST
	Dr. Vandana Singh, Scientist 'D', DST
	Dr. Suraksha S. Diwan, Scientist 'E', DBT
	Dr. Vishwajanani Sattigeri, Senior Principal Scientist, CSIR
	Ms. Ratna Anjan Jena, Statistical Adviser, Ministry of Women and Child Development
05:30 - 06:00	Visit to stalls and Posters and interaction with Scientists

DAY 2	8 OCTOBER, 2018 (Monday)
Time	Programme
	Journey of the Women Innovators and communicators
	Women Innovators
	Dr. Tripti Bhatnagar, Codon Biotech (Industrial Biotechnology)
	Dr. Vanita Anand Prasad, Revy Environmental (Environmental Biotechnology)
	Dr. Subhashini C R, Aristogene (Aquaculture)
09:30 - 10:30	Science Communicators
	Ms. Shubhra Priyadarshini Nature
	Dr. Kinkini Dasgupta Misra, VP
	Dr. Suparana Datta, Professor, Dept of Communication, BITS MESRA
	Dr. Vibha Vershney, Science Editor, Down to Earth
10:30 - 11:00	Tea and Interaction with Women Scientists and Entrepreneurs
11:00 - 12:00	Interactive Sessions with Students – Open Forum/ Open House
	Concluding Session
	Summary by Dr. Kinkini Das Gupta, Vigyan Prasar
12:00 - 01:00	Distribution of Prizes for Posters and Stalls Dr. Renu Swarup, Secretary, DBT.
	<b>Vote of Thanks</b> – <b>Dr. D. S. Shyni</b> , Ministry of Drinking Water and Sanitation, Govt. of India
01:00 - 02:00	Lunch

# National Social Organizations and Institutions Meet (NSOIM)

5 - 6 October, 2018 • Venue: Mars Hall, IGP

#### **COORDINATORS:**

**Dr. Meenakshi Munshi** Sc 'G', DBT Phone No.: 011-24361035 Dr. Shahaj Uddin Ahmed Sc. 'E', DBT, Phone: 011-24364065

**Dr. Sunil K. Agarwal** Sc. 'E', Department of Science & Technology Phone: 011-26590238 **Sh. N. P. Rajive** Consultant, VIBHA Email: nprajive05@gmail.com Phone: 9020336500

#### **Transforming India- Challenges and Opportunities**

In line with the overall theme of the festival, NSOIM is being organized involving grass root level organizations & institutions who are committed to take forward scientific interventions which can play a major role in societal transformation and in turn play a pivotal role in taking forward the flagship programs of the government. This could pave way towards addressing overall UN sustainable development goals. The objective is capacity building of social organizations and institution through S&T interventions for Nation building. We are expecting to have 500 credible social organizations and institutions, which will be short listed after screening by conducting state wise pre conference workshops/ orientation programmes throughout India. The NSOIM shall deliberate on various focal themes like Sustainable Agriculture & Water resource management, Women Empowerment and Child development, Skills and Entrepreneurship development, Science for Transformation and New paradigms for Social enterprises. The expected outcomes are creation of National network of Social Organizations & Institutions of all the stake holders working together in Transforming India, dissemination of Science & Technology through the platform Social Organizations with the motto of 'Science for masses' OR 'Lab to Land' social outreach activities, Capacity building and engagement of Social Organizations in promoting Flagship programs of the Government at the grass root level, promoting Social Entrepreneurship through Network of Social organizations to ensure active role in building New India through the intervention of Science & Technology, developing an e-commerce portal, bringing out a compendium based on the deliberations of the National Meet, IISF-NSOIM, related to the role of Social Organizations in the Nation Building.

# **PROGRAMME SCHEDULE**

DAY 1

# 5 OCTOBER, 2018 (Friday)

Time	Programme	
09:00 - 10:00	Registration	
10:00 - 11:15	Inaugural Session	
10:00	Arrival of Dignitaries	
10:05	Lighting of Lamp	
10:05 - 10:07	Invocation	
10.07 - 10.20	Welcome by Sh. N P Rajive, Coordinator, NSOIM	
10.20 - 10.30	Introduction to NSOIM by Sunil Chaturvedi, National Coordinator, Vibha Vani	
10:30 - 10:40	Presidential Address: Dr. Madhavan Nair Rajeevan, Secretary, Ministry of Earth Sciences	
10:40 - 10:55	Special Address by Sh. A Jayakumar, Special Adviser, Vijnana Bharati	
10:55 - 11:15	Key Note Address: Dr. Girish Sahni, Ex-DG, CSIR	
11:15 - 11:20	Vote of Thanks: Dr. S. U. Ahmad, Scientist-E, DBT	
11:20 - 12:00	High Tea	
12:00 - 01:15		

	<b>3.</b> Science for Transformation Title: "Technology interventions, Innovations and Science Dissemination for New India" Venue: Neptune Hall-3
	Chair: Sh. V P Singh, Secretary, Indian Science Communication
	Speaker 1: Dr. Arun Kumar, CEO & Sr. Vice President, Development Alternatives Group, Delhi
	<b>Speaker 2: Ms. Sheetal Shinkhede</b> , Asst. Director of HPP, Electronics & Communication Engineering
	Speaker 3: Dr. V Balakrishnan, M S Swaminathan Research Foundation, Wayanad
	Speaker 4: Dr. P. M. Padole, Director, NIT, Nagpur
	Key Note: Dr. Girish Sahni, DG CSIR & Secretary DSIR
	4. Integrated Sustainable Development Title: "Search for Integrated Sustainable Development Models" Venue: Neptune Hall-4
	<b>Chair: Dr. B K Dutta</b> , Director, Vivekananda Institute of Biotechnology, Sri Ramakrishna Ashram, Nimpith, WB
Co-Chair: Dr. Sunil Agarwal, SEED, DST	
	Speaker 1: Sh. Atul Jain, General Secretary, Deendayal Research Institute, New Delhi
	<b>Speaker 2: Ms. Vishaish Uppal</b> , Director, Sustainable Livelihood & Governance, WWF India, Delhi
	Speaker 3: Mrs. Anuradha Gupta, Secretary, Prithvi Innovation Foundation, Lucknow
	Key Note: Dr. Anil P Joshi, Founder, HESCO, Dehradun
01:15 - 20:30	Lunch Break
	Plenary Session: (15 Minutes each)and (15 minutes) of Question & Answer
	1. Sustainable Agriculture, Water Resources Management and Environment Title: "Doubling Farmers Income by 2022"
	Chair: Prof. Ashutosh Sharma, Secretary, DST
02:30 - 04:00	Co-Chair: Dr. Subhas Tamboli, Executive Director, AFARM, Pune
	Speaker 1: Dr. R K Singh, Founder & Director, NEFORD, Lucknow
	Speaker 2: Dr. Sunil Chaturvedi, Executive Director, Vibhavari, Indore
	Speaker 3: Sh. Kartik Sapre, Narmada Samagra, Bhopal
	Key Note: Dr. J P Sharma, Joint Director (Agriculture Extension), IARI, New Delhi
03:45 - 04:15	Special Address: Dr. Radha Mohan Singh, Union Min. of Agriculture, GOI

DAY 2	6 OCTOBER, 2018 (Saturday)	
	Plenary Session: (15 Minutes each)and (30 minutes) of Question & Answer	
	2. Emerging Trends in the Social Sector Title: "New Paradigm for Social Enterprises, the road ahead"	
	Chair: Dr. Roshan Lal, Professor, PTU, Chandigarh	
10:00 - 11:15	Speaker 1: Sh. Sadanand Chakrabarti, Secretary, SNASWS, Alipurduar, WB	
	Speaker 2: Sh. Ramasamy Krishnan, Director, SNEHA, Bengluru	
	Special Address: & Launch of E-Commerce Portal for Social Entrepreneurs	
	Sh. P. P. Chaudhary, Min. of State for Corporate Affairs, GOI	
	Key Note: Prof. K. VijayRaghavan, Principal Scientific Adviser to Govt. of India	
11:15 - 12:00	High Tea	
	Valedictory Session	
	Welcome & NSOIM Declaration: Sh. N P Rajive, Vice Chairman, NIF & Executive Director, Vibha Vani	
12:00 - 01:00	Guest of Honour: Sh. Kailash Vijayavargiya, Former Cabinet Min. in M.P. Govt.	
12:00 - 01:00	Valedictory Address and Distribution of Awards/Citation:	
	<b>Dr. Harsh Vardhan</b> , Hon'ble Union Minister of Science & Technology, Earth Sciences, Environment, Forest and Climate Change	
	Vote of Thanks: Dr. Shahaj Uddin Ahmed, DBT	

# **National Science Teachers' Congress**

6 - 7 October, 2018 • Venue: Mercury Hall, IGP

#### **COORDINATORS:**

**Dr. Garima Gupta** Sc 'E', DBT Phone: +91 011-24369385 **Dr. Arvind C. Ranade** Sc 'E', Vigyan Prasar Phone: +91 9871439594

**Dr. Sudeep Kumar** Head-Mission Directorate CSIR Phone: +91 9818671812 **Dr W. Haq** Chief Scientist, CDRI Phone: +91 9450917522

One of the important communities which inculcate and imbibe the moral values, knowledge and wisdom in young age is teachers. Teacher is the basic source of education and helps in building the nation. They were widely loved and respected as their teaching influences high degree of idealism, passion and selfless service. They not only help in imparting knowledge but also shape the values and ideals of the country by leaving a deep imprint on our society.

National Science Teachers Congress will bring hundreds of innovative, dedicated and passionate teachers from all walks of life, on a single platform to share their experiences and put forth the future road map for the country. Participating teachers will showcase the innovative methods of teaching on the subject themes and ideas. The workshop will include panel discussions on various aspects of teaching-learning practices as well as the effective tools for comprehensive and continuous learning of science. It will also discuss the Science, Technology, Engineering and Mathematics (STEM) inter-linkage and policies to make education an effective tool for nation building. The congress will bring out the report based on the dissertations and deliberations conducted.

The workshop shall cover a plethora of topics ranging from Science Education and Role of Science Teachers, Pedagogy of science teaching and learning and plenary talks on "Experience sharing through innovative practices" and Exhibition/Demonstration by subject based practicing teachers.

