CSIR IN MEDIA

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Compiled by Science Communication and Dissemination Directorate (SCDD), CSIR, Anusandhan Bhawan, New Delhi

Dr Jitendra inaugurates 'Tech Neev@75', interacts with successful Start-Ups

CSIR

15th November, 2021

NEW DELHI, Nov 15 : 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 inaugurated "Tech NEEV/ नींव @75" as part of Azadi ka Amrit Mahotsav and interacted with successful Start-Ups, including those from the tribal community to mark the occasion of Janjatiya Gaurav Diwas. Those who interacted with the Minister included groups from Jammu, Tamil Nadu Himachal Pradesh, Orissa and other parts of the country.

While calling upon successful Start-Ups to share their experience with others and inspire others also, Dr Jitendra Singh reiterated India's rising trajectory in the Global Innovation Index (GII). He said, despite the crippling effects of COVID-19, improvement in Global Innovation Index to 46 consolidates India's place among most Innovative Economies with growing investments in innovation, scientific output and expenditures in Research and Development (R&D).

Ever since Narendra Modi came to power in 2014, said the Minister, India has been on a rising trajectory in the Global Innovation Index (GII) as it improved its ranking from 81 in 2015 to 46 in 2021. He said, the Scientific Departments like the Department of Space, the Department of Atomic Energy, the Department of Science & Technology and the Department of Biotechnology have played a pivotal role in improving India's global ranking.

Dr Jitendra Singh said that "Tech NEEV/ नीव @75" is a year-long celebration highlighting the impact of Science Technology Innovation (STI) in empowering community for creating equitable inclusive economic growth. The 75 hour programme includes experience sharing of beneficiaries, community change leaders, societal changemakers conclave and round table discussions by various stakeholders apart from compilation of 75 impactful stories on India's progress towards Atma Nirbhar Bharat.

The Minister said, on a broader front, "Tech NEEV/नीव @75" should lead to opportunities for land to lab research and building synergies with traditional, local and indigenous knowledge leading to new scientific developments that contribute to building resilient communities. He said, "Tech NEEV/नीव @75" is an appropriate and timely initiative of the Ministry of Science & Technology and Ministry of Earth Sciences to showcase the strong foundation laid in the community for adoption of STI for better livelihood outcomes across the Country.

Referring to the Prime Minister's Slogan of New India "Jai Jawan, Jai Kisan, Jai Vigyan, Jai Anusandhan", Dr Jitendra Singh said, it reverberates the importance of Science and Technology in transforming the life of the poorest of the poor and developing affordable technologies. He said, the Speed, Scale and Spectrum of Transformation during the last seven years has placed India among the world's fastest growing large economy.

Underlining the theme of "Vocal for Local" Dr Jitendra Singh said, while Science is universal, technology must be local for providing solutions relevant to local needs and conditions for addressing problems of affordable healthcare, housing, clean air, water and energy, agricultural productivity and food processing etc for Improved Quality of Life and Ease of Living for common man. He said, there is an urgent need for building the capacities and capabilities of the community in harnessing the potential of Science, Technology and Innovation for sustainable development.

Published in:
Daily Excelsior

Skill development training begins in Dimapur

CSIR-CFRTI

15th November, 2021

Skill development training programme on value addition on fruits, vegetables and spices processing, organised by CSIR-Central Food Technological Research Institute (CFTRI), Mysuru in collaboration with Agricultural and Processed Food Products Export Development Authority (APEDA) was launched on November 15 at Nagaland Tool Room and Training Centre (NTTC).

Addressing the gathering as chief guest, agricultural production commissioner (APC), Y Kikheto Sema said that although Nagaland was the second oldest state in NE, the state was not able to concentrate much on the socio-economic development as leaders were focused on how to maintain law and order in the state.

He however added that by the grace of God and support and initiative rendered by citizens, Churches, organisations and leaders, there was now peace in the land for more than a decade. In this regard, Kikheto urged the gathering to take full advantage of it and to head towards bringing changes in the state.

Speaking on citizens of the state engaged in agricultural production for their livelihood, the APC informed that about 70% of the state's population lived in rural areas, engaged in agri and allied activities. Out of the 70%, he informed that 73% of farmers were engaged in jhum and shifting cultivation, while only 27% were practicing wet terracing cultivation.

While pointing out that they should not break away from traditional way of cultivation, Kikheto also said that farmers should not only depend on jhum and shifting cultivation but also focus on other value-added cultivation.

Agri and allied consisting of nine departments should come together to learn from each other and to boost production, he maintained. APC also briefed on the importance of post-harvest management and requested the trainers to provide proper training on it.

Acknowledging the trainees, he said that they had taken up the right decision and urged the participants to take full advantage of the training.

Delivering a short speech, programme coordinator, chief scientist, CSIR-CFTRI, Mysuru, Dr. Ng. Iboyaima Singh informed that the main objective of the training programme was to turn participants into entrepreneurs.

He stressed on the importance of agricultural production as a source of income for Nagas and the North East.

Short messages were also delivered by joint director & HoO, MSME development institute, Taliwati Longchar, assistant general manager, APEDA, Guwahati, Sunita Rai Bharali and principal, NTTC, Petechtuo Miasalhou as guest of honours.

Published in:
Nagaland Post

Drones Successfully Deliver COVID-19 Vaccine Doses in a Remote Village in Karnataka

CSIR-NAL

14th November, 2021

On Saturday, an indigenous, medium class octacopter developed by the state-run National Aerospace Laboratories (NAL) successfully delivered COVID-19 vaccine doses in a remote village in Karnataka, covering an aerial distance of 7 km in about 10 minutes. NAL is an arm of the Council of Scientific and Industrial Research (CSIR), funded by the Union Ministry of Science and Technology. In September, the Civil Aviation Ministry granted conditional permission to CSIR-NAL to conduct beyond visual line of sight (BVLOS) flight trials of unmanned aerial vehicles (UAV).

On Saturday, the CSIR-NAL's octacopter successfully delivered 50 vials of the COVID-19 vaccine along with syringes in a special container from the Chandapura Primary Health Centre (PHC) to the Haragadde PHC.

The octacopter took off at 9.43 a.m. from Chandapura PHC carrying COVID vaccine doses which they delivered to the Haragadde PHC at 9.53 a.m. The octacopter flew at an altitude of 300m AGL at 10 metres/sec and covered an aerial distance of about 7 km in about 10 minutes.

After delivery of vaccine doses at Haragadde, the octacopter returned to the Chandapura PHC. The entire mission covered a distance of about 14 km in 20 minutes, including the delivery of vaccine doses. "The octacopter for the delivery of vaccines is a need of the hour for the country," P.V. Satyanaraya Murthy, Head UAV, CSIR-NAL, said in a statement.

It is perfectly designed "for a much deeper penetration of vaccines in the remote areas", he added. Moreover, Murthy said that the NAL "octacopter is easy to operate by unskilled operators".

He also noted that NAL has already tied up with private firms for drone manufacturing and offering operational services.

