

CSIR in Media



CSIR in Media on
16th to 20th July 2019



CSIR-NIO

20th July, 2019

Goa Govt to engage services of NIO for monitoring riverine & riparian biodiversity

Panaji, Jul 20 (UNI) The Goa Government has decided to engage services of National Institute of Oceanography (NIO) for monitoring riverine and riparian biodiversity on a sampling mode. A decision to this effect was taken at a cabinet meeting held at State Secretariat at Porvorim on Friday.

The NIO, which is Council of Scientific and Industrial Research (CSIR) laboratory under the central government, will carry out assessment studies for sand accretion or replenishment and erosion studies, assessment of biodiversity index for rivers.

The entire study is estimated to cost Rs 9,94,75,000.

The cabinet also resolved to grant approval to incur expenditure for an amount of Rs 26.88 lakh for preparation of action plan for 11 polluted river stretches through empanelled consultants of the SIDCGL (Sewerage and Infrastructural Development Corporation Of Goa Ltd) and for monitoring of River Quality in the 11 polluted River Stretches through Goa State Pollution Control Board.

UNI AKM 1318

Published in:

[UNI](#)

EEPC organises session on use of alternative materials for better efficiency

CSIR-AMPRI



EEPC India Technology Centre on Friday organised a full day session on usage of alternative materials to make the product efficient, cost effective and light. CSIR (Council of Scientific and Industrial Research)'s AMPRI (Advanced Materials and Processes Research Institute) – country's premier R&D institution of advanced materials and processes would impart the required expertise to EEPC India members to use the alternative materials for exportable products. On this occasion an MOU has been signed between Mr Adhip Mitra, Addl Executive Director & Secretary, EEPC India and Dr S K S Rathore Senior Principal Scientist,

19th July, 2019

CSIR- AMPRI on behalf of the respective organisations . The theme of MoU was to educate MSMEs on Materials Science and Engineering to move up value chain for Sustainability to ensure high quality /standards of engineering exports. Mr Ravi Sehgal, chairman EEPC India touched upon the significance of MOU which will enable engineering exporters to benefit from eminent Scientists of AMPRI to bring improvement in their production techniques using alternative materials. He added while Indian engineering exports have been growing by 10% with variation, reaching a historic high of USD 81 Billion during FY 2018- 19, which is over 25% of India's total exports. The Department of Commerce has conferred a mandate to EEPC India to set up technology centres across the country for helping, the MSMEs with new technologies. As globally Industry 4.0 is the new buzzword. Indian MSMEs should leapfrog one generation. "That is where EEPC Technology Centre comes in. EEPC India Technology Centre in

Bengaluru and also the one we would be opening shortly in Kolkata , with a view to develop export product by providing a forum for Industry and Academia discussion and learning" Mr Sehgal said at the seminar. Dr Avanish Kumar Srivastava, Director, CSIR-AMPRI, Bhopal said that Government has allotted 2% GDP for R & D and they are always provided with the required fund. It is very important for young Indian engineers to go for start ups with these alternative materials and become 'job creators' rather than being 'job seekers'. The rise in Indian Engineering exports from \$10 Million in 1955 to \$81 Million over a period of six decades reflects the amount of hard work done by EEPC India and Government and Industry cohesively. This work needs to continue to meet the aspirational target of \$200 billion by 2025.

Published in:
[The Economic Times](#)

CSIR-NEERI

19th July, 2019

'Streamlining knowledge key to chemical management'

Manshika Vaikkath | TNN

Nagpur: The government is acknowledging policies for strategic approach to international chemicals management (SAICM) but it is overwhelmed with a wide range of information at its disposal. Therefore, the government needs the help of scientists and experts to streamline knowledge on this matter, said Ligia Noronha, director of economy division at the United Nations Environment Programme (UNEP), on Thursday.

She was giving a brief overview of special programme on chemical and waste on the concluding day of the two-day international workshop on 'Management of persistent organic pollutants (POPs) in India: Need and gap analysis'.

The seminar was supported by UNEP and organized by Council of Scientific and Industrial Research (CSIR)-National Environmental Engineering Research Institute (Neeri), which is the Stockholm Convention Regional Centre (SCRC) on



Kanchan Kumari (from left), AN Vaidya and Ligia Noronha during the international workshop organized at Neeri on Thursday

POPs for Asia region.