DAY 1	6 OCTOBER, 2018 (Saturday)	
09:00 - 10:00	Registration	
10:00 - 11:00	Inauguration by Hon'ble Dy. Chief Minister, Uttar Pradesh	
11:00 - 11:30	Tea Break and shifting to other venue for parallel sessions	
	Elementary Education	
	Dr. Anup Kumar Rajput     Professor and Head, Department of Elementary Education,     NCERT, New Delhi	
	• Ms. Jyotsna Vijapurkar Faculty Member, Homi Bhabha Centre for Science Education, Mumbai	
	Sh. D. Rama Sarma     Director, National Science Centre, Delhi	
	Secondary & Higher Secondary Education	
	Dr. A. K. Wazalwar     Professor, Department of Education in Science and Mathematics NCERT,     New Delhi	
12:00 - 01:30	• <b>Dr. Dinesh Kumar</b> Professor & Head, Department of Education in Science and Mathematics, NCERT, New Delhi	
	Dr. P. K. Joshi     Homi Bhabha Centre for Science Education, Mumbai	
	Graduate/Post Graduate Education	
	Prof. H. C. Verma     Professor, Department of Physics, IIT Kanpur	
	Sh. Shekhar C. Mande     Director, National Centre for Cell Science, Pune	
	Prof. Pramod Kumar Jain     Director, Indian Institute of Technology, Varanasi	
	Dr. S. Srinivasa     Professor,Tumkur University, Karnataka	
01:30 - 03:00	Lunch	

DAY 2	7 OCTOBER, 201	8 (Sunday)
09:30 - 10:00	Plenary Session	<b>Dr. S.P. Singh,</b> Vice Chancellor, Lucknow University, Lucknow
10:00 - 11:00	Plenary Session	<ul> <li>Prof. K VijayRaghavan</li> <li>Principal Scientific Adviser to Prime</li> <li>Minister of India</li> </ul>
11:00 - 11:30	Теа	
11:30 - 01:00	Demonstrations-II (Practicing Teachers) Physics	• Dr. R K Awasthi Lecturer Physics St. George's College 3 - Agra
11.50 01.00		<ul> <li>Prof. J. Chandrasekhar Rao HOD Physics, Govt. Degree College - Salur, Vizianagaram, Andhra Pradesh</li> </ul>
	Chemistry	<ul> <li>Mrs. Jyoti Milind Medpilwar Teacher, Durganagar High School, Maharashtra</li> </ul>
		• <b>Ms. Pushplata Ravindra Gavande</b> Teacher, Walmikinagar Hindi High School, N.M. C., Nagpur, Maharashtra
	Environment Sciences	• Sh. Vishnu K. Vaze Teacher (Retd), Mithibai College Villeparle West, Mumbai, Maharashtra
		<ul> <li>Dr. Aruna Samant, Professor, Thomas Baptista Jr College Papdy Vasai West, Plaghar, Maharashtra</li> </ul>
	Mathematics	Dr. Ajay Gaur, Principal, Pramukh Swami Science & H.D.Patel Arts College, Gujarat
		<ul> <li>Sh. Meena Suresh, Director Ramanujan Museum &amp; Maths Education Center, Tamil Nadu</li> </ul>
01:00 - 02:30	LUNCH	
02:30 - 03:30	Teaching Science & Mathematics Today - New Dimension in STEM Education	• Prof. G. S. Rautela Former DG, NCSM

<b></b>		
03:30 - 05:00	Demonstrations-II (Practicing Teachers) Physics	<ul> <li>Dr. R K Awasthi         <ul> <li>Lecturer Physics St. George's</li> <li>College 3 - Agra</li> </ul> </li> <li>Prof. J. Chandrasekhar Rao         <ul> <li>HOD Physics, Govt. Degree College-Salur,</li> <li>Vizianagaram, Andhra Pradesh</li> </ul> </li> </ul>
	Chemistry	<ul> <li>Mrs. Jyoti Milind Medpilwar Teacher, Durganagar High School, Maharashtra</li> <li>Ms. Pushplata Ravindra Gavande Teacher, Walmikinagar Hindi High School N.M.C., Nagpur, Maharashtra</li> </ul>
	Environment Sciences	<ul> <li>Sh. Vishnu K. Vaze         <ul> <li>Teacher (Retd), Mithibai College</li> <li>Villeparle West, Mumbai, Maharashtra</li> </ul> </li> <li>Dr. Aruna Samant Professor,         <ul> <li>Thomas Baptista Jr College Papdy Vasai</li> </ul> </li> </ul>
	Mathematics	<ul> <li>West, Plaghar, Maharashtra</li> <li>Dr. Ajay Gaur, Principal, Pramukh Swami Science &amp; H.D.Patel Arts College,Gujarat</li> <li>Sh. Meena Suresh, Director Ramanujan Museum &amp; Maths Education Center</li> </ul>
05:00 - 05:30	Concluding Session	<ul> <li>Welcome of Hon'ble Minister S&amp;T by</li> <li>Dr. Garima Gupta, Sc-E, DBT</li> <li>Remarks by Hon'ble Minister S&amp;T Vote of Thanks by</li> <li>Dr. Arvind C. Ranade, Sc-E, Vigyan Prasar</li> </ul>

# Science & Technology for Harnessing Innovations (SATHI)

### 7 - 8 October, 2018 • Venue: VIP Lounge, Earth Complex, IGP & Pre-conference Area (Lobby) for exhibition

#### **COORDINATORS:**

**Dr. Nitin K Jain** Sc. 'E', DBT Ph. No. 011-24365972 **Dr. Vipin Kumar** Director, NIF Ph. No. 9825316994

**Dr. Anil Kothari** Professor & Head, RGPV Ph. No. 9425148662 **Sh. Amit Katiyar** BIRAC, New Delhi Ph. No 9711669429

The meet aims to provide a common platform for various stakeholders—from students, innovators and researchers to policymakers. About one hundred innovative technologies from all the States of India will be showcased at the exhibition. The special focus will be given to those which could be diffused socially and generate employment. This exhibition at the IISF will expose the visitors and others to the pervasive culture of creativity and innovation at grassroots. There will also be Seminar/round table discussions on innovations, incubation and entrepreneurship during the summit to educate and encourage the young aspirants to take innovations for start-ups.

The session on 'Science and Technology for harnessing innovation (SATHI)' will cover various facets of entrepreneurship development in the area of application of science and technology. The session will have 4 panel discussions in which the leaders from Government, Industry, Academia and start-ups will enlighten audience on challenges and opportunities exist in S&T based entrepreneurship. A brief about the Panel discussion is given below :

#### 1. Science based Entrepreneurship

(Challenges and Opportunities): Indian Biotech Industry has been able to achieve an exponential growth phase due to a range of positive trends including demand for healthcare services, food & nutrition, intensive R&D activities along with strong government initiatives.

This session plans to involve the experts who would throw light on the current scenario of science based Entrepreneurship and will address the challenges faced by entrepreneurs during their journey. The intension is to spread awareness among the rising entrepreneurs about window of opportunities that are being provided by Government of India.

#### 2. Entrepreneurial Journeys

(5-6 startups will share their inspiring journeys): BIRAC has supported various startups, entrepreneurs and SMEs till date. BIRAC aims to foster the strategic research innovation ecosystem through several programs such as BIG, SBIRI, BIPP, PACE, SPARSH, BioNEST and many more.

BIRAC has invited its successful innovators who would share their entrepreneurial journey. They will share their experiences, challenges, driving force towards completion of their journey.

#### 3. Planning your Startup

Ideation, Incubation and Seed Support, Showcase of Various Programmes of Govt. of India:Biotech Startup Ecosystem is one of the sunshine sectors in India. The Startups and Entrepreneurs need mentoring from the domain experts regarding planning and building of a Startup. Government of India has launched many initiatives for the same intent.

The Panelist in this session would share their knowledge and expertise about ideation, incubation and seed support.

#### 4. Scaling Up your Ventures/Startups:

Window of Opportunities-For scaling up the start-ups and their sustenance in the market, Government of India has now moved forward to bring in this support mechanism. A strong foundation has been laid for an innovation driven biotech enterprise in India.

The panel will deliberate the possible strategies and opportunities formulated by Indian Government for scaling up the innovations.

#### **PROGRAMME SCHEDULE**

DAY 1	7 OCTOBER, 2018 (Sunday)
Time	Programme
00.00 10.00	Desistantion

09:00 - 10:00	Registration	
10:00 - 10:45	Inaugural Session	
10:00 - 10:05	Lighting of Lamp	
10:05 - 10:15	Welcome address by Dr. Mohd. Aslam, Scientist G, DBT and MD, BIRAC, New Delhi	
10:15 - 10:30	Address by Sh. A. Jayakumar, Special Adviser, Vijnana Bharati	
10:30 - 10:40	Inaugural Address by Dr. Ashutosh Sharma, Secretary, DST	
10:40 - 10:45	Vote of thanks – Dr. Nitin Kumar Jain, Scientist E, DBT	
10:45 - 11:15	High Tea	
10:00 - 05:30	Exhibition of innovations, prototypes and products by startups, students and entrepreneurship	

	Session 1 Panel discussion on Science based Entrepreneurship –	
	Challenges and Opportunities	
	<ul> <li>Dr. Manish Diwan, Head Strategic Partnerships and Entrepreneurship Development, BIRAC – Moderator</li> </ul>	
	Sh. Anil Agarwal, Joint Secretary, DIPP	
11:15 - 01:00	• Dr. Anita Gupta, Scientist -G /Adviser and Associate Head-NSTEDB, DST	
	• Dr. Alka Sharma, Adviser, DBT	
	• Dr. A. P. Mittal, Member Secretary, AICTE	
	• Dr. Nusrat Jahan M. Sanghamitra, Founder and CEO, Cyca Oncosolutions	
	• Dr. Avijit Bansal, CEO & Co-Founder, Windmill Health	
	Sh. Nitin Sisodia, Founder and CEO, Sohum Innovation	
01:00 - 02:30	Lunch	
	Session 2	
	Entrepreneurial Journeys (5-6 startups will share their inspiring journeys)	
	• Dr. PKS Sarma, General Manager (GM) & Head – Technical, BIRAC – Moderator	
	• Dr. Pawan Mehrotra, Founder and MD Aarna Biomedical	
	• Dr. Vishal Rao, Founder, Innaumation Medical devices	
02:30 - 04:30	• Dr. Tripti Bhatnagar, MD Codon Biotech	
	Dr. Kabir Udeshi, Founder Flycatcher Technologies	
	Dr. Supriyo Sen, Individual entrepreneur	
	Sh. Ashish Gawade, Co-founder Jeevtronics	
	Sh. Abhinav Cardea, Co-founder Cardea Labs	
10:00 - 05:30	Exhibition of Startup Products/Technologies/Prototype	