The octacopter developed by NAL can be used for various BVLOS applications for last-mile delivery like medicines, vaccines, food, postal packets, human organs etc.

It is also integrated with a powerful onboard embedded computer and latest generation sensors for versatile applications like agricultural pesticide spraying, crop monitoring, mining survey, magnetic geo survey mapping etc.

The UAV is made out of a lightweight carbon fibre foldable structure for ease of transportation and has unique features like autonomous guidance through dual redundant microelectromechanical systems (MEMS) based digital autopilot with advanced flight instrumentation systems.

It can fly at an operational altitude of 500m AGL and the maximum flying speed of 36 kmph and can carry a payload of 15 kg with a hovering endurance of 40 minutes.

Published in:
Weather

CSIR-IMMT

14th November, 2021

सीएसआईआर-आईएमएमटी के शोधकर्ता दुनिया के शीर्ष 2% सबसे प्रभावशाली वैज्ञानिकों की सूची में

Prof. S. Basu
Director, CSIR-IMMT
RANK 1022
(Energy)

Dr. L. D. Besra
Chief Scientist
RANK 4442
(Materials)

उपलब्धि

- प्रो. सुधासत्व बसु निदेशक, डॉ एलडी बेसरा भी शामिल

■ नवभारत ब्यूरो | भुवनेश्वर.
www.navabharat.news

स्टैनफोर्ड विश्वविद्यालय के शिक्षाविदों द्वारा किए गए एक हालिया शोध ने एक व्यापक सूची प्रकाशित की, जिसने स्कोपस प्रकाशन प्रभाव के आधार पर दुनिया भर में शीर्ष 2 प्रतिशत सबसे प्रभावशाली वैज्ञानिकों की पहचान की. सीएसआईआर-खनिज और सामग्री प्रौद्योगिकी संस्थान, भुवनेश्वर से संबद्ध आठ वैज्ञानिकों ने एल्सेवियर द्वारा प्रकाशित विषयवार विश्लेषण के आधार पर शीर्ष दो प्रतिशत वैज्ञानिकों की विश्व रैंकिंग में अपना स्थान पाया है.प्रो. सुधासत्व बसु निदेशक, डॉ एलडी बेसरा मुख्य वैज्ञानिक, डॉ. पियाली भंज, डॉ. बिमल पी सिंह एमेरिटस वैज्ञानिक और सीएसआईआर-आईएमएमटी से सेवानिवृत्त मुख्य वैज्ञानिक डॉ. बिस्वेसर दास, डॉ. एस.बी कानूनगो, डॉ. एस. आनंद, डॉ. कादंबिनी सारंगी को क्रमशः ऊर्जा, सामग्री, कार्बनिक रसायन विज्ञान, औषधीय और जैव-आणविक रसायन विज्ञान, खनन और धातु विज्ञान के विषय क्षेत्रों में हैं.

Published in:
Navabharat

CSIR-IMMT

14th November, 2021

IMMT scientists shine: Eight scientists of CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, have found a place in the list of world's top 2% scientists published by the Stanford University as per their subjects.

Published in:
Times Of India

CSIR-CIMAP

14th November, 2021

मुलेठी की जड़ से हो सकेगा मधुमेह का इलाज

सीमैप ने तैयार की मधुमेह नियंत्रित करने की दवा लंबे शोध के बाद मिली सफलता

रविवार विशेष

विश्व मधुमेह दिवस (14 नवंबर)

हमारी सेवा • लखनऊ

मीठी मुलेठी मधुमेह का इलाज कर सकेगी। जी हां, केंद्रीय औषधि एवं सगंध पौधा संस्थान (सीमैप) ने मुलेठी की जड़ में मिलने वाले एक तत्व से इसकी असरकारक दवा बनाई है। यह दवा मुलेठी की जड़ों में मिलने वाले 'आइसोलिक्विरिटिजेनिन' से बनाई गई है। खास बात यह है कि इसे फाइटो फार्मास्युटिकल्स ड्रग की श्रेणी में बनाया गया है, जिसे वैश्विक स्तर के मानकों पर जांच कर मान्यता मिलती है।

मिले एंटी डायबिटिक गुण: वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (सीएसआइआर) की प्रयोगशाला सीमैप के प्रधान विज्ञानी डा. ए पी यादव ने बताया कि आइसोलिक्विरिटिजेनिन पर शोध में हमने मधुमेह विरोधी (एंटी डायबिटिक) गुण पाए थे। इस शोध को संस्थान ने कुछ समय पहले अंतरराष्ट्रीय शोध पत्र 'फाइटोमेडिसिन' में प्रकाशित किया था। जिसके बाद फाइटो फार्मास्युटिकल मिशन के तहत उन्हें यह दवा बनाने की अनुमति मिली। डा. यादव ने बताया कि इसका पहला ट्रायल ट्रांसजेनिक चूहों पर किया गया है। इसमें 90 दिनों तक उन्हें यह दवा खिलाई गई है। 14 से 28 दिनों में इस दवा के बेहतर परिणाम नजर आए हैं।

नहीं होगा कोई दुष्प्रभाव: इस दवा की सबसे अच्छी बात यह है कि इसका कोई दुष्प्रभाव नहीं होता। उन्होंने बताया कि 'आइसोलिक्विरिटिजेनिन' के अब तक मुलेठी की जड़ों में ही पाए जाने की पुष्टि हुई है। अन्य पौधों में इसको ढूंढने की प्रक्रिया जारी है। सीएसआइआर की प्रयोगशाला जब भी किसी नई तकनीक या दवा इजाद करती है तो उसे फार्मा उद्योग को सौंपा जाता है। जिससे उसका उत्पादन वृहद स्तर पर हो सके और यह ज्यादा से ज्यादा लोगों तक पहुंच सके। शोध के प्रथम चरण में चूहों पर किए गए रिसर्च में संस्थान ने पहले ही प्रयास में सफलता पाई है। अब इसके क्लीनिकल ट्रायल की तैयारी शुरू हो गई है, जिसके लिए आवश्यक कार्यवाही जारी है। पेटेंट की प्रक्रिया जारी है। आशा है कि इस ड्रग के बाजार में उतरने के बाद मधुमेह रोगियों को राहत मिलेगी।

मुलेठी की जड़ से बनी मधुमेह की दवा का पहला ट्रायल सफल रहा है • सौ. सीमैप

पहले भी बनाई थी सफल दवा

डा. ए पी यादव

इसके पहले सीमैप ने एबीआरआइ के साथ मिलकर मधुमेह की आयुर्वेदिक दवा बीजीआर-34 बनाई थी। दवा काफी सफल है। डा. ए पी यादव के अनुसार, नई दवा सीमैप के अकेले प्रयास से बनी मधुमेह की पहली दवा होगी। यह शोध का सुफल है।

इस खबर को विस्तार से पढ़ने के लिए स्कैन करें

Published in:

Dainik Jagran

CSIR-IMMT Researchers in the list of top 2% Most Influential Scientists Worldwide

CSIR-IMMT

13th November, 2021

Bhubaneswar : A recent research performed by academics from Stanford University published a comprehensive list that identified the top 2% most influential scientists worldwide based on the Scopus publications impact.

