

Volume 10 | Issue 114 | January 2023





Editorial

Highlights IISF 2022







Dr. Rajesh S. Gokhale

Secretary, Department of Biotechnology, Ministry of Science & Technology, Govt. of India

"Communicating scientific thoughts and process to people from different feats is of utmost importance to make their lives better and healthy. Indian science needs to be at the forefront of inculcating citizen centric science initiative."



"Marching towards Amrit kaal with Science and technology and innovation will instill a spark among young scientist's conclave and public through Artisan's technology village and science through games and toys and new age technology."





Dr. (Mrs.) N. Kalaiselvi,

Director General, Council of Scientific & Industrial Research (CSIR) & Secretary, , Council of Scientific & *Industrial Research (DSIR)*

"As India rapidly marches to emerge as a developed country in the coming decades, Science, Technology and Innovation will place a pivotal role in India's progress, growth and development."





























Chief Editor

Dr. Seema P. Upadhye

Managing Editor: Kamal Pratap Singh

VOLUME 10 ISSUE 114 January 2023

ALL RIGHT RESERVED. No part of this issue can be printed in whole or in part without the written permission of the publisher. Editors, printer and publisher do not take responsibility for any mistake though information are best to assess.

Online and Social Media

www.biotechexpressmag.com www.facebook.com/BiotechExpressmagazine www.linkedin.com/in/biotechexpressmagazine https://twitter.com/KBiotechexpress

Subscription: http://www.biotechexpressmag.com/subscription/

Contact: Biotech Express, V-31/4, Ext-1, Shalimar Garden, Sahibabad, Ghaziabad, U.P- 201005.

Phone: +91- 9311986177

Article and Ad submission

All queries related to article and ads submission can be sent to biotechexpressindia@gmail.com. For more information kindly visit website: www.biotechexpressmag.com

Publisher: Kamal Pratap Singh

Printed at: Monex offset, B-12 SD complex, near MMG hospital, Ghaziabad- 201005.

Individual rates available to subscribers paying by personal cheque or NEFT. Order for Students, PhDs, postdoc subscription must be accompanied by a copy of student ID.

The Biotech Express magazine publishes between 10th to 15th of every month.

CONTENT

Editorial: Who is The Real Anthony Fauci? A true Doctor, liar, pharma profiteer or a totalitarian? | p8

Guestorial: Malnutrition accelerates the metabolic age | p20

Event Report: Australia's biggest week in biotech kicks off in Perth | p14

Featured BioNews p24

- ▶ \$3 trillion growth reported for biotech sector
- ▶ Australia and India approves commercial release of GM variety of Indian mustard
- ► Court Orders CDC to Release Data Showing 18 Million Vaccine Injuries in America
- ▶ IIT Mandi researchers develop simple & portable device to detect ischemic stroke
- ▶ IIT Roorkee researchers identify proteins in saliva that can predict triple negative breast cancer
- ▶ Need to set up 20 active sentinel sites in country on adverse events following immunisation: expert
- ▶ Pfizer admits COVID vaccine was never tested for transmission
- ▶ Protest held against SII, Bill Gates over 'deaths after taking Covid-19 vaccine'
- ▶ The Gates Foundation is Researching How to Manipulate You Into Taking 'Future' COVID Vaccines
- ► Salman Khan's body double Sagar Pandey dies of suspected heart attack
- ▶ UP: Govt School Vaccinates 150 Kids Without Consent; Many Hospitalised
- ▶ Top cardiologist calls for halt to COVID vaccination
- ▶ Biocon Biologics Out-Licenses Two Biosimilar Assets to Yoshindo for Commercialization in Japan
- ▶ Novartis' Zolgensma Under Fire Again as Nature Retracts 2010 Paper
- ▶ Hindawi and Wiley to retract over 500 papers linked to peer review rings

Notifications

GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY

Call for R&D project proposals on 'Human Genetic Diseases'

Considering the health burden of the Human Genetic Diseases, the Department is desirous of supporting cutting-edge Research and Development (R&D) project proposals on Human Genetic Diseases focusing on the following thrust areas:

Rare Genetic Disorders: To study disease associated genetic variation and development of new diagnostic tests, and targeted treatments for rare genetic disorders.

Discovery of causative genes for various Mendelian disorders such as cerebral ataxias, cortical malformations, intellectual disability, dystonia, etc.

Genetics of multi-factorial disorders with monogenic component such as Anencephaly, Parkinson's, Alzheimer's, Cardiovascular disorders, Diabetes etc.

Program on diagnostics development of human genetic diseases using genetic model organisms.

Creation, Integration, and development of capacity & resources for functional interpretation & validation of disease-associated genetic variations of Indian Genetic Diseases Database for genetic diseases relevant to India

Transdisciplinary collaborative research exploring the potential of precision medicine with focus on development of new tools and analytic methods for integrating patient data with information about contextual factors acting at the community or population level to influence health outcomes.

Development of pharmacogenomic and other precision medicine tools to identify critical biomarkers for disease progression and drug responses in diverse populations.

Translation of pharmacogenomic discoveries into clinical practice including effective treatments.

Eligibility:

Scientists / Clinicians / Researchers working in a regular capacity in Government R&D Institutions / Medical Colleges / Academic Institutions / National Laboratories or SIRO recognized Non-Profit R&D Organizations, with sound relevant scientific & technical backgrounds and relevant publications in the proposed research area in the proposal can submit project proposals.

Contact for furher information:

Dr. Onkar N. Tiwari, Scientist 'F', DBT, New Delhi (Email ID: onkar.dbt@nic.in) Tel.: +91-11-24361290

Last Date for Project Submission: 31st January, 2023.

Subscription Biotech Express



The Monthly magazine of Biotechnology

Subscription packages

RNI No. UPENG/2013/54102 ISSN: 2454-6968

Period	Print				Digital			
	Indian Subcontinent		Other countries		Indian Subcontinent		Other countries	
	Institutional	Individual	Institutional	Individual	Institutional	Individual	Institutional	Individual
Single	₹1000	₹1000	USD 150	USD 50	600	₹ 100	USD 50	USD 15
1 Year	₹10,000	₹ 5,000	USD 1000	USD 500	5000	₹ 600	USD 500	USD 100
2 Year	₹19,000	₹ 9,000	USD 1900	USD 900	9000	₹ 1000	USD 900	USD 180
3 Year	₹28,000	₹ 14,000	USD 2800	USD 1400	13000	₹ 1500	USD 1300	USD 250
5 Year	₹45,000	₹ 14,000	USD 2800	USD 1400	20,000	₹ 2200	USD 2000	USD 400

Note: Print subscription includes digital subscription as gratis (no extra cost) for the subscribed period.

Terms and Conditions:

- 1. Please fill the form in CAPITAL letters.
- 2. Print Subscription is valid in India only.
- 3. Print Subscription cost includes first class courier charges.
- 4. Print subscription includes digital subscription as gratis (no extra cost) for the subcribed period.
- 4. The mode of payment should be cheque/DD/NEFT favouring "Biotech Express". Please write your name and contact details on the back side of cheque/DD.
- 5. Your subscription will commence from the next available Issue OR within four weeks.