DAY 2	8 OCTOBER, 2018 (Monday)
Time	Programme
10:00 - 13:15	Exhibition of Startup Products/Technologies/Prototype
10:00 - 10:30	Registration
	Session 1 Planning your Startup- Ideation, Incubation and Seed Support Showcase of Various Programmes of Govt. of India
	• Dr. Sanjay Saxena, Head Investment, BIRAC – Moderator
10:30 - 11:30	• Sh. R. Ramanan, Mission Director, Atal Innovation Mission
	Ms. Shruti Singh, Deputy Secretary, DIPP, Incharge Startup India
	Dr Anita Gupta, Adviser and Associate Head-NSTEDB
	• Dr. Mohit Gambhir, Director, MHRD Innovation Cell, AICTE
	Sh. Virinder Sharma, Director, MSME
11:30 - 11:45	Теа
11:45 - 12:45	<ul> <li>Session 2</li> <li>Scaling Up your Ventures/Startups Window of Opportunities</li> <li>Dr. Shirshendu Mukherjee, Mission Director, PMU-BIRAC – Moderator</li> <li>Dr. Bindu Dey, Former Secretary, TDB</li> <li>Sh. Deepak Bagla, MD &amp; CEO of Invest India</li> <li>Dr. Vipin Kumar, Chief Innovation Officer / Director, NIF</li> <li>Ms. Padmaja Ruparel, IAN</li> <li>Dr. Akhilesh Mishra, Scientist D, DST</li> <li>Dr. Mohit Gambhir, Director, MHRD Innovation Cell, AICTE</li> <li>Sh. Kunal Upadhyay, Bharat Innovation Fund</li> </ul>
12:45 - 01:15 01:15 - 02:30	Award Ceremony for Exhibitors and Concluding Session - Chief Guest Dr. Renu Swarup, Secretary, DBT Vote of Thanks – Dr. Nitin Kumar Jain, Scientist E, DBT Lunch
01.13 - 02.30	Lunch

# Science Village – Mega Student's Camp"Reaching the Unreached" 'Parliament to Panchayat'

5-8 October, 2018 • Venue: CSIR-National Botanical Research Institute

#### **COORDINATORS:**

Dr. Manoj Singh Rohilla	Dr. S. K. Tiwari
Sc 'E', DBT	Sc 'G', NBRI
Phone: +91 1124363726	Phone: +91 9918733338

The 2018 edition of the Science Village is set to unfold at the 4<sup>th</sup> India International Science Festival – 2018 in Lucknow at CSIR-National Botanical Research Institute. The theme of Science Village program has been sculpted in such a way that the teacher and student delegates were selected and nominated by Hon'ble Members of Parliament from their respective adopted villages spreading all states and union territory under the aegis of Pradhan Mantri Sansad Aadarsh Gram Yojana and therefore the Science Village demonstrates a mass representation from the rural part of India. This is indeed a continuation of the democratic process: 'Parliament to Panchayat'. Science Village - 2018 is set to make a much greater attempt to reach out to the rural masses and propagate science to the extent of seeking scientific solutions to the diverse challenges facing our society, particularly the rural part of India. Students will undergo unique activities that shall cultivate scientific temper and encourage interest towards science. The prime goal of science village is to give exposure to the students from rural India and make them aware of India's achievements in frontier areas of Science & Technology. The Science Village program is linked with the Pradhan Mantri Sansad Adarsh Gram Yojana through which each Member of Parliament will nominate 5 students and 1 teacher from their adopted village. The nominated students will be from class 9th - 11th standard. The expected student delegates this time are around 10,000. It will be a lifetime opportunity for them to be a part of such a mega event under a single roof. Each participating student and teacher will get an opportunity:

- To visit Mega Science Expo: An exhibition showcasing India's achievements in Science and Technology by various Ministries, Departments and Institutions of the Government of India.
- To have interactions with Eminent scientists from India and Abroad.
- To R&D laboratories in Lucknow.
- To interact with representatives from various Government Departments and Motivational speakers
- To be a part of live hands on science activities conducted by science communicators.
- To watch science films.
- To see celestial objects through telescope in night sky watch programme.
- Workshop on scientific instrument.

The students will also go through interactive scientific discussions, innovative experiments, quiz competitions which will boost their scientific skills and knowledge and pave way for their excellence in science. It is expected that through IISF 2018, the students will get the right global experience to develop scientific spirit at a very young age. It will nurture student delegates and groom them to become tomorrow's scientists and technocrats of India.

*Pradhan Mantri Sansad Adarsh Gram Yojana* is a rural development programme broadly focusing upon the socio-cultural development in the villages to spread motivation among the people and for social mobilization of the villager community.

### How The Science Village Will Work?

The Science Village will have six different houses with each house named after famous Indian Scientists. Each student and the accompanying teacher from adopted village will become a member of one of the house named after Indian Scientist. Throughout the festival each student and teacher will be known after that house. For identification, each student and teacher of a particular house will be provided a cap and badge with single and prominent color. All students from the respective houses shall perform all activities together and would be taken care of by their respective teachers and set of volunteers at all time. The teachers are required to take instructions from the House Coordinators and the volunteers at all times right from their arrival to departure from IISF -2018 Science Village.

### Six Houses of Science Village

- 1. **APJ Abdul Kalam (1931-2015):** Dr. APJ Kalam was the Eleventh President of India and a world renowned Space Scientist. He outstandingly contributed to India's civilian space program and military missile development. He was given Bharat Ratna Award in 1997 and is fondly referred to as The "People's President" and The Missile Man of India.
- 2. Sir, Chandrasekhar Venkata Raman (1888-1970): Sir Raman's discovery made it possible to map out the levels of possible energy gains of the molecules and atoms to the substance and infer the details of molecular and atomic structure. He made excellent contribution in molecular diffraction of light, mechanical theory of bowed strings and diffraction of X-rays, theory of musical instruments and physics of crystals. In 1930 he wom the Noble Prize for his discovery of the Raman Effect
- 3. Vikram Ambalal Sarabhai (1919-1971): A scientist and innovator who is widely regarded as the Father of India's Space Program. He founded the physical research laboratory in Ahmedabad. He also served as the Chairman of Atomic Energy Commission. The Vikram Sarabhai Space Centre at Thiruvavanthapuram is named after his visionary
- 4. Homi Jehangir Bhabha (1909-1966): Prof. Bhabha made significant contribution in theoretical high energy physics such as vector meson theory, Bhabha scattering and propounded theory of cosmic ray showers by cascade production of gamma rays and positive and negative electron pairs. He was the man behind the growth of atomic energy establishment and also known as the father of Atomic energy in India
- 5. **Har Gobind Khorana (1922 -2011):** Dr. Har Govind Khorana won the Nobel Prize in Physiology or Medicine in 1968 for his work on discovering that the order of nucleotides in our DNA determine which amino acids are built. These amino acids, in turn, form the proteins which are responsible for

the essential cell functions. Khorana is also credited with another scientific breakthrough when he constructed the first synthetic yeast gene. He was also awarded the National Medal of Science during his lifetime.

6. **SirJ agdish Chandra Bose (1858- 1937):** Dr. Jagdish Chandra Bose was one such eminent scientist who not only helped the world by contributing his achievements in the field of science but he also contributed the life of plants and animals. Dr. Bose brought to the world, the fact that just like humans the plants also have emotions and feelings. The plants breathe and even they die.

	Schedule For Scientific Activities In Science Village					
	House Name		Activities			
1	Kalam House         Sci 1         Hands on Experiment- Physics					
2	Raman House	Sci 2	Hands on Experiment – Chemistry			
3	Sarabhai House	Sci- Stu	Student Scientists Interaction			
4	Bhabha House	Sci-Ins/Fs	Scientific Instrument/Foldscope			
5	Khorana House	Lab	Lab Visit			
6	Bose House	Sci -Fs	Scientific Film Show			

Date	Activity		09.0	0-1	2.30	) hrs	5	12.30-13.30 hrs	13	8.30-	16.	00 h	irs			16.00 - 17.30 hrs	20.00 hrs
4 <sup>th</sup> Oct	Arrival & Registration of				Lunch	Arrival & Registration of Students and						ents and	-				
	Students and Teachers								-	Геас	her	S					
									SCI 1	6							
							SCI 2		1								
5 <sup>th</sup> Oct	Incurrent					Lunch	SCI- STU			2				Popular	Sky Watch		
5 000	Inauguration of Science Village			Lunch	SCI-INS				3			Talk	watch				
						LAB					4						
								SCI -FS						5			
6 <sup>th</sup> Oct	Inauguration of IISF 2018					Lunch	Mega Expo VISIT at IGP					Sky Watch					
7 <sup>th</sup> Oct	SCI 1	1						Lunch	SCI 1	6							
	SCI 2		2					Poster	SCI 2		1						
	SCI- STU			3				Presentation	SCI- STU			2				Popular	Sky
	SCI-INS				4				SCI-INS				3			Talk	Watch
	LAB					5			LAB					4			
	SCI -FS						6		SCI -FS						5		
8 <sup>th</sup> Oct	SCI 1	3						Lunch	SCI 1	2							
	SCI 2		4					Poster	SCI 2		3						
	SCI- STU			5				Presentation	SCI- STU			4				Valed	ictory
	SCI-INS				6				SCI-INS				5			]	
	LAB					1			LAB					6			
	SCI -FS						2		SCI -FS						1		

# Face to Face with New Frontiers in Science

7 October, 2018 • Venue: Earth Moon Halls No. 2, 3, 4 & 5, IGP

#### **COORDINATORS:**

**Sh. Arvind Duggal** Sc 'G', DBT Phone: 011-24360984 **Dr. Manish Rana** Sc 'E',DBT Phone: 011-24363012 **Dr. Vandana Prasad** Sc 'F', BSIP Phone: +91 9899192757

**Dr. Chandra Mohan Nautiyal** Former Scientist, BSIP Phone: +91 9415107078 **Dr. Gopal lyyengar** Scientist' G', MoES **Dr. Rajeev Sharma** Scientist 'D', Ministry of Science and Technology

Face to Face with New Frontiers in Science (FFNFS) gives the higher secondary, graduation, post-graduation, research students opportunity to attend the sessions of excellencies in different fields of science and technology. Interactions with scientists and the sessions shall help students to familiarize themselves with the frontiers of science and also think, dream, and work objectively, thereby becoming a part of nation building. A session on careers in science and technology is intended to provide them a chance not only to feel the emerging exciting fields but also to identify their inclinations and learn about the needs of the nation and available opportunities by seasoned scientists. An exhibition on CPS Technologies is also to be held as part of FFNFS.