Eight scientists affiliated to CSIR-Institute of Minerals and Materials Technology, Bhubaneswar have found their place in the world ranking of top two per cent scientists on the basis of a subject-wise analysis which has been published by Elsevier.

The recognition bestowed on the Scientists are Prof. Suddhasatwa Basu, Director, Dr. L. D. Besra, Chief Scientist, Dr. Piyali Bhanja, Ramanujan Fellow, Dr. Bimal P. Singh, Emeritus Scientist, and Chief Scientists retired from CSIR-IMMT are Dr. Biswesar Das, Dr. S.B. Kanungo, Dr. S. Anand, Dr. Kadambini Sarangi in the subject areas of Energy, Materials, Organic Chemistry, Medicinal & Biomolecular Chemistry, Mining and Metallurgy respectively.

Published in:

India Education Diary

IIT Roorkee organizes the 1st L.R. Kadiyali Memorial Lecture on Road Safety Management

CSIR-CRRI 13th November, 2021

Roorkee: Centre for Transportation Systems of the Indian Institute of Technology Roorkee organized the 1st Dr. L.R. Kadiyali Memorial Lecture on 12th November 2021. Distinguished Prof. P.K. Sikdar, Advisor, International Road Federation (India Chapter); President, ICT Pvt Ltd.; Former Director, Central Road Research Institute (CSIR-CRRI), New Delhi, delivered the lecture on 'Road Safety Management – A National Priority.'

The Lecture was attended by Prof Manoranjan Parida, Deputy Director, IIT Roorkee; Prof Durga Toshniwal, Head – Centre for Transportation Systems (CTRANS); Prof B R Gurjar; Prof S N Rangnekar; Prof U K Roy; Prof S Sadhukhan, and other faculty members along with M.Tech and PhD students of IIT Roorkee and various personalities from academia.

The lecture included topics related to how India is having the dubious distinction in the world with the highest road fatalities in a year, which is nearly 11% of all road deaths in the world, Road safety management is the first and fundamental pillar of the global plan for improving road safety performance by systematic and planned approach, and the UN General Assembly has approved the Second Decade of Action to reduce the global road fatalities and serious injuries by 50% by 2030, aligning the target with sustainable development goals.

Speaking during the lecture, Prof. P. K. Sikdar said, "Those countries, which have been able to show positive results in road safety outcomes, have managed it by a structured and multi-sectoral action plan implemented under strict guidelines and a highly coordinated format. No independent and isolated action has ever produced sustainable results in road safety improvement."

"Globally proven and accepted 'safe system approach' can provide a comprehensive and logical action for deriving maximum benefit. Of course, to have such a framework implemented in a

coordinated way, the institutional management role must be derived from the management capacity by focusing actions on multiple fronts as well as on targeted results", added Prof. Sikdar.

Speaking about India's efforts to address this issue, Prof. Sikdar who is also an expert for research and R&D management for Road and Road Transport Sector including highway planning and management for more than four decades, said, "A road safety management framework has already been developed, which identifies effective ways and elements of management that are crucial for improving road safety performance in a country or region. Thus, safety is produced just like any other goods and services and a management system is required at three levels: the institutional management responsible to plan and design interventions, which in turn produce the desired results."

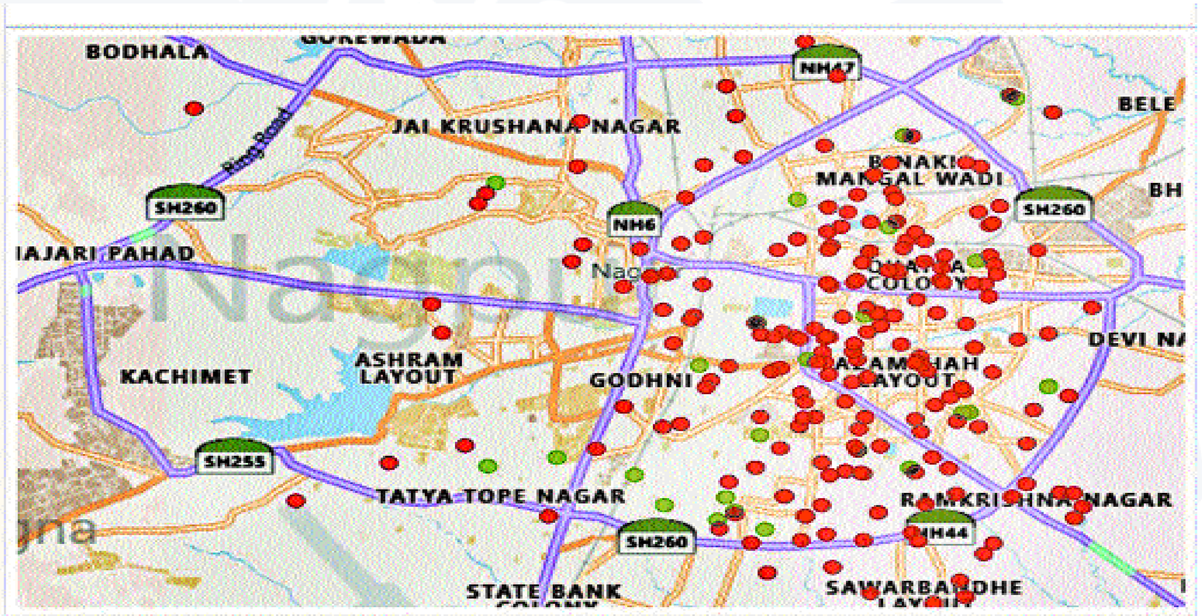
Prof. M. Parida, Deputy Director, IIT Roorkee, expressed his gratitude towards Prof. P.K. Sikdar."The ideas shared by Prof. Sikdar not only resonate with the belief behind Dr. L. R. Kadiyali Memorial Lecture Series but also give a concept for the future programs for Road Safety Management in India. It is time for the country to seriously focus on the adoption of advanced technologies and multidimensional approaches to mitigate road accidents, he added.

Published in:
India Education Diary

This Diwali, noise pollution in city was higher than that in last 2 yrs: NEERI

CSIR-NEERI

13th November, 2021



Noise monitoring by CSIR-National Environmental Engineering Research Institute (NEERI) during this Diwali, by sourcing the data from citizens, has revealed that noise pollution in Nagpur city was higher than that in last two years. Satish Lokhande, CSIR-NEERI Noise Expert and Senior Technical Officer, launched a campaign for noise monitoring across Nagpur city. An appeal was made to the citizens of Nagpur to volunteer and record noise levels with the help of the Android app 'Noise Tracker' developed by Lokhande to report noise pollution status of the city. NEERI received an overwhelming response to this call.