- 6. For Multiple Subscriptions/error use seprate forms (Photocopies allowed).
- 7. Biotech Express will not entertain cancellation of subscription after commencement of the same. No request for refund will be entertained.
- 8. In case of changing address, kindly send us in writing one month in advance.
- 9. Non delivery should be reported within 20 days of publishing of monthly issue to consider repost by us. After which no request will be entertain under any circumstances.
- 10. Annual Subscription can be avail throughout the year.
- 11. Previous Volumes are available on request.

Annual Sponsorship

 Title
 25 Lakh
 40,000 US \$

 Platinum
 18 Lakh
 27,000 US \$

 Gold
 15 Lakh
 23,000 US \$

 Silver
 8 Lakh
 12,500 US \$

Mode of communication: Cover Article, Other Pages Ads, Back Articles, Email Newsletter, Website Linking, Events etc.

Online/NEFT Payment

Account Name: BIOTECH EXPRESS

Account No: 65183799804

Bank Name: SBI, Dilshad Garden,
Bank Address: 7, Local Shopping Centre,

B-block, Dilshad Garden, Delhi, India.

Pin - 110095.

Branch code: 009370 IFSC: SBIN0009370, MICR code: 110002183

Note: BEM Sponsorship will be valid for a period of one year from booking of the same.

Contact: biotechexpressindia@gmail.com, Phone: +91-9311986177

Advisory & Editorial Board



Chief Editor: Dr Seema Pavgi Upadhye PhD, Biochemistry



Managing Editor: Kamal Pratap Singh M.Sc Genetics

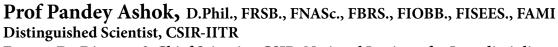


Assistant Editor: Dr Piyush Kumar, PhD

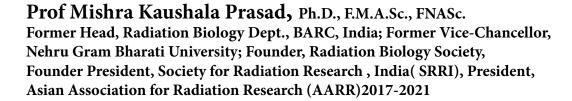
From the very first issue, Biotech Express team has been delivering what's best for Biosciences community. The audience of this magazine includes students, researchers, faculties and executives of highly prestigious organizations of India. In year 2016, BEM has made new editorial Board combining experience of eminent Advisory Board Members who have been into Award winning Research and head of prestigious Administrative positions.

<u>Advisory Board Members</u>

Prof Sopory Sudhir Kumar, Ph.D., FNA., FNASc., FNAAS., FASc., FTWAS Padma Shri, Shanti Swarup Bhatnagar Awardee, SERB Distinguished Fellow, DST, ICGEB 2018----, Vice -Chancellor, JNU, Delhi, 2011-16 Director, ICGEB 2014-15



Former Dy Director & Chief Scientist, CSIR- National Institute for Interdisciplinary Science and Technology; Founder, Biotech Research Society of India (BRSI)





Chairman and Chief Scientist, Sudarshan Biotech Pvt Ltd., India & Emeritus Professor, University of Tennessee Health Science Center, USA



BSR Faculty Fellow, School of Life Sciences, University of Hyderabad, Hyderabad, India Executive President, Federation of Asian Biotech Associations (FABA)











Consulting Editors



Dr. S Venkata Mohan FNAE, FBRS, FT(AP)AS, FIEI, FABAP, FISEES Principal Scientist Bioengineering and Environmental Sciences (BEES), (CSIR-IICT) Hyderabad, India.



Dr. Dubey K K
Associate Professor
School of
Biotechnology
Jawaharlal Nehru
University, New Delhi
(India)



Dr. Sunita Varjani Scientific Officer Gujarat Pollution Control Board Paryavaran Bhavan, Gandhinagar, Gujarat, India.



Dr. Rachna Agarwal Associate Professor, Neurochemistry Institute of Human Behaviour and Allied Sciences (IHBAS), Delhi, India.



Dr. Shailendra K.
Saxena
Professor and Head,
Centre for Advance
Research, King George's
Medical University
(KGMU), Lucknow,
India

Editorial Board Members

Dr. Barun K Bhattacharya Scientist in charge, Biotechnology R&D, East India Pharmaceuticals Works Ltd.

Dr. Dinesh K Gautam Assistant Professor, Department of Zoology, Hansraj College, Delhi University.

Dr. Rajni Gupta Associate Professor, Botany, Kirori Mal college, Delhi University.

Dr. Darshan Malik Associate Professor, Biochemstry, Shivaji College, Delhi University.

Dr. Anand Sonkar Assistant Professor, Department of Botany, Hansraj College, Delhi University

Dr. Sharvan Sehrawat Asst Professor, IISER Mohali, Punjab, India.

Dr. Tathagata Choudhuri Professor, Dept of Biotechnology, Visva Bharati University, Santiniketan, West Bengal.

Dr. Shailesh K Tiwari Scientist at IIVR, Varanasi. Dr. Sumit Gandhi Senior Scientist at CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu.

Dr. Yogesh Joshi Assistant Professor at Department of Bioinformatics Solapur, Maharashtra.

Dr. Deepak Kala Assistant Professor, Chandigarh University

Dr. Kavit Mehta Assistant Prof. biotech at Ganpat University, Ahmedabad, Gujarat, India.

Dr. Seema Amin Assistant Professor at Charotar University of Science & Technology (CHARUSAT), Ahmedabad, India.

Dr. Mukund Bodhankar Teaching and research at Bharati Vidyapeeth University, Pune.

Dr. Selvarajan Ethiraj Research Assistant Professor at SRM University (Sri Ramaswamy Memorial University), Kanchipuram, Tamil Nadu, Dr. Burusa Prasad Rao Senior Scientist at CLRI, Chennai Area, India.

Dr. Paramjit S Panesar SLIET University, Longowala, Punjab.

Dr. Sukanta Majumdar Gour Banga University.

Dr. Rupesh Chaturvedi Professor at Jawaharlal Nehru University New Delhi, Delhi, India.

Dr. Himani jain Teaching Associate at Deenbandhu Chhotu Ram University of science & technology, Murthal, Haryana.

Dr. Baskar Gurunathan St. Joseph's College of Engineering, Chennai.

Pratyush Kumar Das Ph.D Scholar, Centre for Biotechnology, Siksha 'O' AnusandhanOdisha, India.



by Kamal Pratap Singh

Highlights IISF 2022

he 8th edition of IISF held at Maulana Azad National Institute of Technology (MANIT) in the city of Lakes, Bhopal from January 21-24, 2023. The Ministry of Science and Technology (MoS&T), Ministry of Earth Sciences (MoES), Department of Atomic Energy (DAE), Department of Space (DoS), Government of India and Government of Madhya Pradesh jointly organised IISF 2022 on the theme 'Marching towards Amrit Kaal with Science, Technology and Innovation'.