#### **Parallel Sessions:**

Hall A:

#### **Genomics as a Driver of National Development**

The session will highlight how genomics can be a driver of holistic national development. The Keynote Speaker will describe conceptual, methodological and technological advances in genomic sciences, and will also provide real-life applications of genomics. Various domains of relevance to our nation will be discussed. Each domain will be represented by a speaker from an Indian institution with deep contributions to domain knowledge using genomics, who will deliver a lecture emphasizing applications of genomics for development. After the domain-lecture, there will be a discussion on genomics as a driver of the domain.

#### **PROGRAMME SCHEDULE**

DAY 1	7 OCTOBER, 2018 (Sunday)
Time	Name of Speaker
10:00 - 11:00	<b>Prof. Fransisco De La Vega</b> Professor, Genetics and Biomedical Data Science, Stanford University, USA
11:00 - 12:00	<b>Dr. Arindam Maitra</b> Associate Professor, National Institute of Biomedical Genomics (NIBMG), Kalyani
12:00 - 01:00	<b>Dr. Sharmila Mande</b> Chief Scientist & Head, Bio-Sciences R&D at Tata Consultancy Services, Pune, Maharashtra
02:00 - 03:00	<b>Dr. Swarup Parida</b> Staff Scientist II, NIPGR, New Delhi
03:00 - 04:00	<b>Dr. Datta Madamwar</b> Professor, Sardar Patel University, Gujarat
04:00 - 05:00	<b>Dr. Partha P Majumder</b> J. C. Bose National Fellow and Distinguished Professor, NIBMG, Kalyani

## Hall B:

## **Evolution of Life and Climate on Earth**

This session will encompass broad disciplines of Physical, Biological, Meteorological/Climatological, Paleontological, Evolutionary and Environmental Sciences. The theme is focused on the aspects such as: Origin of life on Planet Earth, Physical and geochemical properties of Earth, Evolution of life, Climate of the past, Prediction of the future climate, Ecosystem dynamics etc.

Time	Name of Speaker
09:30 - 10:20	<b>Prof. Ashok Sahni</b> Professor Emeritus Former Pro Vice Chancellor, Punjab University, Chandigarh
10:20 - 11:10	<b>Prof. A. K. Singhvi</b> Raja Ramanna Fellow Physical Research Laboratory, Ahmedabad
11:10 - 12:00	<b>Prof. Sunil Bajpai</b> Professor, Department of Earth Sciences, Indian Institute of Technology, Roorkee
12:00 - 12:50	Dr. G. B. Pant Former Director, IITM

02:00 - 02:50	<b>Dr. Anil Bhardwaj</b> Director, Physical Research Laboratory, Ahmedabad
02:50 - 03:40	<b>Dr. M. Rajeevan Nair</b> Secretary, MoES
03:40 - 04:30	<b>Dr. Swapna Panickal</b> Scientist'E', CCCR IITM, Pune

## Hall C:

## A Date With Data: The Inside Story

The session will lay emphasis on latest and current endeavours in the area of Data science, Internet of things (IoT), Artificial Intelligence (AI), Cyber Physical Systems (CP) and Cyber Security.

Time	Name of Speaker
10:00 - 11:00	Prof. Praveer Biswas Professor, Dept. of ECE, IIT, Kharagpur, West Bengal
11:00 - 12:00	<b>Prof. Ashish Gosh</b> Professor and Former Head, Machine Intelligence Unit In-Charge, Center for Soft Computing Research Indian Statistical Institute
12:00 - 01:00	<b>Prof .Sandeep Shukla</b> Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur
02:00 - 03:00	<b>Prof. Ashis Sengupta</b> Professor, Indian Statistical Institute ISI, Kolkata
03:00 - 04:00	<b>Dr. Vijay Saraswat</b> Technology Fellow, Goldman Sachs, Former Distinguished Research Staff, Member of IBM/Chief Scientist of IBM Research Staff Member, IBM TJ Watson Research Lab
04:00 - 05:00	<b>Prof. Ramesh Jain</b> Director, Institute of Future Health, Donald Bren Professor in Information and Computer Sciences, Department of Computer Sciences, Bren School of Information and Computer Sciences, University of California

#### Hall D:

#### **Career Interactive Session**

Career Interactive Session provides opportunity to undergraduate students to explore the emerging fields of science and technology through interactive sessions in interdisciplinary fields. The speakers including serving and retired directors of various R&D institutions will speak for 20 minutes and students will get an opportunity to interact with them for the remaining time. The 3 hour session is open to students of all level preferably undergraduate students start from 2:00 pm.

Time	Name of Speaker
02:00 - 02:20	Dr. S. K. Barik, Director, NBRI
02:20 - 02:40	Dr. Alok Dhawan, Director, CSIR-Ind. Instt. Toxicology Research (IITR)
02:40 - 03:00	Dr. V. P. Kamboj, Former Director, Central Drug Research Institute (CDRI), Lucknow
03:00 - 03:20	Dr. P. K. Seth, Former Director, IITR & CEO, Biotech Park, Lucknow
03:20 - 03:40	<b>Dr. A. K. Tripathi</b> , Director, CSIR-Central Institute for Medicinal & Aromatic Plants (CIMAP)
03:40 - 04:00	Prof. Avinash Khare, Professor, Delhi University, Delhi

# **Guinness World Record**

# 6-7 October, 2018 Most people conducting a DNA isolation experiment (October 6, 2018) Venue: GD Goenka School, Lucknow Largest First Aid Lesson (October 7, 2018) Venue: Inaugural Hall, IGP

#### **COORDINATORS:**

**Dr. Onkar Tiwari** Sc 'E', DBT Phone: +91 9868267512 **Prof. Pramod Tandon** CEO, Biotech Park, Lucknow Phone: +91 522-2635050

**Prof. Gireesh Kumar** CUSAT, Kochi Kerala Phone: +91 9847363660 Dr. Vaisakh VS VIBHA Phone: +91 9717096659

Ministry of Science and Technology is committed to motivate school students in taking up science as their career. In this regard, we are attempting to create two separate World Records in science with the school children.

The 1<sup>st</sup> attempt is to create a new record in the "Most people conducting a DNA isolation experiment" involving over 600 school students from various schools.

The 2nd attempt will be for creating a new record for the "Largest First Aid Lesson" involving 3000 school students from various schools across Lucknow.

Proper counting and monitoring mechanisms will be adopted. The aim of the programme is science popularization among students. There will be stewards & witness monitoring these events. The entire event will be observed and catalogued by the Judges from Guinness Book of World Record as well.

# **Student Engineering Model Competition**

6-7 October, 2018 • Venue: G.D. Goenka Public School, Lucknow

#### **COORDINATORS:**

**Sh. Sundeep Sarin** Sc 'G', DBT Phone: 011-24362931 **Dr. Alok Prakash Mittal** Member Secretary AICTE **Dr. Meghendra Sharma** Secretary, Vigyan Bharathi Phone: 9829021975,

We all are very familiar with projects/models competition and exhibitions. Schools, colleges, universities and some organizations keep on organizing such events. Solar electricity generation, cars, safety alarms etc. are the common topics of this competition. The engineering projects/models competition and exhibitions are not about repeating common familiar projects. Project competitions are not to judge who can make bigger or beautiful project that are already presented in many exhibitions, but to encourage students in addressing unsolved questions, to resolve day to day problems in scientific ways and to think how science can be used in a creative manner to address day to day problems.

Competition projects are not limited to research projects. Their purpose is to nurture the scientific interests of students and encourage their thoughts to explore science and make it usable to society at large. National mission including Digital India, Swachh Bharat, Make in India etc are changing the face of our nation and trying to build a new India. Engineering models with focus on these national missions can stimulate the progress of the missions and will create a pool of human resource for the nation building.

B.Tech/M.Tech, Polytechnic students of subjects Computer Science, Mechanical, Electrical, Electronics, Chemical, Civil Engineering and Allied sent their engineering models focusing on the national mission including Digital India, Make in India, Swatch Bharat, Swasth Bharat, Renewable energy projects. Selected models have been invited to the exhibition during IISF 2018.

# PROGRAMME SCHEDULE

DAY 1	6 OCTOBER, 2018 (Saturday)
Time	Program
08:00 - 10:00	Registration for delegates (Students, Jury, Org. Committee) at GD Goenka public school, Lucknow
10:00- 11:00	Inaugural function of SEMC event at GD Goenka, , Lucknow
11:00	Exhibition opening
11:00 - 12:00	High Tea (for VIP only)
11:00 - 05:00	Exhibition timing
02:00- 03:00	Lunch

# **DAY 2**

# 7 OCTOBER, 2018 (Sunday)

Time	Program
<b>10:00 - 04:00</b> Exhibition: Inauguration by Dr M Rajeevan Nair, Secretary, MoES	
02:00 - 03:00	Lunch
04:00 - 05:30	Closing ceremony prizes, certificate, billing of delegates.

# **Nav Bharath Nirman** 5 October, 2018 • Venue: Mercury hall, IGP

#### **COORDINATORS:**

**Dr. Alka Sharma** Sc 'G', DBT Phone: +91 011-24363699 **Dr. Sheethal Shinkhede** Lecturer, Baroda University Phone: +91 9099063783 **Dr. Gopal lyenger** Sc 'G', Ministry of Earth Science Phone: 011-24669059

Nav Bharat Nirman/Creation of new India is a concept focused on the innovative methods and solutions to overcome India's historical and social disadvantages along with problems created in the 21st century. The goal of competition programs 'Nav Bharat Nirman' is itself to answer the aforesaid issues. We are opening the platform to people across the spectrum to come up with the innovative and creative solutions through exploring the emerging fields of science and technology. Innovators will get an opportunity to expose their ideas and share the knowledge among them through the platform of Nav Bharat Nirman. Various Departments of Government of India can also be benefited from these fertile minds in their journey to transform India.