A careful analysis and evaluation of the data received revealed that this Diwali, the overall noise pollution of Nagpur city was much higher than that in the last two years. According to Lokhande, "As many as 50 per cent of the noise readings were found between 70 dB and 89 dB, while 29 per cent were between 60 dB and 70 dB, and 21 per cent were below 60 dB. In the city, 46 highly polluted locations had noise levels between 75 dB and 80 dB, whereas 16 areas were severely affected with above 80 dB noise levels. Zone–wise data reveals that Hanuman Nagar, Nehru Nagar, Satranjipura, and Ashinagar zones had critical noise levels above 80 dB."

As per the data analysed by NEERI, 13 locations in Hanuman Nagar Zone had noise pollution levels above 75 dB. Raghuji Nagar, Bhagwan Nagar, Rameshwari, and Manewada in Hanuman Nagar Zone were the 'most noisy places' having pollution above 80 dB. Nehru Nagar Zone had 10 locations with noise pollution above 75 dB, but Nandanvan, Ramna Maruti, Narsala, Dighori, Senapati Nagar had pollution above 80 dB. As many as six locations in Satranjipura

and Ashinagar zones had noise pollution above 75 dB. Tandapeth, Panchaoli, Itwari, and Hansapuri in Satranjipura Zone, and Bezonbagh and Vaishali Nagar in Ashinagar Zone were among the 'most noisy places' with noise pollution above 80 dB.

Though the NEERI report does not specify the names of locations, it does mention that Laxmi Nagar Zone had four locations with noise pollution above 75 dB. Lakadganj and Mangalwari had three such locations each, and Dhantoli Zone had one such location. As per report compiled by Lokhande, Dharampeth and Gandhibagh Zones did not have any location with noise pollution above 75 dB.

Bursting of firecrackers causes noise and air pollution and invariably affects the health of citizens. NEERI has recently published a paper 'Evaluation and analysis of firecrackers noise: Measurement Uncertainty, legal noise regulations and noise-induced hearing loss' in a reputed International journal discussing all related issues, noise pollution. Ahead of Diwali, the Supreme Court had prohibited manufacture, use, and sale of crackers except green ones. Accordingly, States and Union Territories had framed guidelines for use, sale, and purchase of firecrackers. Consequently, Nagpur district administration allowed bursting of firecrackers only for two hours -- between 8 pm and 10 pm. Central Pollution Control Board set the permissible noise limit of 55 dB up to 10 pm, and 45 dB post 10 pm for residential areas.

Nagpurians of all age-groups from different parts of the city joined NEERI campaign. With volunteers' contribution in noise monitoring and sharing of recorded data, for the first time, NEERI could report noise pollution status of the entire city comprehensively. "We received 676 data feeds from various locations all across Nagpur district," said Satish Lokhande. He thanked all volunteers for participation in noise monitoring campaign. He also thanked students of Kamla Nehru Mahavidyalaya, Sakkardara for their active participation, and young researchers at NEERI Vinit Kala and Mohindra Jain for jointly co-ordinating the activity from the front.

Published in:
The Hitavada

CSIR-IMMT Organise Skill Development program for farmers on biochar production

CSIR-IMMT

12th November, 2021

Bhubaneswar: Under the aegis of Azadi Ka Amrit Mahotsav celebration, one day on-field skill development program on "Basics and Applied Skills for Biochar Production" was organised today by Environment & Sustainability department, CSIR-Institute of Minerals and Materials Technology, Bhubaneswar.

Inaugurating the program Dr. Bhgyadhar Bhoi, Acting Director, CSIR-IMMT highlighted the importance of the on-field skill development initiative. Dr. A K Sahoo, Chief Scientist, Dr. D S Rao, Head, HRD, Dr. S Pradhan and Dr. N K Dhal, Head, E & S Department addressed the participants.

Dr. Manish Kumar, Principal Scientist, E & S Department demonstrated trench and rotatable kiln method of biochar production to the farmers.

Elaborating about this programme Dr. Manish Kumar said, “Boichar is inspired by ancient cultivation practice. It is mainly suitable for degraded, acidic and sandy soil. Its application can improve pH, water holding capacity, organic carbon, nutrients availability, crop growth and productivity in the soil. Furthermore, biochar production and soil application prevent and reduces environmental pollution”.

The training program elaborated about agro-residues, processing of biomass residues, size and design of kiln, pyrolysis process, biochar products & their use in agriculture/soil.

Utkalika Samiti, an NGO from Jajpur associated for the skill development program. About 25 progressive farmers from Jajpur district of Odisha were the trainees of the skill development program.

Published in:
Orissa Diary

Nutrify Today launches nutraceuticals academy towards elevating skill sets for industry growth

CSIR-CCMB, IIIM

12th November, 2021

Nutrify Today recently launched the Nutrify Today Academy (https://academy.nutrifytoday.com/) aimed at elevating skill sets for working executives in the nutraceuticals category to stay in sync with the industry's growth. The Nutrify Today Academy, with dual bases in Mumbai and Bangalore, India, will initially focus on India and Asia before expanding to other key global nutraceutical markets through an online curriculum. Several universities including GITAM, Centurion University, Atal Incubation Centre at the Centre for Cellular and Molecular Biology (AIC-CCMB), National Research and Development Corporation of India (NRDC), Council Of Scientific And Industrial Research–Indian Institute Of Integrative Medicine (CSIR–IIIM), and others, will have strong academic affiliations with the Nutrify Today Academy.

According to Amit Srivastava, Chief Catalyst for Nutrify Today, the Nutrify Today Academy will also provide access to university students studying pharma, food technology, biochemistry, and chemical engineering who want to pursue a career in nutraceutical ingredient formulation. The Nutrify Today Academy expects to train a minimum of 5,000 professionals by 2024. Explaining the rationale behind the launch of the academy, Srivastava said, "India is currently a USD$8 billion market, however, we expect exports to grow significantly. Stakeholders in the sector predict that by 2025, the industry will be valued USD$40 billion, and by 2030, it will be worth as much as USD$100 billion." The Academy's faculty will consist of senior industry professionals and senior academicians, thus providing an inside view of the industry.

"The Nutrify Today Academy is industry educational platforms that will help nutraceutical professionals expand their business acumen. The industry is eagerly seeking people who are knowledgeable about product formulations, scientific and overall business development," said Srivastava.

Nutrify Today Academy industry leaders will include Dr. Balkumar Marthi, the former R&D head of Unilever, Brijesh Kapil, former Procter & Gamble India board member, Naaznin Hussein, former president of the Indian Dietetics Association and key opinion leader, Sheldon Baker, Baker Dillon Group chief executive officer and nutraceutical brand marketing leader from the US, as well as other industry professionals who will play a key role in Academy development. The Academy will also have major companies from India and the US advising on course direction.

"The Academy will provide corporate executives with a greater understanding about idea-to-commercialization view of the industry and provide university students a look at the professional and corporate side of the industry," said Baker.

He further added, "From my brand marketing and PR experience, much of the current global market is not keenly aware of the need to develop ongoing company and product marketing strategies. I will try to enlighten course participants of such a need, the cost involved and which directions they might want to consider."

