

CSIR IN MEDIA



CSIR

NEWS BULLETIN **26 TO 31 JANUARY 2023**



Union Minister Dr Jitendra Singh says, traditional millet diet is beneficial in diabetes, obesity and host of other disorders.

CSIR-NPL, CFTRI, NIIST, IHBT

30th January, 2023



Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh, who is also a known Diabetologist and a medical professional, said here today that traditional millets diet is beneficial in diabetes, obesity and host of other disorders. Millets are rich in essential vitamins, minerals, protein and fibre, and the lesser known fact is that all the dishes made from rice and wheat can also be made from millets.

Delivering the keynote address at an exclusive event titled “CSIR innovations on Millets” commemorating the International Year of Millets here today, Dr Jitendra Singh said, after Prime Minister Narendra Modi popularised Yoga globally, it's now time to do so for Millets. He said, 10 of the 12 known types of millets are grown in India, which consist of complex carbohydrates, slow to digest and hence low glycemic index beneficial for blood sugar levels.

The Minister recalled that the first International Day of Yoga was celebrated on 21st June 2015, after the IDY resolution of the United Nations General Assembly (UNGA) in December 2014 came at the initiative of Prime Minister Shri Narendra Modi and was passed

by unanimous consent. Now, The International Day of Yoga (IDY) is celebrated on 21st June every year worldwide. Similarly, spearheaded by Prime Minister Narendra Modi, the United Nations declared 2023 as the “International Year of Millets” at the initiative of the Indian Government last year and was backed by 72 other countries, the Minister informed.

Dr Jitendra Singh also inaugurated the Exhibition and released the Desktop Calendar 2023 on Millets at CSIR-NPL as part of the Celebrations of “International Year of Millets-2023” by CSIR Labs. The Minister informed that the Exhibition had a display of products and technologies developed in CSIR-CFTRI and also other CSIR labs and will showcase the capabilities of CSIR-CFTRI in Millet's R&D and reach out to various stakeholders on the institute's Millet-based Technologies at national Level.

Dr Jitendra Singh detailed how the Government's initiatives are going to revive consumption of millets, not just in India, but globally and increase the farmers' income. He also appreciated the efforts of CSIR, especially CSIR-CFTRI, Mysuru in developing technologies and machineries for processing, value added products from millets and also in the area of skill development.

Dr Jitendra Singh, who is himself a known Diabetologist and medical professional told the august gathering that Millet is a whole grain that is high in nutritional value and the cereal crop is nutritionally superior to wheat and rice due to its higher protein levels and a more balanced amino acid profile. The Minister informed that Millets are drought-resistant, with lower water requirements, and can be cultivated on poor soils and in hilly terrain and therefore could be produced and promoted in almost all Geographical Terrains & Regions of the World. They are also rich in carbohydrates, protein and minerals like calcium, potassium, magnesium, iron, manganese, and zinc, he added.

Dr Sridevi Annapurna Singh, Director, CSIR-CFTRI, Mysore welcomed the Union Minister, gathering and presented the key contributions of CSIR in the area of millet processing. She also emphasised the contributions of CFTRI, Mysuru, NIIST, Thiruvananthapuram and IHBT,

Palampur, the constituent laboratories of CSIR in this area. Dr Sridevi informed that CSIR-CFTRI is organising “One Week One Laboratory” programme in the second week of June 2023 to highlight CFTRI’s contribution with special emphasis on millets, among other achievements. This programme is the brainchild of Union Minister of Science and Technology, Dr Jitendra Singh, who is also the Vice-President of CSIR.

Dr. Venugopal Achanta, Director, CSIR-NPL, New Delhi was the Guest of Honour and he gave the welcome address. Representatives of food processing industries who have taken CSIR-CFTRI technologies, shared their experiences and thanked the organisation for the support. More than 600 participants from various Secretaries & Officials from Central Government Ministries, regulatory bodies, Directors of CSIR institutes, Scientists, students, industrial partners and students attended the programme.