DAY 1	5 OCTOBER, 2018 (Friday)
02:30 - 02:40	Welcome and about the Theme by Dr. Alka Sharma, Scientist 'G', DBT
02:40 - 02:45	Introduction of Juries by Dr. Sheethal Shinkhede, Baroda University, Baroda
	Presentations by the Winners and Runner-ups (15 minutes for each Problem Statement followed by interactive session)
02:45 - 03:00	Problem Statement 1: Innovate ideas for replacing plastic products
03:00 - 03:15	Problem Statement 2: Safety of Children in Cyber Space
03:15 - 03:30	Problem Statement 3: Ground Water Sustainability in water stressed areas
03:30 - 04:00	Tea Break
04:00 - 04:15	<b>Problem Statement 4:</b> Instantaneous determination of bacteriological contamination in drinking water
04:15 - 04:30	Problem Statement 5: Ergonomically designed affordable wearable air pollution mitigation system

#### **PROGRAMME SCHEDULE**

04:30 - 04:45	Problem Statement 6 : Smart domestic electric energy management system
04:45 - 05:00	<b>Problem Statement 7:</b> Sustainable Cooling-low GWP and non-Ozone Depleting Substance (ODS) cost effective alternate cooling technologies
	Concluding Session
05:00 - 05:05	Welcome of Chief Guest Hon'ble Minister, Dr. Harsh Vardhan by Dr. Alka Sharma, Adviser, DBT and Lighting of Lamp
05:05 - 05:10	Address by Dr. Renu Swarup, Secretary, DBT
05:10 - 05:15	Key Note Address by the Chief Guest, Hon'ble Minister, Dr. Harsh Vardhan
05:15 - 05:27	Prize distribution
05:27 - 05:30	Vote of thanks by Dr. Gopal Iyenger, Scientist 'G', Ministry of Earth Science
	Exhibition
02:30 - 05:30	Display of 50 selected models/posters/ppt in their laptop

# International Science Literature and Film Festival "Science Communication for Transforming India" 4<sup>th</sup> India International Science Festival (IISF-2018)

# 6-8 October 2018 • Venue: Atal Bihari Vajpayee Scientific Convention Centre KGMU, Lucknow

#### **COORDINATORS:**

**Dr. Jyoti Logani** Sc 'E', DBT Phone: +91-11-24362329 **Dr. Manoj Kumar Patairiya** Director, CSIR-NISCAIR Phone:+91-11-25846045

**Sh. Nimish Kapoor** Sc 'E', Vigyan Prasar Phone: +91-120-2402009 **Sh. G. Sreedathan** Coordinator, VIBHA Phone: +91 9891412119

Science and Technology has helped humans overcome a variety of challenges ranging from healthcare, food security, environment, transport, energy, and so on. Developments in S&T are brought about by the ingenuity of the human mind and scientific literature holds the potential to spark imagination and creativity in the human mind, which eventually translates into S&T innovations and inventions.

Science literature has also been a means of educating not only the masses but also experts. Apart from science books, magazines, newspapers, and in today's new age media websites, blogs, and a plethora of social media, science literature also encompasses science films and videos, science fiction, poetry, cartoon, drama employing various forms of traditional and modern communication modes.

The International Science Literature & Film Festival invites science writers, communicators, filmmakers, artistes, journalists, science enthusiasts, and students of science communication and mass communication to strengthen the public engagement of science and technology as well as promote scientific culture. The objective is to spark an interest and develop a trust for science and technology amongst the masses in general and youngsters in particular.

The International Science Literature & Film Festival also aims at showcasing India's efforts in science promotion and deliberate on science communication for transforming India. The festival intends to communicate evidence-based science for public discourse. Capacity building workshops on various aspects of science communication, science film appreciation, round-table discussions, interactive sessions with eminent science communicators, authors, filmmakers, and much more are the major attractions of this Festival. An International Science Book Fair would be an added attraction at the Festival providing a platform for publishers and authors to display their science literature.

# PROGRAMME SCHEDULE

DAY 1	6 OCTOBER, 2018 (Saturday)
08:00 am	Registration and Tea/ Coffee

# **INAUGURAL SESSION AUDITORIUM B**

	Welcome by: CSIR-NISCAIR				
	Chair				
	<ul> <li>Sh. Baldeo Bhai Sharma, Chairman, National Book Trust and Professor (Eminent), School of Journalism, Mass Communication &amp; New Media, Central University of Himachal Pradesh</li> </ul>				
	Chief Guest				
	• Sh. Prakash Javadekar, Hon'ble Union Minister of Human Resource Development				
	Sh. Priyadarshan, Veteran Film Maker				
	Guests of Honour				
	• Dr. M. Rajeevan, Secretary, Ministry of Earth Sciences (MoES)				
	Sh. Jayant Sahasrabuddhe, Organising Secretary, Vijnana Bharati				
09:30	• Dr. Narender K Sehgal, UNESCO-Kalinga Prize Winner for Science Popularization				
	<ul> <li>Prof. Shambhu Nath Singh, Director, School of Journalism and New Media Studies, IGNOU and Former Vice Chancellor, Patna University</li> </ul>				
	Inaugural Films				
	CSIR Stands with the People of Chennai by CSIR-NISCAIR				
	<ul> <li>Ganga Haritima Abhiyaan: Ek Vyakti–Ek Vriksh, produced by Uttar Pradesh Forest and Wildlife Department and directed by Mike Hargovind Pandey</li> </ul>				
	Release of Festival Book & Theme Book				
	Performance				
	India's space odyssey (Mohiniyattam) – Chandraayanam				
	• Jayaprabha Menon, Sreelekshmi Namboodiri, Krishna Priya, Shreya V and Thankam Krishnan				
	Vote of Thanks: Vigyan Prasar				
11:00	Tea/ Coffee				

	Scientific Session 1			
	Panel Discussion -Contemporary Science Literature: An Assessment			
	Chairs			
	Prof K. K. Dwivedi, Vice Chancellor, ITM University, Gwalior			
	Sh. Rajesh Badal, Former Executive Director, RSTV			
	Experts			
	Sh. Sanjiv Goswami, Managing Director, Springer Nature India			
	• Dr. Jagdish Chander, Scientist G, International Cooperation (Bilateral), DST			
11:30	• Dr. Arvind Mishra, Secretary, Indian Science Fiction Writers' Association			
	• Dr. V.P. Singh, President, Indian Science Communication Society, Lucknow			
	Dr. Afrina Rizvi, Professor, Aligarh Muslim University, Aligarh			
	• Dr. Kavita Bhatt, H.B. Garhwal Central University, Srinagar (Garhwal)			
	• Dr. Anil Saumitra, Atal Bihari Vajpayee Hindi Viswavidyalaya, Bhopal			
	• <b>Dr. Ankuran Dutta</b> , Head Department of Communication and Journalism, Gauhati University			
	Dr. Sarvendra Vikram Bahadur Singh, Director, Basic Education			
	Govt. of Uttar Pradesh			
01:00	Lunch			
02:00	Proceed to Indira Gandhi Pratishthan, Lucknow for the IISF-2018 Inaugural Function			

# AUDITORIUM C

# AUDITORIUM B

	Scientific Session 2		
	Master Classes on Science Films		
11:30	Communicating Science through Films by <b>Prof. Iftekar Ahmed</b> , Director, AJK Mass     Communication Research Centre, New Delhi		
11.50	• My Tryst with Science Programming by <b>Sh. Pankaj Saxena</b> , Film Academician, Formerly Vice President, Discovery Channel; Programme Head, BBC		
	• Using Narratives and Story Telling to Communicate Science by <b>Sh. Santosh Pandey</b> , Sr. Producer, ETV Bharat, Ramoji Film City, Hyderabad		
01:00	Lunch		
02:00	Proceed to Indira Gandhi Pratishthan, Lucknow for the IISF-2018 Inaugural Function		

# **DAY 2**

# 7 OCTOBER, 2018 (Sunday)

# AUDITORIUM C

	Scientific Session 3			
	Vigyan Sahitya Charcha: Interaction with Authors			
	Release of Book on Science Poems – Kavitayan Gyan ki Vigyan ki by <b>Sh. C. P. Patsariya</b> , Published by CSIR- NISCAIR			
	Chairs			
	• Dr. Madhu Pant, Ex-Director, Bal Bhavan, New Delhi			
09:30	Dr. D.C. Goswami, Science Communicator, Assam			
	Experts			
	Dr. Devendra Mewari, Senior Hindi Science Fiction Writer, Delhi			
	• Sh. Oum Prakash Sharma, Deputy Director, National Centre for Innovation in Distance Education, IGNOU, New Delhi			
	• Prof. J Nandakumar, Assistant Professor, Jawaharlal Nehru University, New Delhi			
	Sh. AKVKS Sharma, Senior Principal Scientist, CSIR-CFTRI, Mysuru			
10:30	Tea/ Coffee			
	Scientific Session 4			
	Workshop - Communicating Research to the Public			
	Chairs			
	• Dr. S K Barik, Director, Director, CSIR-National Botanical Research Institute, Lucknow			
	• Dr. Raj Narayan Shukla <b>dk 泪诗hv/; {} n礼诗 izš</b> k			
	Lead Speakers			
10:45	• <b>Dr. Rakesh Kumar</b> , Director, CSIR-National Environmental Engineering Research Institute, Nagpur			
	Dr. Ricky Kej, Grammy Award Winner, conservationist, Bengluru			
	Experts			
	• Dr. Jagdeep Saxena, Former Editor, DKMA, ICAR			
	• Dr. Kanan Purkayastha, Writer, Britain			
	• Dr. Anil Kumar Rai, Professor & Head, Department of Mass Communication,			
	Mahatama Gandhi Antrarashtriya Hindi Vishwavidyalaya, Wardha			
11:45	Tea/ Coffee			

	Scientific Session 5				
	Seminar - Innovative Approaches to Science Communication				
	Chairs				
	Prof. Anil K. Tripathi, Director, CSIR-CIMAP, Lucknow				
	Dr. Dinesh Kumar, Ex-Director, Institute of Science & Technology, University of Lucknow				
	Lead Speakers				
	• Dr. Gary Kerr, Assistant Professor (Lecturer), Edinburgh Napier University				
	• <b>Prof. M. Sai Baba</b> , T.V. Raman Pai Chair Professor and Principal Scientist, National Institute of Advanced Studies (NIAS), Bengluru				
	Paper Presentation				
12:00	Selected research papers				
	• <b>Dr. Sanghamitra Deobhanj</b> , The Story of The Rice Expert: Exploring New Vistas of Science Communication				
	Bakul Srimany, The Social Web as a Communication Tool in Indian Science Communication				
	• <b>Dr. Snigdha Panda</b> , Promoting Science Communication among Scheduled Tribe Students through Museum				
	• Srinidhi T G, Using Technology to Communicate Science in Regional Languages: Experiences from Karnataka				
	• Gurshaminder Singh, <b>Sh. Anil Sharma</b> and <b>Sh. Y.S. Bagal</b> , Gain in knowledge level of farmers about recommended agricultural practices after watching video films				
	• Dr. Gagandeep Kaur and <b>Dr. Harinder Pal Singh Kalra</b> , Science literature in Indian languages: A study of Punjabi language				
01:00	Lunch				
	Scientific Session 6				
	Scientoon Workshop and Competition				
	Chairs				
	• Prof. Raja Ram Yadav, Vice-Chancellor, Veer Bahadur Singh Purvanchal University,				
02:00	<ul> <li>Jaunpur</li> <li>Prof. Tapas K Kundu, Director, CSIR-Central Drug Research Institute, Lucknow</li> </ul>				
02.00					
	<ul> <li>Workshop by</li> <li>Dr. Pradeep Kumar Srivastava, Scientoonist, Lucknow</li> </ul>				
	Discussants				
	Sh. Vishal Muliya, Christ College, Rajkot				
L	Sh. Amritesh Srivastava, Media Manager, NPCIL, Mumbai				
03:00	Tea/ Coffee				