Nutraceuticals is still considered a relatively new field of study in the India healthcare industry. It recognizes the importance of healthy lifestyle habits and creating a sustainable and a healthy world. Nutraceuticals have sparked much attention in recent years because of its potential nutritional, safety, and medicinal advantages, and as an industry, has the potential for growing to USD$100 billion market by 2030.

The post-pandemic expansion of nutraceuticals in India has attracted global attention creating an Indian nutraceuticals demand in the US and international nutraceuticals entering

India. Nutrify Today is the world's first platform that has taken an idea from conception to commercialization in half the time it takes to traditionally execute it development. This platform currently has over 10,000 executives from nutraceuticals, government, investors and regulatory bodies from India and other global markets. For Academy enrolment information visit https://academy.nutrifytoday.com/.

Nutrify Today organizes theme focussed workshops between large players, start-ups, investors, and regulators. The workshops create the right environment and opportunities for businesses to actuate. The past workshops have resulted in business networking and actuation of business between innovators and market access leaders.

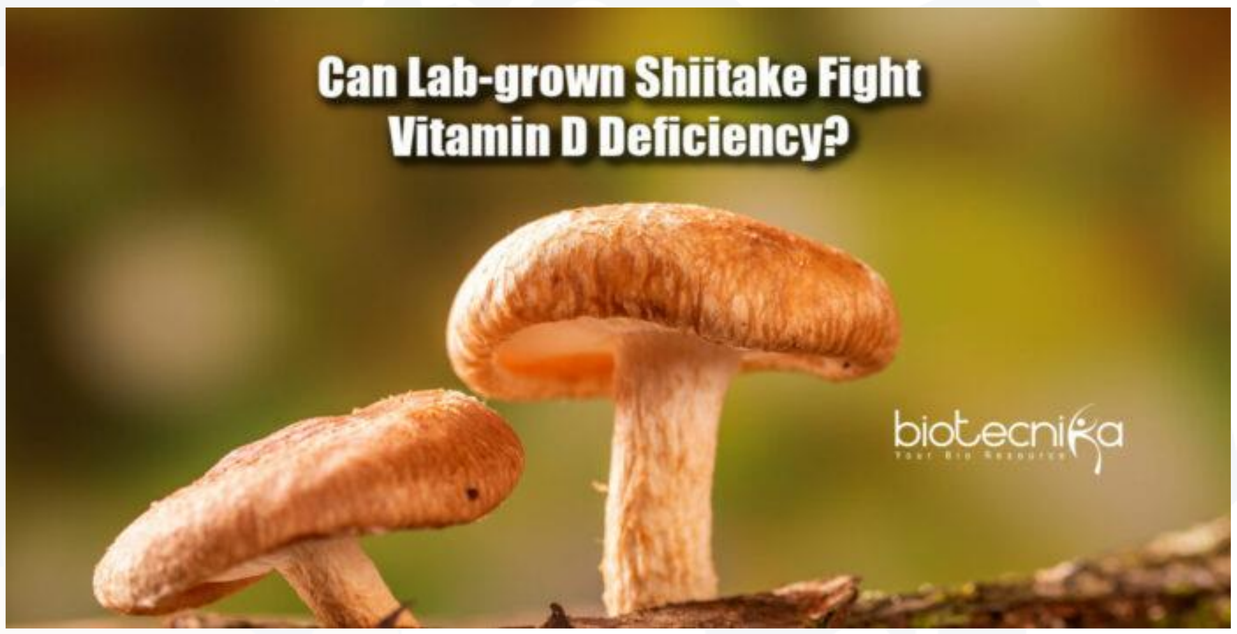
Published in:
Financial Express

Can Lab-grown Mushrooms Fight Vitamin D Deficiency? Human Trials May Soon Roll Out

CSIR-IHBT

12th November, 2021

Scientists at CSIR-IHBT intend to conduct a human clinical trial to evaluate the benefit of lab-grown shiitake mushrooms in Vitamin D deficient people. Researchers from CSIR-IHBT headed by Rakshak Kumar had developed a low-priced approach for growing shiitake mushrooms in the lab, allowing regional farmers to supplement their earnings.



Shiitake, a fragrant, large umbrella type of mushrooms native to East Asia, is primarily utilized in Japanese cuisine. According to the researchers, the popularity of shiitake mushrooms is increasing in India.

Shiitake mushrooms are costly as they grow in particular conditions on fallen tree logs. Although shiitake is currently produced in northeastern India, the team at CSIR-IHBT has developed a new technology that enables these mushrooms to grow much quicker in controlled lab settings. Furthermore, the type grown by CSIR has higher levels of Vitamin D.

To determine whether the mushrooms can be used as a nutraceutical — a food or component of food that gives medical or health benefits — to boost vitamin D levels in people with vitamin D deficiency, the team headed by Rakshak Kumar is planning human trials to assess the benefit of a standardized (the preparation must be such that each lot of the final nutraceutical product has the equal level of Vitamin D) shiitake mushroom soup on vitamin D levels.

Most jobs these days keep everyone indoors. Many people suffer from Vitamin D deficiency as a result of inadequate sunlight exposure. Aman Thakur, a Ph.D. student in Kumar's lab, stated that they want to see if these Vitamin D-enriched mushrooms can benefit people overcome this deficiency.

'Trial by a third-party organization'

As per Thakur, at least 60 people will be selected for the trial and split into 3 categories. The 1st group of 20 people will be given soup made from regular shiitake mushrooms with no added Vitamin D. The 2nd group will be given soup made from Vitamin D-enriched mushrooms grown by the institute. The 3rd group will be given provided with Vitamin D supplements.

The trial will last 4-6 weeks, after which the team will test the participants' blood serum samples for Vitamin D levels. The trial has yet to start; however, it will be presided over by a third party. According to Thakur, CSIR-IHBT will soon publish a tender to call a third-party organization for the same.