Contact person of SCRC AN Vaidya, convener Kanchan Kumari, senior principal scientist at CSIR-Indian Institute of Toxicology Research (IITR) Natesan Manickam, member of the advisory board, Dedicated Centre on Chemical and Waste CSIR-Neeri L Ramakrishnan, Tin Aung Win from the ministry of natural resources and environmental conservation, Myanmar, Atul Bagai, Neeta Thacker and RK Bansal were present.

Noronha said, "The objec-

tive of SAICM is to ensure sound management of chemicals. The key considerations include raising political attention, implementation at the national and regional level and maximizing stakeholders for a green economy."

"The basic message of the special programme is that there is a need to coordinate between the agendas of chemical, biodiversity and climate which requires financing," she said.

"It is essential to understand the gaps in knowledge, implementation, infrastruc-

ture, awareness and leadership in order to prioritize actions," Noronha said.

"The gap in knowledge refers to data generation, collection and sharing while capacity building comes under implementation. Secularity in infrastructure is important for reducing waste generation. Spreading awareness through outreach programmes and leadership in political initiation will create momentum for joint action change," she said.

The seminar was followed by a valedictory session in which the participants discussed the outcome of the workshop and deliberated on various synergistic approaches to facilitate the goal of protecting environment.

In his closing remarks, Vaidya said, "We converged on great pieces of advice through this workshop and we will define and compile all the gaps and needs based on which I urge the panel of experts to come up with an umbrella proposal within six months. This proposal can then be forwarded to the ministry for funding."

Published in:

The Times of India

CSIR-NEERI

18th July, 2019

'POPs, a major concern for environment, health'

■ Staff Reporter

THE detection and measurement of Persistent Organic Pollutants (POPs) is a major challenge that needs to be addressed. In managing POPs, comprehensive approach to social and economic assessment including human health, environmental and social impacts is required, said Dr L Ramakrishnan, Member of Advisory Board on Special Directorate of POPs and Lead Assessor, National Accreditation Board for Education and Training (NABET), Quality Council of India.

Dr L Ramakrishnan was addressing the gathering after inaugurating the two-day International Workshop on 'Management of Persistent Organic Pollutants in India: Need and Gap Analysis' organised by CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) here, on Wednesday. Dr Hemant Purohit, Senior Most Scientist, CSIR-NEERI; Dr A N Vaidya, Chief Scientist and Head, Solid and Hazardous Waste Management Division; and Dr Kanchan Kumari, Scientist, were also present on this occasion.

Dr Ramakrishnan was involved in mitigation of chlorinated hydrocarbons in 1980s, much earlier than India ratified and acceded to Stockholm Convention on POPs in 2005. He high-



Dr L Ramakrishnan inaugurating the workshop at NEERI by lighting the lamp. Dr Hemant Purohit, Dr A N Vaidya, and Dr Kanchan Kumari also are seen.

lighted the importance of qualitative and quantitative analysis of POPs. He said that ideas should be effectively implemented at ground level. He urged the scientists to explore potential alternatives that could perform a function equivalent to POPs.

Earlier, Dr H J Purohit said that CSIR-NEERI as 'Stockholm Convention Regional Centre for Asia on POPs' had taken up many initiatives to minimise and manage POPs for environment and health protection. Still, he added, challenge was in understanding persisten-

cy and life cycle assessment of POPs. He stressed upon the need to study cumulative and synergistic effects of POPs. Dr Kanchan Kumari spoke in brief about the workshop.

Dr A N Vaidya proposed a vote of thanks.

On the first day, five technical sessions were held in which various National and International experts presented significant aspects relating to emerging pollutants and upcoming POPs. S Ganesan, Chairman, Indian Chemical Council, spoke on challenges

and way forward for Indian industries. Dr Anupam Khajuria, United Nations Centre for Regional Development, spoke on POPs and circular economy. Dr Neeta Thacker, former Chief Scientist, CSIR-NEERI, dealt with dioxins and furans; Dr Roland Weber, Environmental Consultant, Germany, shed light on inventory for new listed POPs.

R K Bansal and K P Nyati, Recycling and Environment Industry Association of India (REIAI); Piyush Mohapatra, Toxic Links; and Prashant Kumar Banerjee, Society of Indian Automobile Manufacturers spoke on capacity building for identification and management of chemical wastes. Dr Suneel Pandey, The Energy and Resources Institute; Sumathi N, MSME Development Institute; Prof Munish Chandel, IIT Bombay; Dr J K Sharma, UNEP; and Dr Tanushree Mondal, Department of Health and Family Welfare, spoke on overview of chemicals under Stockholm Convention, challenges and way forward.