Interaction with experts, scientists, industrial partners were the other key activities in the event. This varied group of small-seeded grasses called Millets include jowar (sorghum), ragi (finger millet), kodo (kodo millet), kutki (little-millet), kakun (foxtail - millet), sanwa (barnyard- millet), cheena (proso millet), kuttu (buckwheat) and chaulai (amaranth). It may be recalled that The Food and Agriculture Organization (FAO) of the United Nations, organised an opening ceremony for the International Year of Millets – 2023 (IYM2023) in Rome, Italy. An Indian delegation led by Sushri Shobha Karandlaje, Minister of State, Agriculture & Farmers Welfare and other senior officials were present at the opening ceremony. During the event, India’s ceremonial message by the Prime Minister Shri Narendra Modi was conveyed by Sushri Shobha Karandlaje.

It may also be noted that India produces over 170 lakh tonnes of millet, thus accounting for 80 per cent of Asia’s and 20 percent of global production.

Science Communication Connects Science with Society – Dr. N. Kalaiselvi, DG, CSIR

CSIR-NIScPR, AMPRI

29th January, 2023



CSIR-National Institute of Science Communication & Policy Research (CSIR-NIScPR) organised yet another successful edition of “Vigyanika - Science Literature Festival” at the 8th India International Science Festival (IISF), Bhopal, following on its earlier editions at Chennai, Lucknow, Kolkata, New Delhi and Goa.

Vigyanika event works like a bridge between science and society and this is one of the major goals of IISF. In this way, we can say that IISF is the extended form of Vigyanika. In its Bhopal edition, a spectrum of sessions organized which were focused on science communication in Indian languages, authors of popular science books, Vigyan Kavi Sammelan, paper presentations and so on. Science drama, Puppet show, Mentalism program and drawing competition were the other sources of attraction of Vigyanika event. In the Vigyanika event of IISF, around 50 experts and about 250 delegates comprising science communicators, academics, researchers, scientists, students, etc. participated.

Inaugural session and audience in the auditorium

Vigyanika event was inaugurated by Director General of CSIR and Secretary, DSIR, Dr. N. Kalaiselvi who appreciated that CSIR-NIScPR had successfully organised 5 earlier editions of

Vigyanika as part of IISF. Dr. Kalaiselvi said that science communication connects science with society. This was followed by a Keynote Speech by President, Vijnana Bharati & former Director General, CSIR Dr. Shekhar C. Mande, on the need to pursue disruptive science to find solutions. The Guest of Honour Prof. Sanjay Tiwari, Vice Chancellor, Bhoj Open University, Bhopal apart from his message on the significance of science communication, also appreciated CSIR-NIScPR's popular science magazines. The Vigyanika Theme Book and a book on collection of science poems (Samakaleen Hindi Vigyan Kavita Sanchayan) were released by the dignitaries. Shubhada Kapil moderated the inaugural session of Vigyanika.

The first session in the Vigyanika event had an engaging discussion on the importance of regional science communication, its status, challenges and scope. Regional science communicators in Tamil, Kannada, Marathi, Bengali, Urdu & Hindi were the panelists. The session was moderated by Dr. T. V. Venkateswaran, Scientist with Vigyan Prasar.

On first day, a parallel session was organised for school children. About 100 students from Bhopal Public School participated, in which a Mentalism show, a Science Puppetry show and a drawing competition on the theme “India@100 - My Country, My Vision” were organized successfully. Students were keen and they whole heartedly engaged in all these sessions.

Various sessions of Vigyanika

There were two scientific sessions in which 17 papers on science communication research & new initiatives were presented. The sessions were chaired by Prof. Sunil Kumar Gupta, Vice Chancellor, Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal and Shri Prabal Roy, Head, Centre for Science Communication, Rabindranath Tagore University, Bhopal. The Co-chairs were Dr. Saket Singh Kaurav, Head, Regional Science Centre, Bhopal, Dr. J. P. Shukla, Senior Principal Scientist, CSIR-AMPRI, Bhopal & Dr. Apoorva Pauranik, Neurosurgeon & science communicator, Indore.

The evening session on the first day featured a Science drama “Galileo”, which played to a packed audience. In this drama, the life and struggle of the Italian astronomer and

mathematician Galileo was performed by the theatre group. Scientific awareness is essential for the development of 'society' was the clear message of this drama. Shadow Cultural and Social Welfare Society, Bhopal performed this drama. Noted Film actor, TV & Theatre artist and poet, Neelesh Malviya introduced the Galileo drama. Dr. Manish Mohan Gore, Scientist, CSIR-NIScPR and Shweta Shrivastri, PhD scholar, CSIR-NIScPR compered this drama session.