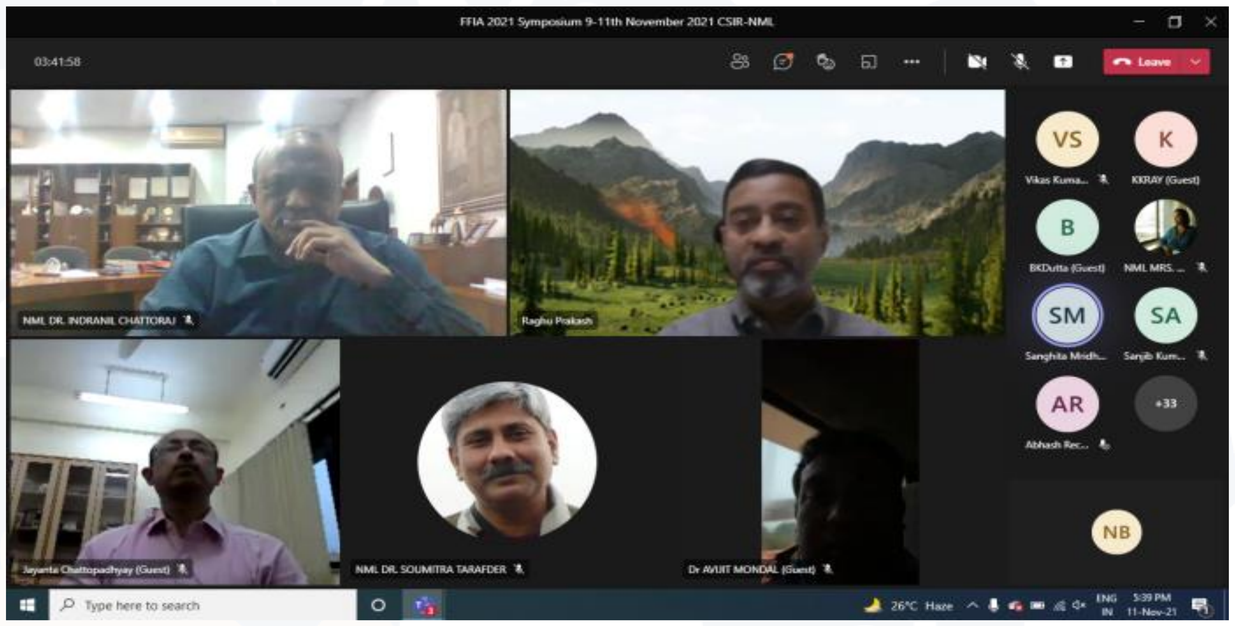
Thakur added that they would standardize the preparation of dried shiitake mushrooms, which will be utilized to make the soup before the trials.

Published in:
Biotecnika

Online symposium on Fatigue, Fracture and Integrity Assessment concludes at NML

CSIR-NML

12th November, 2021



Jamshedpur, Nov 12: A symposium on "Fatigue, Fracture and Integrity Assessment" was jointly organised by Indian Structural Integrity Society (InSIS), Indian Institute of Metals (IIM), Jamshedpur Chapter and CSIR-National Metallurgical Laboratory (NML), Jamshedpur between November 9 and 11.. This three-day event was the VIII th in a series of symposiums that was initiated in 2021 by CSIR-NML, Jamshedpur. The objective was to create a community of technologists, researchers and students who were continuously engaged in the research and study of fatigue and fracture of engineering materials and components. Leading specialists from across the country and abroad were invited to deliver talks on various aspects of fatigue and fracture behaviour of materials.

The eighth symposium aimed to provide a common forum for interaction and exchange of knowledge among professionals representing various industrial sectors like power, defence, aerospace, automotive, oil and natural gas and process industry. The deliberations during this three-day event provided an opportunity for academic interactions among academia, research laboratories and industries who were engaged in development of engineering materials and components.

Various aspects of failure of engineering materials that were included in the scope of the symposium were fatigue crack growth and fracture toughness, service life evaluation of materials and structures, root cause analysis of failures, creep and creep crack growth and deformation mechanisms and micro-mechanisms. The lectures were delivered through several

technical sessions which were chaired by leading technologists of the country. The sessions were attended by sixty registered delegates nominated by industries like IOCL, Tata Steel, NTPC, BiSS, Praj Industries Ltd and institutes like IIT Madras, IIT Kharagpur, IIT Roorkee, NIT Durgapur and IIEST Shibpur.

On the concluding day of the event, a panel discussion was organized on a virtual platform for exchange of viewpoints of the experts engaged in the study of failure of engineering materials. The eminent panellists of the symposium included Dr Indranil Chattoraj, Director, CSIR-National Metallurgical Laboratory, Jamshedpur (Chair), Dr. Vikas Kumar Saxena, Ex-Director, DMRL, Hyderabad, Dr N Eswara Prasad, DRDO-DMSRDE, Kanpur, Prof Raghu V. Prakash, Indian Institute of Technology, Madras, Dr. Jayanta Chattopadhyay, Bhabha Atomic Research Centre, Mumbai, Dr. Soumitra Tarafder, CSIR-National Metallurgical Laboratory, Jamshedpur, Dr Subir Bhaumik, CSIR-National Aerospace Laboratories, Bengaluru, Prof KK Ray, Ex-Indian Institute of Technology, Kharagpur, Dr K Bhanu Sankara Rao, University of Hyderabad, Hyderabad and Dr B K Dutta, Bhabha Atomic Research Centre, Mumbai.

The sessions entailed extensive discussion on structural integrity assessment and its future by the panel members. At the end of the session there was a proposal from Dr S Tarafder to create a common platform by integrating the expertise available in the country and to shift the focus from structural integrity analysis to structural health monitoring which was well appreciated by the panellists. It was also proposed to create a national level database on the subject which would benefit the students engaged in the studies of materials failure.

The virtual program was attended by 60 professionals. The vote of thanks was proposed by Chandra Veer Singh, Scientist at CSIR-NML.

Published in:
Avenue Mail

'Data Submitted, DCGI Nod for Merck's Molnupiravir Pill May Come Soon': Chief of CSIR's Covid Strategy Group

CSIR-IIIM 12th November, 2021

With data on over 700 patients submitted, the emergency-use approval to American pharmaceutical giant Merck's anti-Covid pill Molnupiravir is likely to be given soon, the chief of the Covid Strategy Group at the Council of Scientific and Industrial Research (CSIR) told News18.com on Thursday.

Hailed as a "game-changer", Merck has entered into voluntary licensing agreements with at least eight Indian drug makers, including Cipla, Dr Reddy's Laboratories, Sun Pharma, Hetero, Aurobindo Pharma, and others, for the oral medication. Some of these drug makers have finished conducting the late-stage clinical trials and have submitted the data to the country's apex drug regulator for a marketing nod.

Dr Ram Vishwakarma, chairman of the Covid Strategy Group, CSIR, said that Molnupiravir was one of the 24 molecules selected by the institute for repurposing against Covid-19. "Three CSIR institutes have already developed the processes and technologies which we are ready to share with as Indian pharma companies to add to the capacity of their manufacturing in India," he said.

More ammo against Covid

Calling the anti-Covid19 pills by Merck and Pfizer "big breakthroughs", Dr Vishwakarma said that the clinical trial data of Molnupiravir has been submitted to the Drug Controller General of India and the marketing approval is expected to come soon.

"Three CSIR institutes have already developed the processes and technologies which we are ready to share with Indian pharma companies to add to the capacity of their manufacturing in India," he said. "The United Kingdom's regulator has already approved the drug. Now we have both global and local data to consider. I am hopeful that the regulator will clear the drug soon

for Indian patients. The data of more than 700 people have already been submitted for consideration."

The antiviral medication is for the treatment of mild-to-moderate Covid-19 in adults with a positive SARS-CoV-2 diagnostic test and who have at least one risk factor for developing severe illness. The risk factors include obesity, older age (above 60 years), diabetes mellitus and heart disease.