The Department of Biotechnology, Ministry of Science

& Technology was the nodal coordinating department for organising IISF-2022. The Madhya Pradesh Council of Science and Technology (MPCOST) was the local partner and Vijnana Bharati (VIBHA) was Knowledge Partner for IISF 2022. The nodal agency to organise the IISF 2022 is Regional Center for Biotechnology (RCB), Faridabad.

This year the festival will have fifteen programs including the Mega Science and Technology Exhibition showcasing the theme of the festival. IISF is a festival to celebrate the achievements of India's scientific and technological advancements with students, inno-



ABOUT IISF

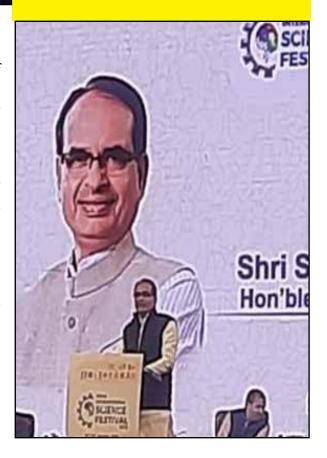
India International Science Festival (IISF) is an initiative of Ministry of Science and Technology and Ministry of Earth Science of Government of India in association with Vijnana Bharati which is a science movement with swadeshi spirit lead by eminent scientists of the country. The main purpose of IISF is the celebration of science by all. Engagement of common people with science in a joyful and entertaining manner is essential for the healthy, prosperous and meaningful life. Through its creative programs and activities, IISF provides opportunities to people and scientific fraternity in the country and abroad to come together, work together and experience the joy of doing science for the wellbeing of India and humanity.

vators, craftsmen, farmers, scientists and technocrats from India and abroad. in simpler words it is the celebration of science cherished by all. The activities during the festival fostered the global theme of G20 – "One Earth, One Family, One Future".

The Chief Minister of Madhya Pradesh Shri Shivraj Singh Chauhan and Union Minister for Science & Technology, Dr Jitendra Singh today jointly inaugurated India International Science Festival, IISF-2022.

Union Minster Jitendra Singh said during the inauguration that science relates to the economy and future of India. "Science is too serious to be left to scientists alone. It has reached people's homes," he pointed out. The minister also highlighted the progress made by start-ups in the country. Moving forward, the country should focus on the sustainability of start-ups and inclusivity.

Dr. Jitendra Singh said the pathbreaking decisions of Prime Minister Narendra Modi like unlocking of Space Sector in



June 2020, liberalization of Drone technologies, cabinet approval for geospatial guidelines and the recent green hydrogen mission worth Rs 20000 crore have open new vistas for India's rapid developmental march in the Amrit kaal. The Minister said that "Technology and Innovations" are going to be the Torchbearers of 2047 Economy of India whet it will celebrate 100 years of its independence.

In his address Shri Shivraj Singh Chouhan said that 2600 Start-ups came up in Madhya Pradesh alone in one year and it is not only confined to city of Indore but even tier-2 and tier-3 cities are dotted with successful start-ups. He called upon the students and entrepreneurs from Madhya Pradesh to develop a zeal for innovations.

Shri Om Prakash Sakhlecha, Minister for Science & Technology, Government of Madhya Pradesh, Prof. Ajay Sood, Principal Scientific Advisor, Government of India, Dr. Rajesh Gokhale, Secretary Department of Bio Technology, Government of India, Dr. N. Kalaiselvi, Secretary, DSIR, Dr. Sudhir Bhaduria, Secretary General, Vigyan Bharati, Dr. Sanjay Mishra, Senior Scientist, DBT, Shri Nikunj Shrivastava, Principal Secretary, Department of Science and Technology, MP and other senior officials of Government of India and Government of Madhya Pradesh joined the inaugural Event.

Prof. Ajay Sood, Principal Scientific Advisor, Government of India told the gathering that the Science is not a static subject but growing each day with new breakthrough. He said that in every progress there is an input of Science, Technology and Innovations.

Prof. Sood said that India has graduated to 41st rank from 86 in the Innovation Index within a very short span of time. He said with the launch of semi conductor mission, India's economy is going to get a booster dose. He underlined that we have to make efforts for making Circular Economy part of the everyday life and take efforts for increasing activities on Waste to Wealth program.

Dr. Rajesh Gokhale, Secretary Department of Bio



Prof. Ajay Sood, Principal Scientific Advisor, Government of India



Dr. Rajesh Gokhale, Secretary Department of Bio Technology



at Student Innovation Festival Dr Heera Lal, IAS, Additional Mission Director NHM, UP stressed upon developing nature-based solutions. He also said that innovations and startups need to address societal issues and environmental challenges.

Technology in his address said that all future challenges can only be dealt with universal scientific interventions as the Covid crisis has amply demonstrated. He said that DBT is taking a concerted efforts to promote the Biotech start-ups in India with global ramifications. "It will also drive innovation in the years to come. We have to bring in technologies, green solutions for manufacturing, a circular economy, waste to wealth, clean energy, and the like," he said at the event.

Some of the important Prime Speakers and Experts who took part in IISF, Bhopal were Dr. Krishna Ella, CMD, Bharat Biotech, Dr. Archana Sharma, CERN,-Geneva, Shri S.Somanath, Chairman, ISRO, Sh. Anand Deshpande, Founder & CMD Persistent Systems, Prof. A. P. Dimri, Director, DST-IIG, Dr. Anil Bhardwaj, Director, PRL, Prof. AmitavaPatra, Director, INST Mohali, Prof. Tapas Chakraborty, Director IACS.



Dr Sanjay Mishra, Scientist H; Convener IISF2022 & Chief Guest, Student Innovation Festival encouraged students to innovate for solutions & develop clearly defined solutions as per needs & challenges of our country.

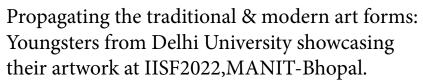
The Artisan's Technology Village

The Artisan's Technology Village@IISF 2022 aimed to provide an insight and opportunity to peep into the Artisan's world and how have they been practicing science in their own way to strengthen their traditional innovation system.

Dr N Kalaiselvi, Secretary, DSIR spoke at Artisan's Technology Village & emphasized on increased participation of next generation human capital to automate & do the S&T value addition while conserving the originality for the sustainable livelihood system.









Sh Ram Soni from Alwar, Rajasthan exhibits Sanjhi Art. Soni's family has been practicing this art from the last 5 generations. This Artisan Technology needs S&T handholding and market support for sustenance.

Face to Face

with New Frontiers in Science @ IISF2022 provided a unique opportunity for science enthusiasts to have stimulating interaction and discussions with subject experts from various S&T disciplines. The event was coordinated by the Department of Science & Technology (DST), Indian Space Research Organisation (ISRO), and Department of Space (DOS). The Madhya Pradesh Council of Science and Technology (MPCST) was the local partner and Vijnana Bharati (VIBHA) was the Knowledge Partner. Informative lectures by eminent scientific personalities, researchers, and innovators were the highlights of the event. The prominent speakers were Dr. Krishna M. Ella, CMD Bharat Biotech International Ltd.; Dr. Anand Deshpande, Founder & CMD, Persistent Systems; Dr. Archana Sharma, Sr. Advisor for Relations with International Organisations at CERN Geneva; and Shri S. Somanath, Chairman, ISRO Secretary, Department of Space.