Ligia Noronha, Director, Economy Division, UN Environment; and Atul Bagai, UN Environment; will launch the website of Stockholm Convention Regional Centre and visit the analytical facility of CSIR-NEERI on Thursday. In the concluding session, the experts will formulate strategies for the management of POPs in India.

Published in:
The Hitvada

CSIR-CBRI

18th July, 2019



रुड़की में सीबीआरआई के वैज्ञानिकों ने छात्रों को विज्ञान संबंधी जानकारी दी। • हिन्दुस्तान

विज्ञान के क्षेत्र में रोजगार की अपार संभावनाएं

रुड़की | हमारे संवाददाता

जिज्ञासा विद्यार्थी वैज्ञानिक संयोजन कार्यक्रम के तहत केंद्रीय भवन अनुसंधान संस्थान के वैज्ञानिकों ने युवाओं को विज्ञान के क्षेत्र में रोजगार के अवसरों के विषय में जागरूक किया।

कैंटोमेंट बोर्ड सीनियर सेकेंडरी स्कूल में विश्व युवा कौशल दिवस के अवसर पर कौशल विकास के महत्व को समझाने के उद्देश्य से एक जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम में सीबीआरआई के वरिष्ठप्रधान वैज्ञानिक और जिज्ञासा कार्यक्रम समन्वयक डॉ. अतुल

कुमार अग्रवाल ने कौशल विकास और करियर के अवसर विषय पर व्याख्यान दिया। उन्होंने विद्यार्थियों से उनके रुचि के विषयों, करियर महत्वकांक्षाओं और विचारों पर चर्चा की। उनके संशय दूर कर उनका मार्गदर्शन किया। उन्होंने विद्यार्थियों को बताया कि किसी भी क्षेत्र में सफलता हेतु ज्ञान, वैज्ञानिक दृष्टिकोण और कौशल के सही सम्मिश्रण का होना आवश्यक है। विद्यालयों में शिक्षकों और पाठ्य पुस्तकों से हमें अपनी रुचि के क्षेत्र में ज्ञान प्राप्त होता है। कहा कि नवोदित वैज्ञानिकों के लिए करियर के कई रास्ते हैं। इस दौरान प्रधानाचार्य नरेंद्र कुमार आदि मौजूद रहे।

Published in:
Hindustan Times

CSIR-CBRI

17th July, 2019

कार्यक्रम

सीबीआरआइ में विश्व युवा कौशल दिवस पर विद्यार्थी-वैज्ञानिक संयोजन कार्यक्रम का आयोजन

ज्ञान जीवन को ऊर्जा एवं गति देकर पहुंचाता है लक्ष्य तक

जागरण संवाददाता, रुड़की: केंद्रीय भवन अनुसंधान संस्थान (सीबीआरआइ) रुड़की में विश्व युवा कौशल दिवस के अवसर पर मंगलवार को जिज्ञासा कार्यक्रम के अंतर्गत विद्यार्थी-वैज्ञानिक संयोजन कार्यक्रम आयोजित किया गया। इसमें विद्यार्थियों को संस्थान की ओर विज्ञान के विभिन्न विषयों में किए जा रहे कार्यों के संबंध में जानकारी दी गई।

संस्थान के वरिष्ठ प्रधान वैज्ञानिक और जिज्ञासा कार्यक्रम के समन्वयक डॉ. अतुल कुमार अग्रवाल ने विद्यार्थियों को बताया कि ज्ञान हमारे जीवन को ऊर्जा और गति प्रदान कर लक्ष्य तक पहुंचाता है। इस यात्रा में हमारा विवेक, माता-पिता, मित्र और शिक्षक अलग-अलग तरह से हमारा मार्गदर्शन करते हैं। इसलिए लक्ष्य की प्राप्ति के लिए इन सभी का सहयोग आवश्यक है। कहा कि कौशल विकास युवाओं को सशक्त और आत्मनिर्भर बनाने, उनके आर्थिक विकास और रोजगार के अवसरों में वृद्धि



आयोजन

- विज्ञान के विषयों पर किए जा रहे कार्यों की दी जानकारी
- केवि एक और दो के करीब 200 से ज्यादा छात्रों ने लिया हिस्सा