Drug may cost just Rs 25 per tablet

A specialist in drug research and manufacturing, Vishwakarma is the director at CSIR's Indian Institute of Integrative Medicine (IIIM). CSIR-IIIM plans to work with pharmaceutical companies to boost the manufacturing of Molnupiravir in India.

"Molnupiravir is a relatively simple molecule to manufacture involves just 3-4 step synthesis. It can be reasonably priced and availability should never be an issue," he added while estimating that pharma companies can sell the drug for Rs 500-1000 per cycle which includes 15-20 tablets. "It is much simpler than the manufacturing of Remdesivir which was extremely difficult and consists of several steps including chiral synthesis." It's the "AZT moment" for Covid-19 and nothing short of a "breakthrough", he said.

"AZT was the first anti-AIDS drug that was launched in 1991 in the middle of a crisis when millions of patients were dying of AIDS across the globe. The successful results of anti-Covid pills of Merck and Pfizer are the biggest breakthrough in Covid times. It's nothing short of developing a vaccine against Covid-19," said Vishwakarma.

Published in:
News18

CFTRI Develops a Technology that could be a New Source of Income for Coffee Growers

CSIR-CFTRI 12th November, 2021

Coffee growers now have the opportunity to earn additional cash from their plants throughout the year as the Mysuru-based Central Food Technological Research Institute (CFTRI) has developed a technology that will allow them to produce a beverage mix out of the leaves and create a value-added product from coffee leaves that also offers health benefits.

Growers could expect an additional income from their plants with this coffee leaf brew mix, even beyond the usual three-month harvest period, according to Pushpa S Murthy, Principal Scientist (Spice and Flavour Science Department) of CFTRI.

About the Technology:

This technique is the result of a CFTRI initiative in 2019 to generate value-added products from coffee leaves. The Union Ministry of Food Processing Industries provided funding for the project.

She believes that if coffee farmers can use leaves that can be taken during the off-season or during pruning without interfering with coffee bean growth, it will have a significant impact on their social status.

Due to the nature of the coffee bean's growing cycle, over 70% of the coffee industry is unemployed or underemployed for nine months of the year. The project's goal was to give coffee farmers a year-round sustainable procedure.

Simple Procedures:

Coffee leaves are typically dumped as a by-product, according to her. The making of a beverage from coffee leaves is called in Ethiopia as “kuti tea” and in West Sumatra and Indonesia as “Kahwa daun”. However, according to Murthy, the preparation in these areas

differs from the one developed by CFTRI. Water can be used to make the brew, which can then be steeped for a few minutes before being filtered and drunk. According to her, the institute has started the process of transferring this technology to the coffee business, and a few industry partners have already given their assent.

In terms of the beverage's nutritional content, she claims that coffee leaves are high in phenolic acids, which may have health benefits. A coffee leaf contains around 17 percent more antioxidants than green tea.

The beverage should be eaten in its natural state. According to her, the beverage contains health-promoting polyphenols including chlorogenic acid and mangiferin, which assist to lower blood glucose, inflammation, and blood pressure.

Published in:
Krishijagran

Union Minister Dr. Jitendra Singh says, 134 proposals/requirements were received from 33 Line Ministries/Departments for Scientific Applications and Technological Solutions

CSIR

12th November, 2021

New Delhi: 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 informed that 134 proposals/requirements were received from 33 Line Ministries/Departments for Scientific Applications and Technological Solutions by all the six S&T departments coordinated by CSIR.

Addressing the third joint meeting of all Science Ministries and Departments here today, Dr Jitendra Singh expressed satisfaction that such a large number of proposals were received from Line Ministries within two months of the initiative launched in September to work out utilisation of different scientific applications for sectors like agriculture, food, education, skill, railways, roads, Jal Shakti, power and coal to name a few. This is keeping in mind that every sector today has become largely dependent on scientific technology, he said.

The novel initiative was launched by Dr Jitendra Singh in Mid-September this year, where representatives from all the Science Ministries including Science & Technology, Earth Sciences, Atomic Energy, Space/ISRO, CSIR, and Biotechnology separately engaged in extensive brain storming with each of the different Ministries in Government of India to work out what scientific applications could be utilised in which sector. The Minister had stressed the need for integrated theme based projects instead of a particular Ministry based or Department based projects in that meeting.

Dr Jitendra Singh said the out of box idea was suggested by Prime Minister Narendra Modi, who not only has a natural predilection for science but is also forthcoming in supporting and promoting science and technology based initiatives and projects.

On the directions of Dr Jitendra Singh, Principal Scientific Advisor to the Government of India Prof. K Vijaya Raghavan chaired 13 meetings so far with the line departments/ministries and the S&T departments and identified Five themes of the meeting.

(i) Energy and Climate Change Mitigation,.
(ii) Infrastructure and Industries;
(iii) Agriculture, Food and Nutrition
(iv) Education, Skilling and Social Empowerment;
(v) Health.

The meetings emphasized on solution-driven research, public R&D system, catering challenges of the line ministries, improving the economic competitiveness of industries and government service delivery to citizens. Similarly, Line Ministries were asked to identify needs and use their R&D budgets for objective-oriented research in coordination with S&T departments.

Principal Scientific Advisor to the Government Prof. K Vijaya Raghavan, DG, CSIR & Secretary DSIR, Secretaries of Science & Technology, Earth Sciences, Department of Biotechnology and other senior scientists participated in today's meeting. Chairman ISRO & Secretary Department of Space Dr. K Sivan and Dr K.N.Vyas, Chairman, Atomic Energy Commission joined the meeting virtually.

Published in:
India Education Diary

CSIR-IMMT

12th November, 2021

बायोचार उत्पादन पर किसानों के लिए कौशल विकास कार्यक्रम

सीएसआईआर-आईएमएमटी ने आयोजित किया

■ नवभारत ब्यूरो । भुवनेश्वर.
www.navabharat.news

आजादी के अमृत महोत्सव उत्सव के तत्वावधान में, पर्यावरण और स्थिरता विभाग, सीएसआईआर-खनिज और सामग्री प्रौद्योगिकी संस्थान, भुवनेश्वर द्वारा बायोचार उत्पादन के लिए मूल और अनुप्रयुक्त कौशल पर एक दिवसीय ऑन-फील्ड कौशल विकास कार्यक्रम आयोजित किया गया. ओडिशा के जाजपुर जिले के लगभग 25 प्रगतिशील किसान कौशल विकास कार्यक्रम के प्रशिक्षु थे. कार्यक्रम के उद्घाटन के दौरान सीएसआईआर-आईएमएमटी के कार्यवाहक निदेशक डॉ भाग्यधर

भोई ने कार्यक्रम के महत्व पर प्रकाश डाला. साथ ही डॉ एके साहू मुख्य वैज्ञानिक, डॉ. डीएस राव प्रमुख एचआरडी, डॉ. एस प्रधान और डॉ. एन के ढाल, प्रमुख ई एंड एस विभाग ने प्रतिभागियों को संबोधित किया. बाद में डा. मनीष कुमार प्रधान वैज्ञानिक, ई एंड एस विभाग ने किसानों को बायोचार उत्पादन की ट्रेंच और रोटेटेबल भट्ठा पद्धति का प्रदर्शन किया. प्रशिक्षण कार्यक्रम में कृषि अवशेषों, बायोमास अवशेषों के प्रसंस्करण, भट्ठी के आकार और डिजाइन, पायरोलिसिस प्रक्रिया, बायोचार उत्पादों और कृषि / मिट्टी में उनके उपयोग के बारे में विस्तार से बताया गया. उत्कलिका समिति, जाजपुर से एक गैर सरकारी संगठन, कौशल विकास कार्यक्रम के लिए जुड़ा.