Dr Krishna Ella, Executive Chairman Bharat Biotech International Ltd. at IISF shares with students that innovation must for development (No innovation, No Vaccines) at Face to Face with New Frontiers in Science. Also he shared "No Farmer Commit Suicide if they have Allied Agriculture Income".





Dr. Anita Gupta, Advisor/Scientist G, NSTEDB, DST said the key objective of the Face to Face with New Frontiers in Science event is to Bring iconic role models in various domains of science & technology to inspire ignite young minds and youth of the country.

"Develop Vigyan Ki Shine in your Life to be Successful" Said Dr. Archana Sharma, Senior Scientist CERN, at Face Face with New Frontiers in Sciences.



Dr Mayuri Dutt, Coordinator of Guinness World Records from Vijnana Bharati.



1484 students have successfully assembled and demonstrated the working Agribot model and created a new world record.

Guinness World Records

Guinness World Records@IISF2022 was intended at encouraging active public participation in science. It was open to challengers who seek to break any imaginable limit. As part of their unique feat, 1484 young students and budding scientists were simultaneously assembled a model Agribot kits during the IISF2022 to make a new Guinness record. The activity had been planned to commemorate the Amrit Kaal when India is expected to make big strides to be among the top nations in the world. The Guinness record making event held on 23 January 2023. School students (12-14 years old) from Bhopal participated in the event.

Science through Games and Toys

Science through Games and Toys@IISF2022 synchronized well with the science outreach efforts of the Govt. of India as it offered to engage children and adults with stimulating and engaging toys and games.

India has a rich tradition of toy-making and has talented and skilled artisans capable of making unique toys. IISF provided a platform to showcase traditional, creative, and modern toys by traditional toymakers and new start-ups in a spirit of vocal for local toys. The event host sessions and workshops for students to develop logical reasoning and explore the science behind development of games and toys.



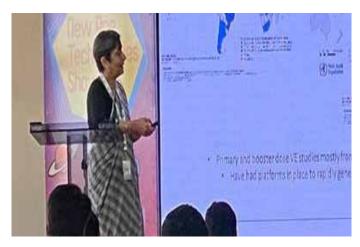
Prof. Manish Jain of IIT Gandhinagar has developed India's first Maths Learning Toy Lab, Centre for Creative Learning. Prof. Jain has been working in the field for many years and has devised and developed new toys and ways for making mathematics learning easy for students.

New Age Technologies Show

New Age Technologies Show@IISF2022 showcased how in Amrit Kaal India is poised to become a global center of research and innovation. India is also moving towards leading the fourth industrial revolution. It showcased through various sessions that it is high time the whole world recognises India's potential as an effective contributor to the identification and development of new age technologies. The event displayed the technological readiness of engineered prototypes and products in various cutting-edge areas. The event had special sessions with industry professionals and experts from academia to discuss the current trends and developments in the field of New Age Technologies.



Master Apoorva Jha from Sagar Public School, MP won a prize for his impressive knowledge of science & new age tech!



Dr Gagandeep Kang, Professor, CMC Vellore, delivered a keynote talk on "Current and Future Vaccine for COVID-19".





Students from Kanpur Institute of Technology showcased their project on flood warning messaging system.

Students from Institute of Chemical Technology, Mumbai showcasing their innovation on Milk Preservation Using Non Thermal Technology

Students' Innovation Festival

Students' Innovation Festival previously held as Students' Engineering Model Competition (SEMC), the Engineering Students Festival (ESF) united the top young scientists and engineering students, showcasing their unique ideas and talents on an international stage.

The 8th edition of IISF 2022, Students' Innovation Festival (SIF) had the core theme 'Developing Sustainable Life based on Five Elements of Nature'. Using their imagination and creativity, the students were encouraged to think innovatively and scientifically to address the societal issues using diverse technological tools with a focus on five elements of nature - the earth, the water, the fire, the air, and the space.

Eminent scientists from prestigious scientific and educational institutions across India such as DST, IIT, CSIR-CEERI, AICTE, NIT, National Institute of Ayurveda and many more assessed the innovative demonstrations and projects showcased by the students and young scientists.



The Students Science Village

The Students Science Village at IISF2022 was intended for students from class VIII-XI and teachers nominated by the Members of the Parliament, from the villages adopted under Pradhanmantri Sansad Adarsh Gram Yojana, for better S&T exposure through hands-on activities and interactions besides demonstrations by experts. Hon'ble Members of Parliament have nominated 5 student and 1 teacher delegate from their adopted villages. Around 1500 students and delegates had the opportunity to be part of hands-on science activities, scientific films, workshops; interactions with the eminent scientists, educationalists, and industrialists from India and abroad.



Directors from various reputed organizations of Country showed their presence at Young scientist conference IISF2022.

Young Scientist conference

Young Scientist conference@11SF2022 offers young researchers a platform to showcase their research to the public and other scientists. The event helped young researchers enhance their skill of public presentation and motivated the visitors to pursue research in frontiers of sciences such as artificial intelligence, nanotechnology, quantum computation, etc.

Hundreds of young scientists and researchers, including representatives from the scientific industry, faculty members, Postdoctoral fellows, PhD students, and final-year MSc and BTech students from across the country gathered for this event. Prominent scientists spoke on a range of topics, from space science to under water vehicles, e-waste management to telemedicine. Experience and technical knowledge of speakers enlightened the participants during the sessions. Each session ended with a Q&A session.



Panel Discussion at ISFFI at IISF2022 on the theme, India's G20 priorities and role of science films.

International Science Film festival of India

International Science Film festival of India (IISFI)@ IISF2022 supported the goal of Science Popularisation and Public Engagement of IISF. IISFI is the country's biggest-ever Science Film Festival bringing together filmmakers from India and across the globe under one roof. A bunch of select films on (i) Science, Technology, and Innovation for Sustainable Development; (ii) Science, Technology, and Innovation to Address Climate Change; and (iii) Science, Technology, and Innovation for a Better Life were screened during the festival which could be be watched virtually too. In addition films by Indian filmmakers, the festival had the participation of science films from Australia, Austria, Brazil, Bulgaria, Colombia, Germany, Greece, the Islamic Republic of Iran, Italy, Malaysia, Nigeria, Spain, The Philippines, The United Kingdom, The United States, Turkey, Tunisia, and Ukraine.

On the inaugural session of the 8th India International Science Film Festival of India, the keynote speaker DR. CHANDRA MOHAN NAUTIYAAL, Consultant, Science Communication, INSA addressed the enthusiastic audience on the topic 'FILMS TO REFLECT INDIA AS EMERGENT S&T LEADER:CONTEXT S20' along with the other dignatries on the stage.