सीबीआरआइ रुड़की में आयोजित कार्यक्रम में बच्चों को जानकारी देते संस्थान के वरिष्ठ प्रधान वैज्ञानिक डॉ. अतुल अग्रवाल ● जागरण

में सहायक है। संस्थान के मुख्य वैज्ञानिक डॉ. सुवीर सिंह ने अग्नि अनुसंधान विषय पर व्याख्यान प्रस्तुत किया। उन्होंने अग्नि आपदा के दौरान अग्नि के प्रसार के पूर्ण प्रक्रम को लघु चलचित्रों की सहायता से समझाया। साथ ही विद्यार्थियों को भवनों में अग्नि आपदा नियोजन हेतु निर्माण

प्रक्रिया के दौरान वास्तुकार, संरचनात्मक इंजीनियर, मैकेनिकल इंजीनियर तथा सिविल इंजीनियर की भूमिका के विषय में बताया। डॉ. एलपी सिंह ने उन्नत भवन निर्माण सामग्री, वरिष्ठ प्रधान वैज्ञानिक डॉ. आर. धर्मराजु ने आपदा जोखिम न्यूनीकरण और प्रबंधन विषय

पर व्याख्यान दिया। विद्यार्थियों ने सीबीआरआइ की समृद्ध प्रयोगशालाओं, ग्रामीण पार्क और तकनीकी दीर्घा का दौरा किया और संस्थान के वैज्ञानिकों से वार्तालाप कर संशयों को दूर किया। कार्यक्रम में केंद्रीय विद्यालय नंबर एक और दो के 200 से अधिक विद्यार्थियों

ने शिक्षकों के साथ प्रतिभाग किया। इस अवसर पर केवि नंबर एक के प्रधानाचार्य वीके त्यागी, केवि नंबर दो के प्रधानाचार्य अरविंद कुमार, संस्थान से डॉ. अशोक कुमार, डॉ. हरपाल सिंह, अनिल कुमार, के अरोड़ा, अमन कुमार, पलक गौयल आदि उपस्थित रहे।

Published in:

Dainik Jagran

IIT Delhi signs MoU with five CSIR laboratories to promote cooperative research

CSIR

17th July, 2019

Indian Institute of Technology (IIT Delhi) has entered into an agreement with five of the renowned national laboratories of CSIR, CSIR-advanced materials and processes Research Institute, CSIR-Central Scientific Instruments organisation, CSIR-Central Electronics Engineering Research Institute, CSIR-Institute of Minerals and Materials Technology, CSIR-National Physical Laboratory of India by signing an MoU.

Advertising

The MoU was signed by the Directors of above five laboratories and Prof V. Ramgopal Rao, Director, IIT Delhi on July 16, 2019. Prof. V. Ramgopal Rao, Director, IIT Delhi said that IIT Delhi has been pioneering in providing its students and faculty with world class infrastructure and conducive environment for research. He specially spoke about the collaborations of IIT Delhi with scientists of other institutes. It is planned to initiate about 60 Interdisciplinary Research projects with the five CSIR laboratories this year.

As a part of MoU, IIT Delhi plans to promote collaborative research, exchange of ideas, development of knowledge, enhancing high quality research throughput. The MoU would also serve as a platform to students, faculty and other research scholars equally to contribute towards research and development growth of nation and fuelling its growth. The research activities undertaken through this MoU will make best utilisation of already existing Infrastructure, expertise and vast experience of IIT Delhi and the participating CSIR laboratories.

Published in:

[The Indian Express](#)

Grand Finale of the Smart India Hackathon Hardware edition inaugurated

CSIR-NCL



PUNE: CSIR- National Chemical Laboratory (CSIR-NCL), Pune in coordination with Indian Institute of Science Education and Research (IISER), Pune inaugurated the Grand Finale of Smart India Hackathon (SIH) 2019 (Hardware Edition) recently. Smart India Hackathon is a non-stop product development competition with a unique Open Innovation Model. Anil Sahasrabudhe, Chairman AICTE said this is the Third Consecutive year of Smart India Hackathon World's Largest Open Hackathon- Smart India Hackathon. The competition is growing each year in terms of participation and solutions .

16th July, 2019

It was started in the year 2017, with participation of around 50000 students, in year 2018 around one lac students participated.