A Science drama “Galileo” became the centre of attraction during Vigyanika event at IISF Bhopal

The second day began with the session “Meet the Authors”, featuring science authors like Dr. Archana Sharma from CERN, Geneva, Dr. P. A. Sabareesh, Pankaj Chaturvedi, Swati Tiwari, Pramod Bhargava, Amit Kumar, Niranjana Dev Bhardwaj and Dr. Meher Wan. The session was moderated by Shri Pallava Bagla, science communicator and science photo journalist. Authors of this session discussed the salient points of making and major take away of their books.

The next session was a Vigyan Kavi Sammelan Chaired by Dr. Santosh Chaubey, Chancellor, Rabindranath Tagore University, Bhopal and Co-chaired by Shri Neelesh Malviya, noted TV actor & poet. The session was held in front of a full audience in the more than 300 capacity auditorium. Dr. Shubhrata Mishra, Sarika Gharu, Shuchi Mishra, Sudhir Saxena, Vishal Muliya, Mohan Sagoriya, Om Prakash Yadav, Dr. Dinesh Chamola and Pankaj Prasoon were the lead poets of this session. Radha Gupta compered this session.

A glimpse of Vigyan Kavi Sammelan

The Valedictory Session was chaired by Dr. Santosh Chaubey, Chancellor, Rabindranath Tagore University, Bhopal with Guests of Honour Prof. K. G. Suresh, Vice Chancellor, Makhanlal Chaturvedi University of Journalism, Bhopal and Dr. C. M. Nautiyal, Program Consultant, Science Communication, Indian National Science Academy (INSA). Shri Hasan Jawaaid Khan, Chief Scientist, CSIR-NIScPR welcomed the guests and Dr. Manish Mohan Gore, Scientist, CSIR-NIScPR delivered the key points of the whole program of Vigyanika. Dr. Santosh Chaubey said that there is a need of human sentiments among science

communicators and scientific thinking and temperament in writers. Prof. K. G. Suresh pointed out the challenges present before the humanity like cancer & climate change and stressed the adoption of science communication and adoption of rational thinking by the common citizens to resolve these challenges. Prof. B. S. Balaji, Associate Professor, School of Biotechnology, JNU, New Delhi delivered a lecture on 'Educational Tools for the Divyang – Promise of a New Beginning'.

Dignitaries of the Valedictory session of Vigyanika [From L to R: Dr. Manish Mohan Gore, Dr. Santosh Chaubey, Prof. B.S. Balaji, Dr. C.M. Nautiyal, Hasan Jawaid Khan, Dr. Neel Sarovar Bhavesh & Prof. K.G. Suresh]

All the sessions of Vigyanika recorded appreciable attendance and the event also found coverage in the press and Doordarshan. The CSIR-NIScPR team did an excellent job along with the Vijnana Bharati coordinators and volunteers from Rabindranath Tagore University & CSIR-AMPRI, and help from Madhya Pradesh Council of Science & Technology (MPCST) in successfully executing the event. The venue of Vigyanika event was the Auditorium of the Mechanical Engineering Department, Maulana Azad National Institute of Technology (MANIT), Bhopal.

Glimpses of CSIR-NIScPR stall at Mega Expo, IISF Bhopal. (From Left to Right) Students at NIScPR stall and DG, CSIR Dr. N. Kalaiselvi along with the Director, CSIR-AMPRI.

CSIR-NIScPR also showcased its popular science magazines, books and journals in the Mega Science Expo pavilion at IISF Bhopal. Thousands of science lovers visited this stall of CSIR-NIScPR.

The Minister unveils the “Young Start-Up Conclave” at Kathua in J&K organised by CSIR, Ministry of Science and Technology

CSIR-IIIM

28th January, 2023



Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh today called for change of mindset to avail StartUp opportunities knocking at their door.

Speaking after inaugurating the “Young Start-Up Conclave” at Kathua in Jammu and Kashmir organised by CSIR, Ministry of Science and Technology, Dr Jitendra Singh said, the government job mind-set is proving an impediment to Start-Up culture, mainly in North India.