Mega Science and Technology Expo

Mega Science and Technology Exhibition@ IISF2022 provided a platform for the government, corporate, public sector undertakings, academic, R&D institutions, innovators, and entrepreneurs from across the country to showcase their scientific and technological accomplishments. This edition of the exhibition hada special focus on 'Science Technology Innovations and Achievements in Amrit Kaal' to commemorate India's 75th anniversary of independence.

The exhibition had interactive and experiential activities to serve as a forum for exchange of ideas, collaboration between researchers and industry professionals, and information about opportunities for aspiring scientists and technologists. A wide range of topics were discussed during the event including biotechnology, nanotechnology, robotics, artificial intelligence, energy, environment, space research, etc.

The Mega Expo and Startup Expo became a major attraction of the festival. More than 150 people demonstrated new and innovative technical ways to benefit the country's growth at the Startup Expo. The expo also proved that startups are not only limited to the youth or the IT sector but there is no age limit to start something new. Not only startups, many reputed organizations, like Brahmos, CSIR, ISRO, MP Pollution Control Board, MP Tourism, MP Khadi & Village Industries Board, etc. had their stalls at Mega Expo. The displays of all the stalls showcased how far India has come in the area of science and technology.





Best Pavillion award of IISF2022 won by DBT India.



Startup Conclave

The objective of the Startup Conclave@ IISF2022 was to celebrate and showcase the achievements in the area of sciences, technology, innovation, and startups. It was coordinated by Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology (DBT), Government of India.

The conclave had a special focus on the Biotech Innovation ecosystem championed by DBT/BIRAC. It showcased the outcome of the startups funded under Biotech Ignition Grant (BIG) for entrepreneurs & startups, and the BioNEST scheme for bio-incubation centres from the past 10 years. There were exhibition of innovative products and technologies developed by Startups in various fields.





Managing Director BIRAC, Dr Alka Sharma felicitated all the panelists of the Session "One Health-Leadership Talks" at Startup Conclave



Dr. Subhra Chakraborty, Director NIPGR talked about the Healthy Plant Healthy planet-Food & Nutrition Security in the session "One Health- Leadership Talks".

National Social Organisation and Institutions Meet

National Social Organisation and Institutions Meet @IISF2022 was organised by Science for Equity Empowerment and Development (SEED) division of Department of Science and Technology and VibhaVani India (an initiative of VIBHA). Stakeholders of societal development discussed and exchanged ideas under the theme Livelihood Centric Technology Transfer for Reducing Multidimensional Poverty and Building Atmanirbhar bharat". There were six sessions on the following themes: Water and Agriculture, Woman & Child Health and Nutrition, Education, Energy, Livelihood and Environment, and Income Generation: Mini Social Enterprises sector-Post Pandemic era and meeting Amrit Kaal challenges.



We must change NGOs to NBOs (Nation Building organizations) as we have largest number of such organizations in the world and they are supporting building India," said Dr A Jayakumar at #NSOIM



Our constitution promotes scien- Dr N C Talukdar, Chairperson at tific temper and India is the first valedictory function of NSOIM country to adopt Scientific temper #IISFBhopal praised the work of in its constitution, Dr Debapriya social organizations and NGOs Dutta, Advisor, DST-SEED spoke toward the development goals of in the #NSOIM event of #IISF2022



the country.

State Science & Technology Councils Conclave

The Department of Science and Technology (DST), Government of India (GoI) has established a unique Center- State Science and Technology Cooperation mechanism through the network of 28 State Science & Technology Councils. State Science & Technology Councils Conclave intended to deliberate discussions on catalyzing the Science Technology and Innovation (STI) ecosystem at the state level through the network of State Science & Technology Councils.



Release of Compendium on Inventions protected through Patent Facilitation Program of DST by Hon'ble MP State Minister of S&T Shri Om Prakash Sakhlecha during State S&T Conclave.

VIGYANIKA – Science Literature Festival

Science, Technology and Innovation (STI) are crucial to addressing challenges that the country faces and advancing the nation's growth. The benefits of STI to usher in an 'Aatmanirbhar Bharat in the Amrit Kaal' can be optimally and effectively harnessed if the citizens of the country from all walks of life are appropriately engaged with scientific ideas and developments. This is a big challenge, especially in view of the vast expanse of the country, the huge population and the rich diversity that India is blessed with – languages, cultures, and traditions. 'Vigyanika – Science Literature Festival' aimed to deliberate on mechanisms to take science to every corner of the country through effective science literature disseminated through the multitudes of media channels available today.

As in its earlier editions, Vigyanika will deliberated on contemporary challenges to the creation of scientific literature and science communication. 'Vigyanika 2022 – Science Literature Festival' organized a rich fare of Keynote Lectures, Panel Discussions and Scientific Sessions interspersed with interactions with S&T authors, Vigyan Kavi Sammelan, Science Drama and competitions.

Dr. TV Venkateswaran, Scientist F, Vigyan Prasar, DST at Vigyanika Literature Science shares that we need more daily-based multimedia platforms to promote S&T for larger impact and change.





At IISF- 2022 two books of Vigyan Prasar and two of NISPER were released at Vigyanika Science Literature Festival at MANIT Bhopal.



Dr. Shekhar C. Mande, National President, Vibha_India at Vigyani-ka Science Literature Festival shares how India Scientists & Researchers rose up to the challenges and made technology available to the masses.



At Vigyanika, Dr N Kalaiselvi, Director General, CSIR, India stresses the importance of using native language as it is the most effective mode of communication for impact and development at grassroots level.



Valedictory Function IISF 2022

Delivering the Valedictory address at IISF in Bhopal, Union Minister for Agriculture and Farmers Welfare Shri Narendra Singh Tomar said, the energy and innovative power of the Youth will make India the Number One country in the World.

He said, India is a Country full of Youth power ready to do big and added that 52 percent of India's population is Young Now and it's right time to bug leaps in what Prime Minister Shri Narendra Modi rightly calls Amrit Kaal.

Shri Tomar said, the role of Science, Technology and Innovation can be seen in all spheres of life in India including in the Agriculture Sector. He said, farmers are now using technology in agricultural production and also for post harvest operations. He said, drone applications are gaining currency in Agri Sector and





newer experiments are waiting to happen.

In his address, Science and Technology Minister of Madhya Pradesh, Shri Om Prakash Sakhlecha said thar he is very happy to note that Deep Tech Startups are coming up very fast in India. He said, Startups are demonstrating use of Robot for sowing and cutting of crops and this indicates what kind of revolution is going to come in Agri Sector. He said apart from Mega Startups Expo, 1500 young scientist brainstormed on emerging technology in all areas including Biotechnology.

Secretary, Ministry of Science and Technology, Shri S Chandrasekhar in his address said that we will come up with better agenda next time. He said, Science has no boundaries and the India International Science Festival is fast emerging as a platform to deliberate on global challenges.

Shri Chandrasekhar said that IISF is happening at a time, when India has assumed the G-20 Presidency under Prime Minister Shri Narendra Modi, where we will be showcasing India's power, not only in Science and Technology, but in every sector to the World.