This year, the magnitude has grown bigger; around two lac students have participated this year. The first part of Smart India Hackathon 2019, Software edition was conducted during March 2-3, 2019. Mohit Gambhir, Director MHRD Innovation Cell and Coordinator Smart India Hackathon 2019 at smart India Hackathon 2019 Hardware Edition said that more than 1.2 Lac students from 2235 colleges sent their entries for 198 problem statements, submitted by more than 40 industries and 9 central government ministries and various government departments.

Around 2000 participants from 250 teams of 178 different colleges are participating in the Grand finale of Smart India Hackathon 2019 Hardware Edition that includes IIT's and NIIT's.

The grand finale is being conducted from today for next 5 days at 18 different nodal Centres in 9 states, one Union Territory and one Capital Territory of India. These teams will provide innovative hardware solutions for 124 problems.

At Pune centre, 25 teams are participating for the grand finale that included 137 male and 63 female participants from all across the country. The teams are given with the problem themes such as Waste Management, Clean Water, Renewable Energy, Robotics and Drones, Healthcare and Biomedical Devices and Smart vehicles.

Published in:
[The Times of India](#)

CSIR-NEERI

16th July, 2019

'Need to adopt climate-resilient agriculture'

■ Staff Reporter

"PRODUCTIVITY and disease resistance of a plant lies in its genes, therefore, research on genome decoding is important to create high-yielding and disease-resistant varieties of crops," said Dr N K Singh, National Professor, ICAR-National Institute for Plant Biotechnology, New Delhi. He spoke on 'Genomics-assisted Breeding for Infusing Climate Resilience into Green Revolution Varieties of Rice.

Dr Singh's lecture was organised by CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) in memory of Dr Ashok S Juwarkar on Monday in the NEERI auditorium. Dr Hemant Purohit, Senior-most Scientist and Dr J S Pandey, Chief Scientist and Head of Climate Change and Skilling Division also were present on the occasion.



Dr N K Singh receiving a memento from Dr H J Purohit, also seen is Dr J S Pandey.

Dr Singh informed that the first sequencing of plant genome was at the cost of Rs 11 crore, the ICAR team sequenced 61 per cent of the genome and identified 47,004 genes

in arhar. About 1,200 genes are associated with disease resistance and 152 with tolerance to drought, heat and salinity, he added. Dr Singh said that the genetic

information would help our farmers to create better varieties of crops capable of tolerating heat and drought without compromising the yield. Rice was the first crop genome that was sequenced, but the major challenge is to enhance wheat productivity and accelerate the breeding of climate-resilient wheat varieties through reference genomes, Dr Singh said and urged scientists to develop drought and salinity resistant crops through genomics.

Earlier, Dr Hemant Purohit, Senior-most Scientist, CSIR-NEERI briefed about the significant contributions of late Dr Ashok S Juwarkar. Dr J S Pandey introduced the chief guest. Samruddhi conducted the proceedings and Prakash Kumbhare proposed a vote of thanks. Students of M M Rabbani Junior College, Kamptee and Ashram Schools attended the lecture and visited the Institute's laboratories.

Published in:
The Hitvada

CSIR-CSIO

16th July, 2019



CSIO (MOU)

CSIR- Central Scientific Instruments Organisation (CSIO) and Hindustan Aeronautical Limited (HAL), Avionics Division, Kowra joined hands by entering into an MoU on Wednesday to share expertise and lab facilities for indigenization of various optical and optronic systems for different aircraft platforms. CSIO, a premier National R&D laboratory working in the areas of instrumentation in different domains of science and technology, already has a well-established lab facility and necessary knowledgebase for the development of see-through avionics displays, aircraft exterior lights and a host of test and calibration tools for such systems.

Published in:

The Indian Express

CSIR-CMERI

16th July, 2019

बायोडीजल उत्पादन के लिए लागत प्रभावी प्रौद्योगिकी

लुधियाना, 16 जुलाई (रूसीएसआईआर-सीएमईआरआई) के तत्वावधान में, सीओईएफएम, लुधियाना के दो वैज्ञानिकों ने "सेमी-अविरल बायोडीजल प्लांट" की तकनीक वि छठ अअअअ कसित की है यह तकनीक 10 प्रतिशत तक मुक्त फ़ैटी एसिड सामग्री वाले किसी भी फीडस्टॉक से बायोडीजल के उत्पादन के लिए एक सरल प्रक्रिया का प्रतिनिधित्व करती है। यह एक कम रखरखाव उत्पादन तकनीक है, इसे कम पूंजीगत लागत पर कहीं भी आसानी से लागू किया जा सकता है और जो मैनुअल हस्तक्षेप से संचालित होता है। यह बायोडीजल संयंत्र विभिन्न प्रकार के अशुद्ध खाद्य तेल जटरोफा, करंज, तुंग महुवा जेजोबा एवं पशु वसा से गुणवत्ता वाला बायोडीजल बनाने में सक्षम है।