Referring to Four Success Stories of Youths, who narrated their experiences, including two B-Techs and one Mechanical Engineer, who quit their jobs for Start-Up Ventures, Dr Jitendra Singh pointed out that “Purple Revolution” spearheaded by him through CSIR became part of the Republic Day Parade Tableaux, thus earned countrywide recognition and popularity.

Dr Jitendra Singh pointed out that the ‘Purple Revolution’ originating from Jammu & Kashmir offers attractive Start-Up avenues and those who have entered the lavender sector are

making a fortune out of it. He said, it is important to take note of some of the exemplary instances of many young entrepreneurs who are seen quitting their lucrative jobs in the MNCs to establish their own Start-Ups, as these young entrepreneurs are now beginning to realise the possibility of greater fortunes in this.

The Minister also underlined that J&K has huge unexplored potential of Agri-tech Start-ups as the geography and climatic conditions here favour the cultivation of medicinal and aromatic plants.

Dr Jitendra Singh informed that the Biotech KISAN Hub has rejuvenated over 40 orchards till date in Jammu and Kashmir under rejuvenation of apple orchards, where a very innovative methodology has been used to transform the old orchards. The Minister promised full help by DBT and CSIR for setting up of Agritech Start-ups.

The Minister exhorted the Youth of Jammu and Kashmir not to miss the Start-Up Bus, which is playing a crucial role in India's Technological & Economic Journey to emerge as a Frontline Nation in the World.

Dr. Jitendra Singh said that the Start-Up ecosystem in India has gathered momentum since Prime Minister Narendra Modi gave the slogan of Start-Up India and Stand-Up India from the ramparts of the Red Fort on 15th August, 2015. He said, from 350 odd start-ups in 2014, the number swelled to 75,000 in August, 2022 and now stands at over 88,000 Start-Ups spread across 653 districts and generated more than Nine Lakh job opportunities in the country. The Minister said, India is also home to 107 Unicorns and 23 of them emerged in 2022 itself, a sign of India's rapid upward ride on STI (Science, Technology & Innovation) ladder.

The Minister pointed out that a new wave of Agri-tech Start-Ups has emerged in the country in the last few years and these Start-Ups are solving problems related to supply chain management, cooling and refrigeration, seed management and distribution, besides helping farmers to access a wider range of markets.

In the next 25 years of Amrti-Kal, said Dr Jitendra Singh, Jammu & Kashmir and several hill territories as well as the Himalayan States are going to make a significant value addition to build India's future economy because these are the territories whose resources have remained under-utilised in the past. With Prime Minister Narendra Modi giving a focussed attention to these areas, they are going to play a pivotal role in placing India on the world pedestal by 2047, he said.

Earlier, Dr. Singh also took round of the StartUp kiosks set up by the entrepreneurs of J&K, Himachal Pradesh, Punjab and other parts of the country besides the models setup by the students from different educational institutions of Kathua.

DDC Vice Chairman, Sh. Raghunandan Singh Babloo, Director CSIR-IIIM, Jammu Dr. D. Srinivasa Reddy, DC Kathua, Sh. Rahul Pandey, SSP Kathua, Sh. Shivdeep Singh Jamwal, Principal GDC Kathua, Sh. Somnesh Jasrotia were present in the conclave.

The conclave witnessed the presence of renowned entrepreneurs, industry leaders, academicians, representatives of leading venture capital firms, incubators and accelerators.

During the conclave, the local progressive farmers also shared their success stories and experience and expressed gratitude to CSIR for making it possible through proper hand holding and considerable support in their endeavors.

Kisan Mela - co-cultivate traditional, medicinal plants together: Minister

CSIR-CIMAP

31st January, 2023

The minister was appreciating the efforts being made by CSIR-CIMAP towards the economic uplift of farmers by developing new varieties, value addition and processing facilities related to medicinal and aromatic plants. “Medicinal and aromatic plants should be co-cultivated with traditional crops to enhance farmers’ income. This will make farmers self-reliant and the U.P.



government will extend all assistance in making India self-reliant in food crops,” said Surya Pratap Shahi, cabinet minister, finance, agriculture, agricultural education and agricultural research on Tuesday.

He was appreciating the efforts being made by CSIR-CIMAP towards the economic uplift of farmers by developing new varieties, value addition and processing facilities related to medicinal and aromatic plants.