Chairman, ISRO, Dr S Somanath told the gathering thar we are celebrating Science to give light and way to the future generation for making pioneering contributions in Amrit Kaal.

Shri Somanath said, we have to be creative, innovative and do many firsts in the world to become a Scientific

Power. He expressed hope that India will become such a country by navigating the Great Scientific Ecosystem that everyone in the world will aspire to come and live here.

Dr. Sudhir Bhaduria, Secretary General, Vigyan Bharati said that the Vigyan Bharati is working with the Science Ministries and Science Department of universities and colleges in India to promote the modern scientific outlook and thinking for the benefit of the country and the entire humanity.

IISF Bhopal deliberated on 15 important event in four-days science festival like the Student Science Village where 2500 students participated and get expose to new technologies and innovations.

References:

- 1. Personal attendance
- 2. https://vigyanprasar.gov.in/iisf2022-newsletter/
- 3. https://www.scienceindiafest.org/



Prof Kaushal Prasad Mishra, Advisory of Biotech Express awarded at 108th Indian Science Congress

27 December 2022

The Indian Science Congress (ISC), being held from 3rd to 7th January 2022 at Nagpur would focus on scientific development in India under a feminine veil keeping in view the women empowerment and socio-political changing scenario.

The Theme of 108th Indian Science Congress therefore has been aptly chosen as "SCIENCE AND TECHNOLOGY for SUSTAINABLE DEVELOPMENT with WOMEN EMPOWERMENT".

The forthcoming ISC has been designed to celebrate the spirit of womanhood and their remarkable contribution in the field of Science and Technology. In sync with their natural gift to generate, women have stood out as a true harbinger and have led the foundation of a number of innovative and niche developments and discoveries. The Congress aims to address all the key issues that are obstacles to the growth of Women in the fields of Science & Technology.

As per the precedence, Prime Minister of India Narendra Modi would inaugurate the 108th Indian Science Congress on 3rd January 2023. Eminent scien-



tists, industry leaders, technocrats, policy makers and academicians would grace the occasion.

Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), one of the premier educational institutio central India, established in 1923 & hence celebrating centennial year of establishment, will be playing the of the 'host university' for ISC.

A key highlight of the event is the Pride of India (PoI)-Mega Science Exhibition that has emerged as a ur platform for organisations from both public and prvicate sectors to showcase their achievements in sci and technology.

Vigyan Jyot (Flame of Knowledge) remains lit at the venue of the Indian Science Congress PoI Expo fo duration of the Congress. Lakhs of students, dignitaries and general public visit Vigyan Jyot every year and an oath to spread the awareness of science.

A dedicated pavilion called the Hall of Pride will portray the life journey of unique personalities who created indelible mark not just in India but globally in the field of science and technology.

Established in 1914, Indian Science Congress Association (ISCA) is the premier Indian Science Commi organisation. For the last 107 years, ISCA has been bringing together has been bringing together the e scientific fraternity to discuss the key issues related to various streams of science.

Featured Biotech News

C-CAMP wins 3rd National Award from the Government of India



January 18, 2023

Centre for Cellular and Molecular Platforms (C-CAMP) has won the National Award at the prestigious National Startup Awards 2022 as an Ecosystem Enabler from Startup India and DPIIT, Ministry of Commerce and Industry, Government of India.

In a prize ceremony to mark the National Startup Day 2023 and Innovation Week 2023 in New Delhi on 16th January, C-CAMP CEO and Director, Dr. Taslimarif Saiyed received the award from Mr. Piyush Goyal, Minister of Commerce & Industry, Consumer Affairs & Food & Public Distribution and Textiles, Govt. of India and Leader of House in Rajya Sabha.

Accepting the award on behalf of C-CAMP team, Dr Saiyed said – "We are very proud to receive this recognition and thank Startup India and DPIIT for this honour. This win is a testament to C-CAMP's decade long effort in building a strong bio-innovation ecosystem in India. India has emerged as one of the world's largest and most dynamic startup ecosystems.

In the last decade, C-CAMP has built a portfolio of 350+ startups and innovators across 34 states and UTs in India supported by funding, incubation and advancement programs. It has invested up to INR 80+ Cr in these startups of which close to 100 have raised up to INR 2000+ Cr in follow-on funding at a cumulative valuation of over INR

6000+ Cr.

This is C-CAMP's third National award after the National Award from Department of Science & Technology, GoI (May 2022) and the Ministry of Skill Development and Entrepreneurship, Govt of India in 2017.

C-CAMP is an initiative supported by the Department of Biotechnology Govt of India and other govt agencies, is also a founding member of the Bangalore Life Science Cluster comprising of National Centre for Biological Sciences (NCBS), Institute for Stem Cell Science and Regenerative Medicine (InStem) and Tata Institute for Genetics and Society (TIGS).

CDRI scientist finds out a novel option to tackle Triple-Negative Breast Cancer



December 27, 2022

Dr Dipak Datta's research group at CSIR-CDRI has recently published an article in a peer reviewed international journal, Nature Communications 13, 7344 (2022), that uncovers new functions for epigenetic modulator EZH2 (Enhancer of Zeste homolog 2) in the spread (metastasis) of TNBC. (An epigenetic modulator regulates whether a gene will be expressed or not).

Using an inhibitor of EZH2, Tazemetostat, Dr Datta and team have demonstrated a new and interesting mechanism for EZH2 mediated gene upregulation that can dictate TNBC progression. In contrast to its classical role in suppressing gene expression, the team found that EZH2 can mediate the overexpression of specific

genes, promoting the spread of cancer from the breast to liver and spleen in animal models of TNBC. These findings suggest a rationale for targeting TNBC with EZH2 inhibitors.

The study has brought into limelight that TNBC spread, particularly from breast to liver and spleen is markedly regulated by functional hyperactivation of an epigenetic modulator EZH2 (Enhancer of zeste homolog 2). This EZH2 gene codes an enzyme, which participates in histone methylation resulting in chromatin condensation and transcriptional repression of other genes.

We show that EZH2 functional overexpression or histone trimeth-

ylation (H3K27me3) is robustly and selectively increased in case of human TNBC peritoneal metastasis. Surprisingly, instead of classical H3K27me3 mediated transcriptional repression, here, we discovered, it increases KRT14 or cytokeratin-14 gene expression that turns out to be one of the critical regulators of H3K27me3 mediated TNBC peritoneal metastasis.

Further, we put forward conclusive evidence that genetic loss of EZH2 or inhibition of enzymatic function of EZH2 (H3K27me3 mark) in tumor cells by inhibitors like the FDA approved drug Tazemetostat is effective in animal models to prevent TNBC peritoneal metastasis.

Department of MSME joins hands with BioAsia 2023



December 8, 2022

BioAsia has partnered with the Department of Micro Small and Medium Enterprises (MSME) to promote the MSME sector in the upcoming 20th edition of BioAsia – Asia's largest life-sciences and Health Tech forum and the annual flagship event of the Government of Telangana.