सीएसआईआर-सीएमईआरआई बायोडीजल मशीनरी का व्यवसायीकरण से एमएसएमई की सहायता कर रहा है। नए उद्यमी और स्टार्टअप सफल व्यवसाय मॉडल विकसित करने में भाग ले रहे हैं और वर्तमान में इसे पांच से अधिक उद्योगों में स्थानांतरित

किया गया है। इस विकसित तकनीक का सीएसआईआर-सीएमईआरआई के निदेशक प्रो० हरीश हिरानी की उपस्थिति में मैसर्स बासुदेव बायोडीजल एलएलपी, भुवनेश्वर, ओडिशा को स्थानांतरित कर दिया गया है। इस अवसर पर सीएमईआरआई के निदेशक, प्रो० हरीश हिरानी ने कहा कि सीएमईआरआई ऊर्जा उत्पादन के लिए अपशिष्ट तेल, बायोमास, और नगरपालिका के ठोस अपशिष्ट का प्रयोग कर अनुसंधान और विकास तकनीकों का संचालन कर रहा है। उन्होंने उद्योगों से आग्रह किया कि वे अक्षय ऊर्जा स्रोतों पर उच्च ऊर्जा निर्भरता के सरकार के लक्ष्य को प्राप्त करने के लिए इस तकनीक को आगे लाने के लिए मिलकर काम करें। वर्तमान में, संस्थान बायोडीजल संयंत्र के पूरी तरह से स्वचालित आप-स्कैल संस्करण को विकसित कर रहा है, जिसमें कई और विशेषताएं हैं - जैसे उच्च एफएफए तेलों का उपयोग करना और अभिकारकों की वसूली और उत्पादों की शुद्धि, प्रौद्योगिकी का विस्तार करते हुए, आविष्कारक, डॉ० कृष्णेंदु कुंडू, प्रधान वैज्ञानिक ने कहा कि इस



संयंत्र के माध्यम से उत्पादित बायोडीजल समग्र स्थिरता पर विचार करते हुए एक बेहतर ऊर्जा का विकल्प है क्योंकि यह कार्बन मोनोऑक्साइड, नाइट्रस ऑक्साइड और पार्टिकुलेट मामले आदि जैसे विषाक्त उत्सर्जन को कम करता है। यह तकनीक बायोडीजल उत्पादकों के लिए भी लाभदायक है क्योंकि यह उन्हें एक वर्ष से कम की अवधि में प्रति लीटर 5 से 8 रुपये का लाभ देगा। लाइसेंस समझौते पर हस्ताक्षर करने के बाद, श्री प्रमोदसमंत्रा, मैसर्स बासुदेव बायोडीजल एलएलपी, भुवनेश्वर, ओडिशा ने इस व्यावसायिक प्रयास में समर्थन के लिए सीएसआईआर का आभार व्यक्त किया और उन्होंने इस बात

पर भी जोर दिया कि बायोडीजल प्रौद्योगिकी की बाजार में बड़ी संभावनाएं हैं। इस तकनीक को ऑपरेशन और उसके रखरखाव में सुगमता प्रदर्शित करने के लिए उद्योग को प्रदर्शित किया गया था। संयंत्र के विभिन्न कार्यों को एक नियंत्रण कक्ष के माध्यम से नियंत्रित किया जाता है। इससे पहले, एक 35 एचपी ट्रैक्टर 1000 से अधिक घंटे के लिए सफलतापूर्वक बी 100 (100 प्रतिशत बायोडीजल) पर चलाया गया था। यह आश्वासन दिया गया कि इस तकनीक से उत्पादित बायोडीजल सामान्य डीजल की तुलना में भारतीय मानक ब्यूरो और एएसटीएम के गुणवत्ता मानक से मेल खाता है।

Published in:
Punjab Shakti



Please Follow/Subscribe CSIR Social Media Handles



[CSIR INDIA](#)



[CSIR_IND](#)



[CSIR India](#)