Shahi was speaking as a chief guest while inaugurating a Kisan Mela organised by CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP) organised at its headquarters in Lucknow under CSIR’s ‘One Week One Laboratory’ programme.

On this occasion, Shahi planted a sandalwood plant and also inaugurated the stalls put up by eight CSIR laboratories along with Anil Kumar Yadav, director, Council of Science and Technology, UP and G N Singh, advisor, chief minister. “The U.P. government has collaborated with CSIR laboratories to implement technologies developed for various districts under One District One Product scheme,” said GN Singh.

The main attraction of this Kisan Mela was market information of medicinal and aromatic plants, sale of advanced plant material and publications, display of drones and advanced varieties, live demonstration of distillation units.

In the Mela, 2,000 kg of planting material was provided to 3,000 farmers and industry representatives from different states of the country.

Kisan Mela souvenir book 'Aus Gyanya', UV protection herbal product CIM-Kayakawach, an agriculture technical handbook of alternative cultivation of mentha and QR code for information on advanced varieties developed by CIMAP were also released during the occasion.

WIM-CO₂ED Workshop Cum Industry Meet At CSIR-IMMT Bhubaneswar

CSIR-IMMT, NEERI

28th January, 2023

CSIR-IMMT has conducted WIM-CO₂ED workshop cum industry meet held on 25th January 2023. This workshop aimed at enabling sustainable development of indigenous electrolyze for converting CO₂ to value added chemicals namely formic acid and syngas, which can be utilized further for various industrial applications.

It was organized under the aegis of Ministry of Steel & CSIR Mission on CCUS program. During workshop the participants deliberated on potential of recycling CO₂, development of CO₂electrolyser along with catalyst manufacturing at industrial scale and associated business opportunities.

Prof. Suddhasatwa Basu, director CSIR-IMMT and PI of this Project, shared the progress and highlighted the capability of this technology for achieving Net Zero Emission along with CO₂ utilization and value generation to the participating industries.

Dr Mukesh Kumar, Senior Advisor, Jindal Steel and Power Group appreciated on achieving the project target and enlightened the other panelist with significance of the work. Dr. Mukesh further advised to reorient the development towards production of Syngas in alignment with emerging demand of alternative reductants for the steel industries, which will help in reduction of the overall carbon foot-print of the industry.

Dr. Amit Chatterjee, Chief R&D Officer, Vedanta Co Pvt. Ltd. remarked that in backdrop of achieving sustainable goal this technology can prove to be truly disruptive. Dr. Nitin K. Labhsetwar, Chief Scientist, CSIR NEERI pointed out that the development of this technology is challenging and commands lot of industry support for indigenization. Mr. Paramjeet Singh, Addl industrial advisor ministry of steel also expressed his appreciation for development and approved of the roadmap of the electrolyses development at CSIR-IMMT.

Dr. D P Chakraborty, Chief, Iron Making Technology Group, Process Technology, Tata Steel appreciated the significance of this project for steel industry. Further, Dr. Chakraborty remarked if the CO₂ can be captured techno economically CO₂Electrolyser will become a step further in converting it to valuable products.

Dr. Ashok Sahu, Head SPBD, CSIR-IMMT remarked that CSIR will like to take up the scale-up work with adequate Industry input and collaboration.

Dr Mamata Mohapatra presented the Technical aspects of the CO₂Electrolyser and technology demonstration was done by her and Dr. P Senthil Kumar, Research Associate. Dr. Abdul Rauf Sheikh, Pr. Scientist, Ms. Barsha Marandi, Sr. Scientist and Ms. Pooja Sahu, Sr. Scientist discussed to understand engineering aspects for scaling up of the CO₂Electrolyser. This event concluded with promise of developing indigenous commercial electrolyze technology for successful utilization of CO₂ by the relevant industries.



Please Follow/Subscribe CSIR Social Media Handles



[CSIR INDIA](https://www.youtube.com/CSIRINDIA)



[CSIR_IND](https://twitter.com/CSIR_IND)



[CSIR India](https://www.facebook.com/CSIRIndia)



[CSIR India](https://www.linkedin.com/company/CSIRIndia)



[csirindia](https://www.instagram.com/csirindia)