

talked about India's painfully conflicting rejection of various drugs, including Pfizer's arthritis drug, making the molecules made in India itself, inaccessible to most patients because of the monetary burden. Balamram then talked about the CML-turned anticancer drug Imatinib, developed by Novartis, which underwent the fastest FDA approval (for a cancer drug) of two and a half months. This showed how drugs approved in the US are immediately approved in India, which otherwise, takes an excruciatingly long amount of time. The judges dismissed the Novartis argument that this drug was patentable in India. As Novartis did not win the case, the patent was not issued, and the companies in India bene-

fited from selling generic Gleevec, thus making it available to Indian patients. He remarked that dealings with intellectual property rights only benefited the associated lawyers, thus emphasizing how the pharmaceutical industry in the current scenario has morphed into a money-generating system from a medicine manufacturing facility with considerable assistance from the inefficiency of laws. The severe need for the distinction between the terms 'invention' and 'discovery' was also spoken about because 'psychologically inventors and discoverers are different kinds of people with different needs and management'. Significant discoveries of drugs like penicillin, streptomycin, ivermectin, artemisinin,

statins and other drugs from natural plant sources were discussed in the light of Pliny the Elder's quote which reads as follows: 'Nature is to be found in Her entirety nowhere more than in Her smallest creatures'.

The general feedback by participants was that, this scientific session is a good beginning and should be continued by the Current Science Association every year.

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MEETING REPORT

India International Science Festival 2015*

The India International Science Festival (IISF) 2015 organized recently signifies a collective effort towards nurturing scientific temper at the global level. The aim behind organizing this festival was to provide a platform to thousands of young researchers and students across the nation and other neighbouring countries for discussing scientific ideas and innovations on issues of global relevance. The event was inaugurated by Harsh Vardhan, Union Minister for

Science and Technology, and Earth Sciences.

The festival focused on the major scientific achievements by youth and future prospects in the scientific arena through Young Scientists' Meet (YSM), Mega Science, Technology and Industrial Expo, International Science Film Festival, Innovation Models and 'INSPIRE' presentations, IRIS National Science Fair (Initiative for Research and Innovation in Science), Scientist-Students Interaction, workshops and interactive sessions, and the largest collective science practical session 'Catalysis' with the aim to enter the Guinness World Records. More than 10,000 participants, including about 2000 students from different corners of the country as well as from foreign countries participated in this science festival. IISF 2015 had been the first science festival organized in our country to promote the 'potential benefits of science to the society', and simultaneously inculcating and nurturing the scientific calibre. Five plenary sessions were conducted in which several eminent scientists shared their research work through a series of highly informative talks. Soumya Swaminathan (ICMR) spoke about awareness of curable diseases, followed by M. V. S. Valiathan (Manipal University) about Ayurveda and cause/prevention of vari-

ous lifestyle diseases. W. Selvamurthy (Amity University, Noida) talked about yoga lifestyle for holistic healthcare, while M. Radhakrishna Pillai (Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram) talked about his efforts towards cervical cancer prevention. Girish Sahni (CSIR) shared his experiences regarding various Indian innovations that aided in transforming the society. Vijay Bhatkar (President, Vijnana Bharati (VIBHA)), unfolded the history of electronics in India from the invention of radio till super computers. Anil Kakodkar (Atomic Energy Commission of India) spoke about the probable strategies to bridge the import/export gap through technology/R&D. YSM comprising 10 themes was a good effort to provide the scientists up to the age of 45 years to showcase their research work and achievements. Research activities related to certain innovative diagnostic aids, agricultural practices and livestock management, technologies related to climate, geo-information system, waste to wealth and make in India, green technology, sustainable development and indigenous science/technology were presented by various participants. During the YSM, parallel sessions were organized. Several topics were discussed having great relevance to the society.