The annual BioAsia conference to be held between February 24 to 26, 2023 at Hyderabad has been a catalyst for 20 years in bringing together prominent dignitaries and delegates, leaders, entrepreneurs, and professionals from the life science and healthcare sector from around the world year on year.

The partnership with the Department

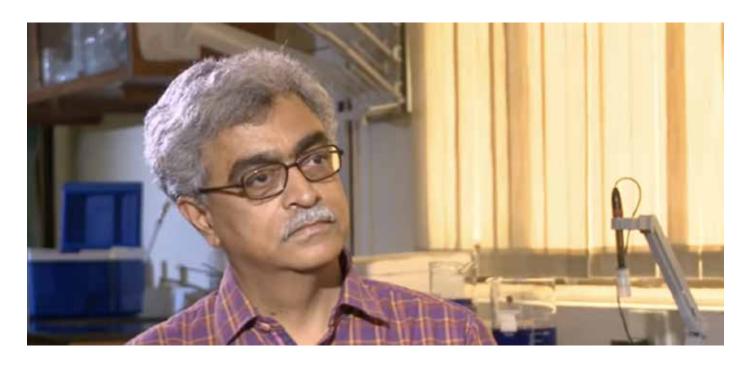
of MSME is expected to boost the growth of MSME organizations that play a significant role in strengthening the position of India in the global life sciences industry.

A dedicated MSME Pavilion has been proposed to be installed in the tradeshow with around 60 companies from the MSME sector covering Medical Devices, Pharmaceuticals, and allied industries. BioAsia 2023 will present a great opportunity for MSMEs to build key relationships, partnerships, and channels for extending businesses as well as effectively and collectively showcase India as the global life sciences destination. Through the Procurement & Market Support (PMS) -Market Access Initiatives of Di-MSME, the cost of participation for MSMEs are being subsidized upto 100%.

In this context, Mr. D. Chandra Sekhar, Additional Development Commissioner, MSME-DI, Hyderabad said, "The 20th celebratory edition of BioAsia 2023, with the theme Advancing for ONE: Shaping the next generation of humanized healthcare, is also expected to advance the growth opportunities for MSME units in India and benefit from its driving investments and global opportunities into the life sciences.

With this collaboration and participation in BioAsia 2023, we trust the MSME players will be immensely benefitted from its gained significant stature in healthcare industries across the globe."

Dr Ramesh Venkata Sonti is the new Director of ICGEB



January 2, 2023

Renowned plant scientist, Prof. Ramesh Venkata Sonti has joined the International Centre for Genetic Engineering and Biotechnology (IC-GEB) as the new Director on January 01, 2023. He succeeds Dr Dinakar M. Salunke who was at the helm for over six years.

Well known for his deep research in agriculture biotechnology, Dr Sonti's research has focused on understanding plant-pathogen interactions using, as a model, rice and the bacterial pathogen, Xanthomonas oryzae pv. oryzae (Xoo).

His work has led to the identification of novel Xoo virulence functions. Dr Sonti has led a team of scientists of CCMB and the Directorate of Rice Research, Hyderabad that together developed a rice variety called 'Improved Samba Mahsuri' which has been released for commercial cultivation. This variety is resistant to the serious bacterial blight disease that is caused by Xoo. He has been a Member of the International Organizing Committee for two International Conferences on bacterial blight of rice that have been held in Japan and China.

Dr Ramesh Sonti is a recipient of the SS Bhatnagar Prize in Biological Sciences and the National Bioscience Award for Career Development of the Department of Biotechnology. He is an elected Fellow of the National Academy of Sciences (India), Allahabad, Indian Academy of Sciences, Bangalore, National Academy of Agricultural Sciences, New Delhi and Andhra Pradesh Akademi of Sciences.

Hyderabad.

Dr Sonti earned his BSc degree from Andhra University and MSc and MPhil degrees from University of Hyderabad. His MPhil dissertation was under the guidance of Professor Arjula Reddy. He worked in the Department of Biology, University of Utah, USA (1983-90) where he obtained his PhD in bacterial genetics under the supervision of Professor John R Roth.

He worked as Postdoctoral Fellow (1991-93) in the Department of Biology, Massachusetts Institute of Technology under the supervision of Professor Ethan Signer. Since 1993, he has been working at the Centre for Cellular and Molecular Biology (CCMB), Hyderabad.

Govt aims to make Indian healthcare future-ready: Dr Jitendra Singh



December 31, 2022

Union Minister of State (Independent Charge) Science & Technology, Dr Jitendra Singh visited premier Kolkata institute founded in 1935, the Indian Institute of Chemical Biology (IICB) and urged the Director and senior scientists to carry out preventive healthcare research, with special focus on prevention of Metabolic Disorders like Type 2 Diabetes Mellitus in the young.

Minister emphasized that it is necessary that India's youth energy could be optimally channelized for nation building instead of letting go under-utilized on account of health issues.

Dr Jitendra Singh said that Healthcare has been one of the key focus areas of

the Modi government since 2014, and he has taken several measures in the last 8 and half years to make Indian Healthcare future ready.

Dr Singh underlined that there is a Paradigm Shift in approach as far Healthcare is concerned as the government is focusing on health as well as wellness, by eliminating the factors responsible for illness and making treatment of diseases inclusive.

Union Minister was happy to note that the Indian Institute of Chemical Biology (IICB) was established in 1935 as the first non-official centre in India for biomedical research and was included within the aegis of CSIR in 1956.

He said, the institute continues to exploit its unique strength in Chemical biology for understanding various diseases to find out therapeutic solutions and the Process chemistry for generics is one of the priority areas in addition to novel drug development of various diseases.

Dr Jitendra Singh said, CSIR-IICB today is engaged in research on diseases of national importance and biological problems of global interest, employing sophisticated state-of-the-art technology in keeping with the rapid and unprecedented momentum that life science research has gained globally over the last 50 years.

The scientific staff has expertise in a variety of areas including chemistry, biochemistry, cell biology, molecular biology, neurobiology and immunology which promotes productive interdisciplinary interaction.

Govt launches 'SMART' programme for ayurveda professionals to boost R&D

'SMART' PROGRAM LAUNCHED TO BOOST R&D IN AYURVEDA



January 04, 2023

The National Commission for Indian System of Medicine (NCISM) and the Central Council for Research in Ayurvedic Sciences (CCRAS), the two prominent institutions under the Ministry of Ayush, Government of India for regulating medical education and conducting scientific research respectively, have launched 'SMART' (Scope for Mainstreaming Ayurveda Research in Teaching Professionals) programme aimed to boost scientific research in priority healthcare research areas through ayurveda colleges and hospitals.

The programme was launched recent-

ly by Vaidya Jayant Deopujari, Chairman, NCISM and Prof. Rabinarayan Acharya, Director General, CCRAS in the presence of Prof. B. S. Prasad, President of Board of Ayurveda, NCISM and other senior officials.