03:15	Film Screening Session 1 Screening of Indian Competitive Science Films	
05:15	Film Screening Session 2 Screening of Foreign Science Films	

## **AUDITORIUM B**

09:30	Film Screening Session 3				
09.30	Screening of Indian Competitive Science Films				
	Scientific Session 7				
	Jury's view on Competitive Indian Science Films				
	Prof. Shambhu Nath Singh – Chairman, Jury				
	• Sh. Pankaj Saxena – Member, Jury				
10:30	• Sh. Himanshu Malhotra – Member, Jury				
	Ms Gauri D. Chakraborty – Member, Jury				
	• Dr. Suparna Dutta – Member, Jury				
	Sh. Subhash Thaledi – Member, Nomination Jury				
	Sh. Nimish Kapoor, Member, Convener				
11:15	Tea/ Coffee				
	Scientific Session 8				
	Science Film Appreciation: Screening of Science Films and interaction with Film-makers				
	Chair				
	• Dr. Pradeep Kumar Srivastava, Former Dy. Director				
	CSIR-CDRI, Lucknow				
	Experts				
	Sh. Andres Palacios, Deutsche Welle (DW), Germany and Sh. Mahesh Jha,				
11:30	Teamleiter, Deutsche Welle (DW)-Hindi, Germany: Communication Science & Technology through Manthan, a weekly TV magazine				
	<ul> <li>Ms Seema Muralidhara, Sr. Science Film-maker; Director, Beacon Television, Mumbai: Jack of All Trades, Master of Some: Director's Perspective</li> </ul>				
	• Dr Sabina Kidwai, Associate Professor, AJK MCRC, New Delhi: Understanding science				
	through Environment Films and <b>Sh. Himanshu Malhotra</b> , Wild Life Film-maker, New Delhi				
	<ul> <li>Sh. Nandan Kudhyadi, Sr. Science Film-Maker, Pune: Themes and Approaches for Science Films</li> </ul>				
01:00	Lunch				
01.00	Lunch				

	Scientific Session 9					
	Panel Discussion – How can Science & Environment Films bring changes locally, nationally and globally?					
	<ul> <li>Chairs:</li> <li>Dr Mike Pandey, Brand Ambassador of Eco-Tourism in Uttar Pradesh, Environmentalist, Veteran Science &amp; Wild Life Filmmaker</li> </ul>					
	• <b>Sh. Chander Mohan</b> , Chair Professor in Tribal Studies, Jawaharlal Nehru University, New Delhi, Former Adviser & Scientist G, DST					
	Experts:					
	• Sh. Santosh Pandey, Sr. Producer, ETV Bharat, Ramoji Film City, Hyderabad					
02:00	Sh. G. Unnikrishnan Nair, Deputy Director, Agriculture, Govt. of Kerala Thiruvananthapuram and Sr. Science Film-maker					
	• <b>Sh. Jalaluddin Baba</b> , Guerrilla Green Filmmaker/Activist/Writer, Srinagar, Jammu and Kashmir					
	• <b>Dr Upendra Pandey</b> , Chief News Coordinator, The Tribune, Chandigarh and Sr. Science Communicator					
	Ms Rama Arun Trivedi, Programme Head, Doordarshan, Lucknow					
	Sh. Subhash Thaledi, Asst. Director, Programmes, Doordarshan Directorate, New Delhi					
	• <b>Ms Lovita J.R. Morong</b> , Green Oscar Entrant filmmaker/Artist/Scriptwriter/Poet, Guwahati, Assam					
03:30	Tea/ Coffee					
	Scientific Session 10					
	A Journey through Science Film Making: Interaction with Dr Mike Pandey followed by screening of Green Oscar awarded films					
04:00	The Last Migration - Wild Elephant Capture in Surguja					
	Shores of Silence: Whale Sharks in India,					
	Vanishing Giants					
	Timeless Traveller- The Horseshoe Crab					

DAY 3	8 OCTOBER, 2018 (Monday)		
AUDITORIUM C			
	Scientific Session 11		
	Science Film-making: Orientation Workshop		
	<ul> <li>Chairs</li> <li>Dr. C. M. Nautiyal, Consultant, Science Communication Programmes, Indian National Science Academy, New Delhi</li> <li>Dr. Raj Mehrotra, Head, Regional Science City, NCSM, Lucknow</li> </ul>		
09:30	<ul> <li>Experts</li> <li>Sh. H.B. Muralidhara, Sr. Science Film-maker, Mumbai: 'Camera' from the Directors Point of View</li> </ul>		
	<ul> <li>Sh. Biju Pankaj, Science film-maker, Bureau Chief, Mathrubhumi Television, Kochi, Kerala: Science in Environmental and Wildlife Filmmaking</li> </ul>		
	<ul> <li>Sh. Ritesh Taksande, Director, First Film.Com; Trainer at FTII, Pune: Mobile Science Film Making</li> </ul>		
	Sh. Jaya Jose Raj, Filmmaker, Thiruvananthapuram: Scripting for Science Films		
11:00	Tea/ Coffee		
11:30	Film Screening Session 4 Screening of Foreign Science Films		
01:00	Lunch		

# AUDITORIUM B

	Scientific Session 12 Chaupal – Science through Folklore		
09:30	<ul> <li>Chairs</li> <li>Prof. Alok Dhawan, Director, CSIR-Indian Institute of Toxicological Research, Lucknow</li> <li>Dr. Denzil J. Godin, Lucknow Christian College, Lucknow</li> </ul>		
	Experts		
	• <b>Dr. Padmaja Suresh</b> , Bengluru, Experienced and noted artiste of Bharatanatyam, teacher, researcher, TV host and social worker		
	Ms Abhinaya Naga Jothy, Delhi-based Kuchipudi exponent and researcher		

	Dr. Govinda Varma Raja, Former HOD, Dept of Folklore Calicut University					
	Connecting folklore to the Science Teaching and also Folk technologies of Artist					
	select examples from the Case Study- thirayattam performance					
	Performance by:					
	• Dr. Peethambaran K.C., President, Ethnic Arts Council of India, Kozhikode					
	• Dr. RethiThampatty P.C., Former Principal, Zamorins Guruvayurappan College, Calicut					
	Dr. Vijisha P., Faculty, School of Ethnic Studies					
	Sh. Sunil Kumar K.C. and Sh. Hari Kumar K.C., Ritual Drummer					
11:00	Tea/ Coffee					
	Scientific Session 13					
	Round Table Meet and Summing Up: Science Outreach – Looking Ahead					
	Chairs					
	• Dr. Harsh Vardhan, Hon'ble Minister of Science & Technology, Earth Sciences and					
	Environment, Forest & Climate Change					
	Sh. A. Jayakumar, Secretary General, VIBHA					
	Experts					
	Dr Manoj Kumar Patairiya, Director, CSIR-NISCAIR					
	Sh. Nalaka Gunawardene, Science Communicator, Sri Lanka					
11:30	• Dr. Sanat Kumar Sharma, B. P. Koirala Memorial Planetarium,					
	Observatory and Science Museum Development Board, Nepal					
	Dr. Sung-Kyum Cho, Chungnam National University, Korea					
	Prof. Gabriel Gomez, Professor, Chicago University, USA					
	Dr. V. K. Srivastava, President, Indian Science Writers' Association, New Delhi					
	Dr. Yashwant Singh, Professor, Department of Linguistics,					
	Manipur Univeristy, Imphal, Manipur					
	Sh. Raj Kumar Bhardwaj, Director, Educational Multimedia Research Centre (EMMRC), IIT Roorkee Campus					
	Sh. Pallava Bagla, Science Editor, NDTV					
01:00	Lunch					
02:00	Distribution of Certificates & Proceed to Indira Gandhi Pratishthan, Lucknow for IISF 2018 Valedictory Session					

# **Science Film Screening Schedule**

# **PROGRAMME SCHEDULE**

**DAY 2** 

7 OCTOBER, 2018 (Sunday)

09:30 to 10:30

## Screening of Indian Competitive Science Films Category: Ignited India (Films made by College Students)

S. N.	Title of the Film	Duration	Language	Director / Producer
1.	Anndaata	00:09:58	Hindi	<b>Raushan Kumar</b> / DAV University, Jalandhar
2.	Fishing in Ganges	00:09:50	English	<b>Ankan Kumar Pal</b> / Vijaygarh Jyotish Ray College, Kolkata
3.	Fostering Sustainable Green	00:09:59	English	<b>RITABRITA MAITY</b> / Vijaygarh Jyotish Ray College, Kolkata
4.	Green Soil	00:05:01	English, Hindi	<b>KEERTHI RAJ B S</b> /Vivek Kannadi, Science Media Centre, IISER Pune
5.	Hydroelectric Cell Invention: A Venture In Clean Energy	00:06:37	English, Hindi	Tushar Jha, Arni Gaur/ Birla Institute of Technology
6.	Kisi ko Batana Nahin	00:08:05	Hindi	<b>Jayant Ray</b> / Kushabh Thakre Patrkarita avam Jansanchar Vishvavidyalaya Raipur, Chhattisgarh
7.	Plastic- A Monstrous Story	00:08:15	Hindi	Karishma Shakhla/ Govt. Dungar college,Bikaner, Rajasthan
8.	SWWAMPURNA 2: Beyond 'PADMAN' A Short Sci Film on Menstrual Taboos, Health and Hygiene	00:09:59	English	<b>Tanvi</b> / Birla Institute of Technology, Mesra, Off Campus Noida