*A report on 'The India International Science Festival' (IISF-2015) held at the Indian Institute of Technology, Delhi from 4 to 8 December 2015. The festival was organized jointly by the Ministry of Science & Technology (DST, DBT and DSIR/CSIR), Earth Sciences (MoES) and Vijnana Bharati (VIBHA) and supported by Indian Space Research Organisation (ISRO), Defence Research and Development Organisation (DRDO), Indian Council of Medical Research (ICMR), Department of Atomic Energy (DAE), Indian Council of Agriculture Research (ICAR), University Grants Commission (UGC), National Council of Educational Research and Training (NCERT), All India Council for Technical Education (AICTE). Indian Institute of Technology, Delhi was the host institution and Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi was the nodal institution.

The INSPIRE programme under the flagship of DST, New Delhi has an objective to attract young minds towards science at an early age. This year, around 799 selected students and 200 teachers participated from all over the country. An attempt to conduct the largest science practical session in which 2000 school children performed a science experiment entitled 'Catalysis' under one roof before 80 teachers and 3 instructors was an exhilarating experience and by doing so India made an entry into the *Guinness World Records* by breaking the record of the Royal Society of Chemistry, London in the area of largest practical science lesson. The aim behind conducting this experiment was science popularization and motivation for the students and young minds to take up science education and to develop a sense of pride for Indian science in the future minds of the country.

'Think Science, Live Science', a mega science and technology and industry expo was organized on a grand scale in 75,000 sq. ft area and included a wide spectrum of participants like research organizations, academic and professional institutions, teachers, students and science enthusiasts. Major emphasis was given on inter-dependence of science-technology-innovation and society. Scientists from the Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow led by Sunil Bajpai (BSIP) participated in the science festival and showcased the research work carried out at their Institute, which was well appreciated by researchers, common man and the industry. Popularization of palaeobotany is an important activity of the BSIP museum and as an outreach activity, an exhibition pertaining to the museum, archives, research activities and state-of-the-art analytical facilities available at the BSIP premises

was organized in the mega science expo under the banner of DST. The exhibits comprising fossils from Precambrian to Harappan civilization, posters, pamphlets and banners attracted a large number of people.

An Initiative for Research and Innovation in Science – the IRIS National fair – also coincided with the mega science expo that displayed the public-private partnership initiated by the Indo-US Science and Technology Forum (IUSSTF), Intel Technology India (Intel) and DST for empowering the future innovators. In the IRIS National fair, young students from class 5 to 12 had the opportunity to present their budding research ideas at a national level. Another such extraordinary scientific event was a three-day International Science Film Festival, where internationally acclaimed and national award-winning short films on science and society, health and environment, Digital India and Swachh Bharat were screened. The film festival was a unique opportunity for the emerging and established enthusiasts to interact with people from diverse areas and gather useful knowledge on techniques and impact of communication.

The workshop and interactive sessions offered an excellent platform and good opportunity to discuss the culture of research and development, problems during the early research career, structuring, design and writing of research/review papers and research proposals and protecting the intellectual property. Eminent scientists and representatives from DST, MoES, CSIR, UGC, IIT Delhi, DBT, NIIT, etc. interacted with the students and researchers. The session focused on interaction with techno entrepreneurs, the Government's Central Research Facilities and research funding, region-specific research areas of India, research

areas of Government missions, and interaction with research funding agencies. Scientist-students interaction was organized to communicate the recent developments in the areas of light, space science and soil science. Eminent scientists from across the country interacted with the students to ignite their minds.

In the valedictory function, 60 young students were awarded for their outstanding projects under the DST INSPIRE programme. Awards were given to various presentations. With the motto of 'Developing a scientific temper amongst the masses', this science festival provided a common platform especially to the layman who may not have had any formal education or schooling and hence his intelligence/creativity was underestimated. Through this meeting, this hidden potential was recognized, appreciated and awarded. IISF-2015 provided a definitive impetus to the 'Make in India' and 'Start-up India' initiatives, Smart Villages and Smart Cities.

India has a large number of technically qualified professionals. Yet scientific temper needs to percolate into the entire societal fabric. IISF-2015 is a first step to promote such scientific temper.

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