Published in:
Navabharat

CSIR-CFTRI

12th November, 2021

CFTRI brews a new source of income through coffee leaves for growers

AJ VINAYAK

Mangaluru, November 11

Here is a chance for coffee growers to get additional income from their plants throughout the year. The Mysuru-based CFTRI (Central Food Technological Research Institute) has developed a technology to prepare a value-added product from coffee leaves that packs in health benefits, too.

Pushpa S Murthy, Principal Scientist (Spice and Flavour Science Department) of CFTRI, told *BusinessLine* that with this coffee leaf brew mix, growers could look at an additional income from their plants beyond the usual three-month harvest period.

This technology follows a CFTRI project on the development of value-added products from coffee leaves taken up in 2019. The project was funded by the Union Ministry of Food Processing Industries.

If farmers can use the leaves which can be harvested during the off-season or during pruning, without interfering with coffee bean growth, it will have a great impact on the social elevation of coffee farmers, she said.

Coffee leaves are rich in phenolic acids with potential health benefits

Easy process

She said the coffee leaves are usually discarded as a by-product. The preparation of beverage from coffee leaf is native to Ethiopia and is known as "kuti tea", and as "Kahwa daun" in West Sumatra and Indonesia. However, Murthy said the preparation in these regions is different from the one that CFTRI has developed. The brew can be prepared with water, allowed for a few minutes to steep, filtered and consumed. The institute has initiated the transfer of this technology to the coffee industry, and a few industry participants have already extended their consent, she said.

The leaf brew does not really taste like coffee, according to Murthy. "The brew is subtle with less caffeine compared to coffee or tea," she said.

On the nutritional value of the beverage, she said coffee leaves are rich in phenolic acids with potential health benefits. A coffee leaf contains around 17 per cent more antioxidants than green tea. The beverage should be consumed plain. The beverage accords health-promoting polyphenols like chlorogenic acid and mangiferin which help in reducing blood glucose levels, inflammation and blood pressure, she said.

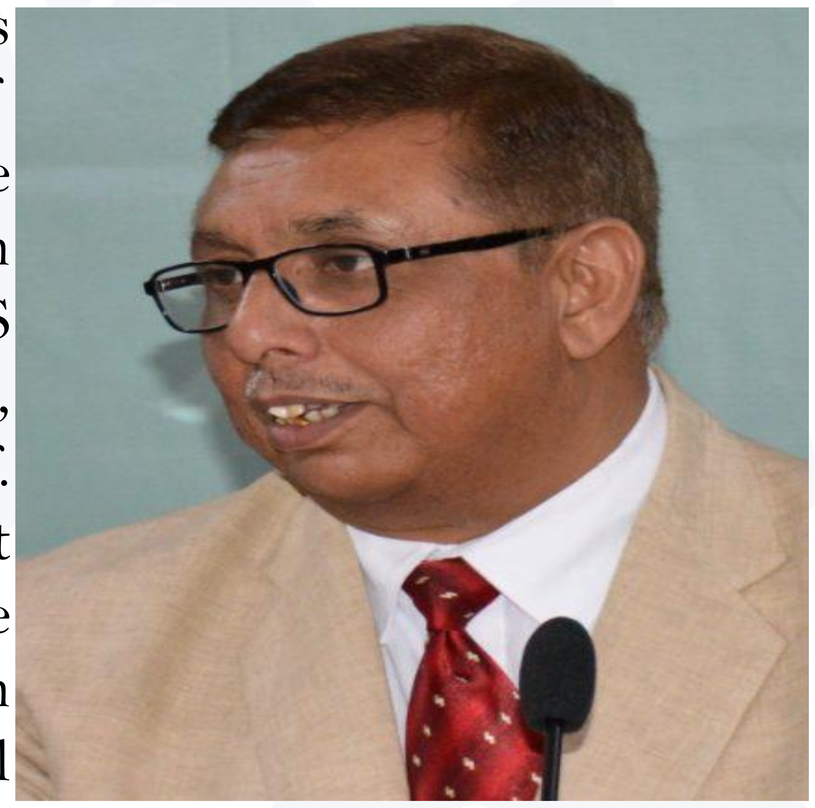
Published in:

Business Line

Former Jmi Chair Professor Elected As A Fellow Of The World Academy Of Sciences (Twas), Italy

CSIR-NGRI

11th November, 2021



Prof. Shakeel Ahmed who served Jamia Millia Islamia (JMI) as MK Gandhi Chair Professor has been elected as a Fellow of "The World Academy of Sciences (TWAS)", Trieste, Italy. He has been elected for this prestigious international recognition for advancement of Science in a Developing Country. TWAS supports sustainable prosperity through research, education, policy and diplomacy.An expert in Water Sciences, Prof. Ahmed during his 2 years tenure at JMI (2018-2020) taught at the Centre for Disaster Management as well as the Department of Geography. He has a rich experience in teaching advanced development in water related natural disasters as well as climate change.

Prof. Ahmed's contribution to JMI has been extraordinary as he has published more than 13 research papers in high impact international Journals and contributed 3 chapters in books published by INSA as well as Springer and Elsevier. During his tenure at JMI, Prof. Ahmed was also elected as the Fellow of the National Academy of Sciences of India (NASI).Prof. Ahmed will be leading a high level delegation from India with Prof. Atiqur Rahman of the Department of Geography, JMI and many other scientists/experts from India to Montpellier, France to discuss with a matching delegation from France, the impact of Climate Change on Water Management in May 2022.

Prior to joining JMI, he has served as Scientist at the CSIR's National Geophysical Research Institute, Hyderabad for 37 years and reached the level of the senior-most Chief Scientist of the Institute. He has led a large number of national and international projects on Earth Science including his crucial role in the mega program of National Aquifer Mapping in India.

Prof. Ahmed is managing the Secretariat of the Asian GWADI, a flagship program of UNESCO as its Secretary.

He already has many more awards to his credit including the National Geoscience Award and International Prize for Water Science.Prof. Ahmed has led an Indo-French Centre for Groundwater Research in Hyderabad for almost 2 decades as its founder head. He has been visiting Fellow to the Aligarh Muslim University and visiting professor to Kashmir University and presently he is working as consultant to the School of Sciences, Maulana Azad National Urdu University at Hyderabad.

Published in:
The News Strike

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