### **AUDITORIUM B**

**DAY 2** 

7 OCTOBER, 2018 (Sunday)

03:15 to 5:15

## **AUDITORIUM B**

# Screening of Indian Competitive Science Films Category: Ignited India (Films made by College Students)

S. N.	Title of the Film	Duration	Language	Director / Producer
1.	Poison in Food	00:09:59	English	<b>BISHAL SENGUPTA</b> /Vijaygarh Jyotish Ray College, Kolkata
2.	Wetland - The Multi Functional Ecosystem	00:09:59	English	<b>Ujjwal Gayen</b> / Vijaygarh Jyotish Ray College, Kolkata

S. N.	Title of the Film	Duration	Language	Director / Producer
1.	In Memory of the Master	00:09:59	English	Jyotirmay Deb
2.	Pratikriya	00:06:45	Hindi	Abhinav and Bharti
3.	Stepwells- Elixir of Water Restoration	00:10:02	English	Pooja Vyas
	Heritage Assets			

# Category: Innovative India (Films made by Research Scholars)

# Category: Inspired India (Films made by School Students)

S. N.	Title of the Film	Duration	Language	Director / Producer
1.	Achal-A Space Settlement	00:05:38	English	<b>Harshit Parikh</b> / Utpal Shanghvi Global School, Mumbai
2.	Automating Agriculture	00:05:04	English	<b>Rishu Tiwari /</b> Gurjot Kaur
3.	Bicycle	0:07:05	Marathi	Sidharth Balkrishna Damle/ ACRT, Pune
4.	Dream of a Green World	00:07:30	Hindi	Smriti Pandy/ St. Mary's Convent College, Nainital, Uttarakhand
5.	Dump the Junk	00:05:16	English	Afreen Kapoor
6.	E-Book	00:01:36	English	<b>Manish Kumar</b> / Ramendra Singh Kushwaha
7.	Everyone is Unique	00:10:01	English	Alina Naqshbandi, Priya Wagh/ Stepping Stones High School, Aurangabad
8.	Grandma's Home Remedies (AjibaichaBatva)	00:09:57	Marathi	Kasturi Milind Kulkarni
9.	Ruchi	00:03:01	Hindi	<b>Manish Kumar</b> /Junior High School, Shivganj, Auraiya, UP
10.	We Didn't Start the Fire	00:07:56	English	Afreen Kapoor

## DAY 2

# 7 OCTOBER, 2018 (Sunday)

05:15 to 06:15

# Screening of Foreign Science Films – Non competitive

S. N.	Title of the Film	Duration	Language	Director / Producer	Country
1.	One Point Seven	00:16:30	English	Andreas Van De Laar	Netherlands
2.	A Changing Environment – Snow, water, ice and permafrost in the Arctic	00:15:43	English	Alphafilm / SWIPA	Denmark
3.	B-Roll Cashless Society	00:07:54	English	Embassy of Sweden	Sweden
4.	B-Roll Waste to Energy	00:09:40	English	Embassy of Sweden	Sweden
5.	Sweden, Leading the World in Innovation	00:05:18	English	Embassy of Sweden	Sweden

## **AUDITORIUM C**

DAY 3

# 8 OCTOBER, 2018 (Monday)

11:30 to 12:30

# Screening of Foreign Science Films – Non competitive

# AUDITORIUM C

1.	Living Amid the Ruins	00:13:20	English	lşılay Gürsu and Ekin Kazan / BIAA	United Kingdom
2.	Using crowd psychology to boost public safety	00:03:20	English	Chocolate Films / ESRC	United Kingdom
3.	Cutting carbon footprints in the service sector	00:04:12	English	Impact Media Specialists/ESRC	United Kingdom
4.	Research prompts public data on police use of force	00:03:18	English	Impact Media Specialists/ESRC	United Kingdom
5.	Future of the Cities	00:03:55	English	Impact Media Specialists/ESRC	United Kingdom
6.	BBSRC – Harvest 2050	00:04:16	English	David Martin, Impact Media Specialists Ltd	United Kingdom

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7.	Camelina: The quest for Omega-3	00:06:54	English	Paul Langcaster, BBSRC	United Kingdom
8.	Air Pollution	00:01:24	English	Green TV for UKRI's NERC	United Kingdom
9.	Research and Innovation for Zero Plastic Waste	00:02:45	English	CASS Productions for UKRI's NERC	United Kingdom
10.	Discovery of the Ozone Hole	00:01:57	English	UKRI'S NERC	United Kingdom
11.	People of Science: David Attenborough and Brian Cox (chosen scientist Charles Darwin)	00:04:18	English	The Royal Society	United Kingdom
12.	People of Science: Bill Bryson and Brian Cox (chosen scientist Benjamin Franklin FRS)	00:04:18	English	The Royal Society	United Kingdom
13.	People of Science: Dame Julia Higgins and Brian Cox (chosen scientist Michael Faraday)	00:04:22	English	The Royal Society	United Kingdom
14.	People of Science: Sally Davies and Brian Cox (chosen scientist Fleming and Florey)	00:05:27	English	The Royal Society	United Kingdom

Parallel Event: International Science Book Fair 7th October 2018

# **Crafts and Artisan Demo**

# 7 October, 2018: Conference on Development and Promotion of Arts and Crafts Venue: VVIP Lounge - Earth Complex, IGP

7-8 October, 2018: Crafts and Artisan's Demo • Venue: Railway Ground, Gomti Nagar

#### **COORDINATORS:**

**Dr. Alka Sharma** Sc 'G', DBT Phone 011-24363699 **Dr. Niloo Srivastava** Sc 'E', DBT Phone 011-49166740 **Dr. Rajeev Singh** Assistant Professor, ARSD (DU) Phone 9311225501

## Highlighting Science involved in Indian Art and Crafts:

A National level Handicrafts and Handloom Expo showcasing the Art and Crafts from across the country will be a special attraction of IISF 2018. Crafts persons and artisans shall converge at the event to display their fascinating and unique handcrafts and handloom items along with some unique eco-friendly sustainable products. Leading cultural institutions, individuals, organizations, and art foundations have been invited to present elements of their ingenuity.

Timings	Inauguration (10.30-11.15 AM)	
10:30 - 10:40	Welcome and about the Theme by Dr. Alka Sharma, Scientist 'G', DBT	
10:40 - 10:45	Lighting of the lamp	
10:45 - 10:55	Address by Sh. A. Jayakumar, Special Adviser, VIBHA	
10:55 - 11:10	Address by the Chief Guest	
11:10 - 11:15	Introduction of Speakers by Dr. Rajeev Singh, ARSD College, New Delhi	
11:15 - 11:45	Tea Break	
11:45 - 12:15	<b>Prof. Sharada Srinivasan</b> Professor & Dean, National Institute of Advanced Studies Indian Institute of Sciences, Bengluru Metal Crafts Heritage of India	
12:15 - 12:45	<b>Dr. Vinod Vidhwans</b> Dean, Chair - Faculty of Fine & Performing Arts FLAME University, Pune 'Bharat Veena': A Synthesis of Physics, Music and Aesthetics	

## **PROGRAMME SCHEDULE**

12:45 - 01:15	<b>Sh. Mallisham Chintakadi</b> Padam Shri, TEDx Speaker, Inventor of Laxmi Asu Machine "To reduce Mother's pain…"
01:15 - 02:15	Lunch Break
02:15 - 02:45	<b>Dr. Abhinav Kant</b> In charge, Bamboo and Cane Development Institute, Agartala Bamboo: Skill, Design and Technology
02:45 - 03:15	<b>Dr. Ratan Kumar</b> Principal, Lucknow College of Arts and Crafts, Lucknow
03:15 - 03:45	Tea Break
03:45 - 04:15	<b>Sh. Debashish Adhikary</b> Pracheen Kala Kendra, New Delhi "Effects of Music on Human Body and the Science Behind it"
04:15 - 04:45	Workshop on Madhubani Painting by Santosh Paswan
04:45 - 05:15	Workshop on Calligraphy
05:15 - 05:20	Vote of Thanks, <b>Dr. Niloo Srivastava</b> , DBT

# **Clean Air Campaign**

## 7 October, 2018 • Venue: Neptune Hall, IGP

#### **COORDINATORS:**

Dr. Sanjay KaliaDr. Rajneesh K GaurScientist 'E', DBTScientist 'E', DBTPh. No. 011-24362338Ph. No. 011-24362338

**Dr A. K. Mehta** Joint Secretary, MoEFCC Ph. No. 011-24695130 **Dr. Sumit K. Mishra** Sr. Scientist, CSIR-NPL Ph. No. 9911920419

The present government has formulated a National Clean Air programme as a medium term national level strategy to tackle the increasing air pollution problem across the country in a comprehensive manner. The objective of this programme is to evolve effective ambient air quality monitoring network across the country besides ensuring comprehensive management plan for prevention, control and abatement of air pollution. This programme focuses on collaborative and participatory approach covering all sources of pollution and coordination between relevant Central Ministries, State Governments, local bodies and other stakeholders. The use of cutting edge technologies to combat the rising challenge of air pollution in India is a must.

The Clean Air Campaign activity in IISF 2018 aims to sensitize the mass about the increasing air pollution problem across the country and its plausible implications on human health and climate. This activity plans to sensitize the mass about their green social responsibility to curb the air pollution and also inspires our children to become 'Green Sainiks' in fight against air pollution. The campaign provides a suitable platform for interactions amongst non-government organizations (NGOs), civil society citizens and academic and R&D institutions. The Clean Air Campaign activity is planned for the whole day comprising of popular lectures by eminent air pollution experts, showcasing of Air Pollution Measuring/Mitigation Technologies, Puppet/Nukkad Natak shows and drawing competitions.