While highlighting key points of 'SMART', Prof. Vaidya Rabinarayan Acharya, Director General, CCRAS said, "The proposed initiative is conceptualised with an objective to identify, support and promote innovative research ideas in healthcare including Osteoarthritis, Iron Deficiency Anaemia, Chronic Bronchitis, Dyslipidemia, Rheumatoid Arthritis, Obesity, Diabetes Mellitus, Psoriasis, Generalised Anxiety Disorder, Non-alcoholic fatty liver disease (NAFLD)".

He also added, "The eligible Ayurveda academic institutions may apply by 10 January, 2023. All details regarding contact information, eligibility criteria and application process has been shared to all recognised academic institutions and hospitals through NCISM".

Growth of deep tech startups will offer more jobs to PhDs: Prof Ajay Sood



04 January 2023

At the ongoing 108th Indian Science Congress (ISC) in Nagpur, from 3 to 7 January 2023, Principal Scientific Adviser to the Government of India, Professor Ajay K Sood laid emphasis on the need to push deep-tech startup sector in India.

"While India has emerged as the third largest ecosystem for startups globally and the deep tech startup landscape in India has seen rapid growth, there is still space to boost it up specifically in areas like consumer technology, automotive, media

and entertainment, agri-tech, energy utilities, and cyber security", said Prof Sood.

He also noted that India is among the top three nations in the world in terms of the number of PhDs.

"While the number of PhDs are increasing in India, the country's share in the top 1% of published research is less. India needs to focus on impactful science, and not just derivative science", he said.

He further said that PhDs need not continue in the academic space throughout their career. "Our mindset has been that if you have done PhD you can only become a professor. This is not a sustainable way. Further growth of the startup sector, particularly deep-tech, can provide numerous job opportunties to PhDs in the industry", said Prof Sood

Gufic Biosciences launches India's first indigenous Botulinum Toxin injection 'Zarbot'



December 30, 2022

Gufic Biosciences Limited has launched indigenously produced 'Zarbot' (Botulinum Toxin Type A) injection in India.

'Zarbot' was unveiled by Dr. Dirk Dressler, Dr. Balaram Singh and several other prominent Healthcare Practitioners of India in a well-attended event held in Mumbai. 'Zarbot' has been developed and manufactured in collaboration with USA-based Prime Bio.

One of the most important USPs of 'Zarbot' is that it has been manufactured using purified HALL strain and proprietary technology which results in thin film formulation and better

stability compared to other botulinum toxin brands.

Speaking on the occasion, Dr. Rajesh Lalchandani, Consultant Medical Director said, "Illustrating our continued commitment to bring out the best possible treatment for the people suffering from neurological deficits in India, we have launched Botulinum Toxin Type A injection 'Zarbot'. With its biological potency similar to international brands 'Zarbot' complies with European and British Pharmacopeial standards."

'Zarbot' is an effective option for treating certain neurological conditions which can be more challenging with conventional therapy. It comes in a unique pack with 10 ml Normal saline to improve compliance and can be stored at 2-8 °C for 36 months or 25 °C for 6 months before reconstitution and also stable up to 14 days at 2-8 °C after reconstitution and multiple withdrawal of injection solution from vial under aseptic precautions.

Gufic is well-recognised as one of the largest manufacturers of Lyophilized injections in India and its lyophilized product portfolio includes Antibiotic, Antifungal, Cardiac, Infertility, Antiviral and proton-pump inhibitor segments, among others. The products of Gufic Biosciences are supplied to all the major hospital chains and leading medical facilities.



IISER Thiruvananthapuram and JNCASR Bengaluru focus on chromosome stability research

20 December 2022

The Indian Institute of Science Education and Research Thiruvananthapuram (IISER TVM) and the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) Bengaluru recently concluded the 5th International Chromosome Stability Meeting 2022.

The 4-day long event recorded participation from around 170 scientists, graduate students, and postdoctoral fellows from Asia, Europe, the USA, and the UK to cover research involving many model systems and molecular approaches used to study chromosome stability.

Chromosome stability refers to an elaborate DNA damage repair and

recombination process that culminates with the accurate segregation of chromosomes in progeny during cell division. Errors in these processes are known to be associated with several diseases, such as cancer and congenital birth defects.

The objective of the meeting was to bring together established scientists and young investigators from India and abroad working on areas related to chromosome stability.

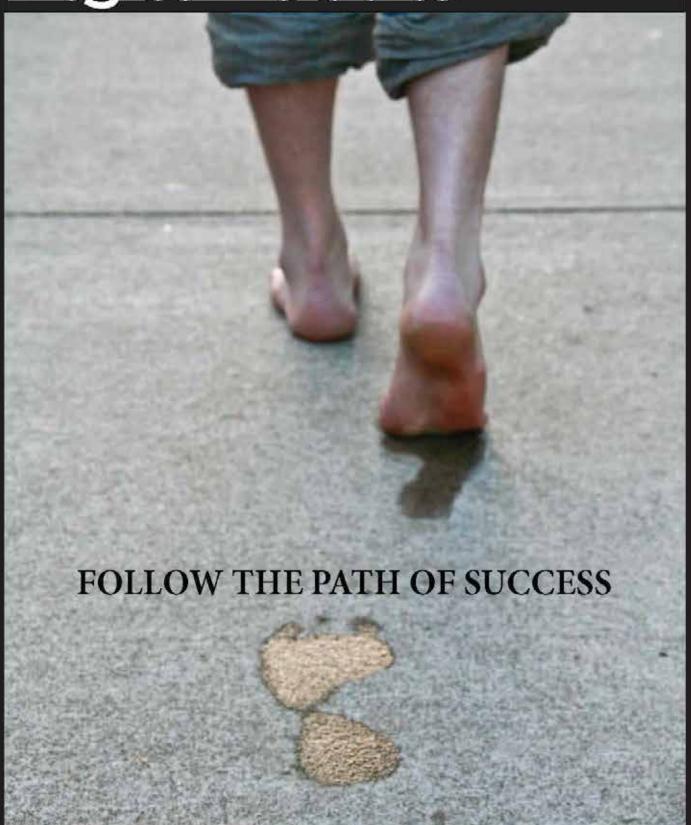
The last few years have seen the emergence of a substantial number of principal investigators in India whose laboratories are engaged in addressing problems in the area of chromosome stability. There are currently no major meetings in India focused on chromo-

some stability. The meeting on chromosome stability began as a series in 2012 to fill this lacuna.

Topics discussed in the meeting were highly relevant for understanding many genomic disorders, cancers, and ageing resulting from chromosome instability and DNA damage.

The International Chromosome Stability Meeting is well-known globally among scientists and trainees working in the field of chromosome stability and is expected to establish new scientific leaders in the area of chromosome stability in India. The meeting series has catalysed the growth of the scientific community working on chromosome stability in India.

ROTECH EXPRESS The gist of Life Science



Choose only

Postal Registration No. - UP/GBD-196/2014-16

BIQTESS EXPRESS