## **PROGRAMME SCHEDULE**

## 7 OCTOBER, 2018 (Sunday)

Time	Activity	Guest/Speaker	
9:30 - 10:30	Inauguration	By Dr Mahesh Sharma	
10:30 - 10:50	Теа		
	Plenary Talks (#4)	Sh. C. K. Mishra, Secretary, MoEF	
10.50 01.10	[35 minute each]	Sh. S P S Parihar, Chairman, CPCB	
10:50- 01:10		Dr Ajay Mathur, DG, TERI	
		Dr. D. K. Aswal, Director, CSIR-NPL	
01:10 - 02:30	Lunch		
	Invited Talks (#6)	Dr. J. R. Bhatt, Adviser, MoEF	
	[20 minute each]	Prof. Mukesh Sharma, IITK	
02-20 04-20		Prof. Mukesh Khare, IIT, Delhi	
02:30 - 04:30		Prof. Uma Kumar, AlIMS, New Delhi	
		Dr. C. Sharma, CSIR-NPL	
		Adv. Dr. Sourabh Mishra, Supreme Court	
04:30 - 04:45	Теа		
04:45 - 05:30	Valediction	By Sh. Dara Singh, Uttar Pradesh	

• Drawing competition 10 AM to 12 Noon (parallel for three class categories)

• Nukkad Natak—throughout day (Only two shows, One in the forenoon & the other in the afternoon)

• Puppet Shows —throughout day (4-5 shows for the whole day)

**DAY 1** 

• Stalls (Air pollution measurement and mitigation technologies)-throughout day

# Mega Science, Technology & Industry Expo

5 - 8 October, 2018 • Venue: Railway Ground, Gomti Nagar

#### **COORDINATORS:**

 Dr. S R Rao
 Ch. Narendra Sharma

 Sc 'H', DBT
 VIBHA

 Phone: +91 011-24360295
 Phone: +91 9958188770

## Mega Science, Technology & Industry Expo

#### October 05-08, 2018

This Expo will highlight the achievements and success stories of Indian Scientific/Academic Organizations, R&D Labs, PSUs and Indian Industry. IISF 2018 Expo will showcase various initiatives started by Hon'ble Prime Minister in the last 3 Years — Missions like Swachh Bharat Mission, Digital India, Skill India, Make an India etc., will be highlighted by various Ministries and Organisations.

IISF 2018 Expo will be a comprehensive show of Scientific, Technological and Industrial Programme and Achievements of India.

- Inauguration by Hon'ble Minister for S&T and Earth Sciences at 10;30
- Exhibition will be open every day from 10:00 AM to 7:30 PM except on 8<sup>th</sup> October when it will end at 05:30 PM

## **Highlights of IISF 2018 Expo:**

- Number of Stalls: 900
- Number of Participant Organisations: 300
- Expecting Visitors: 6 lakhs

### I. Participant Organisations:-

A. Major Flagship Organisations and their Units/Labs across India:-

All the Autonomous Institutions and associate Units of the following Organisation are taking part in IISF 2018 Mega Science, Technology & Industry Expo.

Department of Biotechnology (DBT)

Department of Science & Technology (DST)

Indian Space Research Organisation (ISRO)

Indian Council of Medical Research (ICMR)

Council of Scientific and Industrial Research (CSIR)

Defence Research and Development Organisation (DRDO) Indian Council of Agricultural Research (ICAR) Department of Atomic Energy (DAE) Ministry of Earth Sciences (MoES) Ministry of Environment, Forest & Climate Change (MoEF&CC) Ministry of Electronics and Information Technology (MeitY) Ministry of AYUSH

#### B. Participant Mega Institutions/Organisations and Ministries:-

All India Council for Technical Education (AICTE) BrahMos Aerospace Software Technology Parks of India (STPI) National Mission for Clean Ganga Bharat Dynamics Limited (BDL) Oil and Natural Gas Corporation Limited (ONGC) Gas Authority of India Limited (GAIL) Hindustan Petroleum Corporation Limited (HPCL) Indian Oil Corporation Limited (IOCL) Bharat Petroleum Corporation Limited (BPCL) Cochin Shipyard Limited National Highways Authority of India (NHAI) Shipping Corporation of India HP India Ministry of Railways RDSO National Biodiversity Authority (NBA) Neyveli Lignite Corporation (NLC) Shri Mata Vaishno Devi University National Handlooms Development Corporation National Institute of Pharmaceutical Education and Research (NIPER), Guwahati Centre for Development of Telematics, Delhi

Rajiv Gandhi Proudyogiki Vishwavidyalaya Translational Research Platform for Veterinary Biologicals (TRPVB), Chennai Maharashtra Hybrid Seeds Co.Pvt. Ltd. (MAHYCO) Maharashtra Remote Sensing North-Eastern Space Applications Centre Bharat Broadband Network Limited Central Silk Board National Research Laboratory for Conservation of Cultural Property Oil Industry Development Board Inter-University Accelerator Centre Vijnana Bharati NBO Association - VIBHA VANI Vijnana Bharati Home Pavilion

### C. State Government Representation: -

All the State Governments have represented their Programmes on Science & Technology, Energy, Remote Sensing, Agriculture, Bio-Technology and presented the massive "Vibrant India" Pavilion.

### D. Small Scale Industries: -

Above 50 Small Scale Industries will also take part in the Expo, showcasing their Technologies and Products.

### E. State Pavilions: -

All the States are displaying their outstanding achievements.

### F. Handicrafts and Handlooms Expo: -

There are about 100 Craftsmen across the Country will showcase beautiful crafts work.

### I. Exhibits:

Live models of Missiles, Warfare Tanks, Satellite Models, Agricultural projects and various Models/ Charts/Live presentations/PPTs/Displays about on-going projects, achievements and programmes.

Various Technologies developed by Indian Scientific and R & D Institutions across the Country will be on the display to educate Students, Young Scientists and general Public

# **Outreach Programme**

### **COORDINATORS:**

**Dr. Dhananjay Tiwary** Sc 'E', DBT Phone: +91 011-24369611 **Dr. Sachin Mandavgane** Associate Professor, VNIT, Nagpur Phone: +91 9823246329

In the month of September, institutes across India opened their labs to the public for one (or two) day(s) and showcased their scientific achievements and research facilities to students, the general public and local media. The lab organised lab tours, exhibitions, popular lectures, scientist-student/public interaction, interactive games/activities on research topics, competitions and much more!

The Outreach programme was organised in the following labs between 1<sup>st</sup> September to 7<sup>th</sup> October, 2018.

Ahmedabad • National Innovation Foundation, DST					
	• Vikram Sarabhai Space Exhibition - Space Applications Centre, ISRO				
Ajitgarh District	National Agri-Food Biotechnology Institute, DBT				
(S.A.S. Nagar district)	Semi-Conductor Laboratory, ISRO				
Bengaluru	National Aerospace Laboratories, CSIR				
	Indian Institute of Astrophysics, DST				
	Jawaharlal Nehru Centre for Advanced Scientific Research, DST				
	Raman Research Institute, DST				
	The National Centre for Disease Informatics and Research, ICMR				
	ISRO Telemetry, Tracking and Command Network, ISRO				
Bhavnagar • Central Salt Marine Chemicals Research Institute, CSIR					
Bhopal	Advanced Materials and Processes Research Institute, CSIR				
Bhubaneswar	<ul> <li>Institute of Minerals and Materials Technology, CSIR</li> </ul>				
	Institute of Life Sciences, DBT				
	Regional Medical Research Centre, ICMR				
Chandigarh	Central Scientific Instruments Organisation, CSIR				
	Institute of Microbial Technology, CSIR				
Chennai	Central Leather Research Institute, CSIR				
	Structural Engineering Research Centre, CSIR				
	National Institute of Epidemiology, ICMR				
	National Institute of Ocean Technology, MoES				

## **PROGRAMME SCHEDULE**

Dehradun	Indian Institute of Petroleum, CSIR
	Wadia Institute of Himalayan Geology, DST
Delhi	Central Road Research Institute, CSIR
	Institute of Genomics and Integrative Biology, CSIR
	National Physical Laboratory, CSIR
	<ul> <li>National Institute of Science Communication and Information Resources, CSIR</li> </ul>
	National Institute of Immunology, DBT
	National Institute of Plant Genome Research, DBT
Dhanbad	Central Institute of Mining and Fuel Research, CSIR
Dibrugarh	Regional Medical Research Centre, ICMR
Dona Paula	National Institute of Oceanography, CSIR
Faridabad	Regional Centre for Biotechnology, DBT
Gurugram	National Brain Research Centre, DBT
Guwahati	Institute of Advanced Study in Science and Technology, DST
Hyderabad	Centre for Cellular Molecular Biology, CSIR
	Indian Institute of Chemical Technology, CSIR
	National Geophysical Research Institute, CSIR
	Centre for DNA Fingerprinting and Diagnostics, DBT
	National Institute of Animal Biotechnology, DBT
	National Institute of Nutrition, ICMR
	National Remote Sensing Centre, ISRO
	Indian National Centre for Ocean Information Services, MoES
Imphal	Institute of Bioresources and Sustainable Development, DBT
Jammu	Indian Institute of Integrative Medicine, CSIR
Jamshedpur	National Metallurgical Laboratory, CSIR
Karaikudi	Central Electrochemical Research Institute, CSIR
Kochi	Centre for Marine Living Resources & Ecology, MoES
Kolkata	Central Glass Ceramic Research Institute, CSIR
	The National Institute of Biomedical Genomics, DBT
	• S. N. Bose National Centre for Basic Sciences, DST
	National Institute of Cholera and Enteric Diseases, ICMR

Lucknow	Central Drug Research Institute, CSIR
	Indian Institute of Toxicology Research, CSIR
	National Botanical Research Institute, CSIR
	Birbal Sahni Institute of Palaeobotany, DST
	Shri Ramswaroop Memorial University
Mohali	Center of Innovative and Applied Bioprocessing, DBT
	Institute of Nano Science and Technology, DST
Mumbai	National Institute of Immunohaematology, ICMR
Mysore	Central Food Technological Research Institute, CSIR
Nagpur	National Environmental Engineering Research Institute, CSIR
Nainital	Aryabhatta Research Institute of Observational Sciences, DST
Navi Mumbai	Indian Institute of Geomagnetism, DST
Noida	National Institute of Cancer Prevention and Research, ICMR
	National Centre for Medium Range Weather Forecasting, MoES
Palampur	Institute of Himalayan Bioresource Technology, CSIR
Pali	Translational Health Science and Technology Institute, DBT
Pilani	Central Electronics Engineering Research Institute, CSIR
Puducherry	Vector Control Research Center, ICMR
Pune	National Chemical Laboratory, CSIR
	Unit for Research and Development of Information Products, CSIR
	National Centre for Cell Science, DBT
	Agharkar Research Institute, DST
	National AIDS Research Institute, ICMR
Roorkee	Central Building Research Institute, CSIR
Thiruvananthapuram	Rajiv Gandhi Centre for Biotechnology, DBT
	Sree ChitraTirunal Institute for Medical Sciences & Technology, DST
	National Institute For Interdisciplinary Science and Technology, CSIR
Vasco-da-Gama	National Centre for Antarctic and Ocean Research, MoES

NOTE

