

CSIR IN MEDIA



CSIR

NEWS BULLETIN

21 TO 25 JANUARY 2023



Bhopal: Stubble-burning has richer option

CSIR-AMPRI

23rd January, 2023



A waste-to-wealth technology that turns toxic fly ash generated by thermal power plants in Madhya Pradesh into 'evergreen hybrid wood' (better than conventional wood and plywood), promises similar green solution to stubble burning in Haryana, resulting in better air quality in neighbouring Delhi.

Researchers at Council of Scientific and Industrial Research (CSIR) Advanced Materials and Process Research Institute (AMPRI) in Bhopal have successfully converted parali (stubble) into eco-friendly and evergreen hybrid wood, which is 30% cheaper and 20% stronger than the conventional particle wood and plywood.

The wood derived from parali can be used for making doors, partition panels, roofing sheets and thermal insulator materials. The parali-to-evergreen hybrid wood technology developed in two years has already been transferred to the Haryana government, which, as per CSIR-Advanced Materials and Process Research Institute researchers, is now trying to commercialize it through the MSME sector in the state.

The technology has also been transferred to a Raipur (Chhattisgarh) company, which is

working at starting large-scale production of Parali-to-evergreen hybrid wood, that will not only address the menace of stubble burning by farmers in northern India and consequently better Delhi's air quality, but also conserve the environment by preventing felling of trees for making particle wood and plywood.

The researchers started working on the greenwood technology in 2010. Nearly a decade-long research by CSIR-AMPRI director Prof Avanish Kumar Srivastava led to the development of an alternative wood out of fly ash, which was fit for making furniture and decorative items.

“The technology was also transferred to a Chandrapur (Maharashtra)-based private unit for commercialization. In 2020, West Bengal showed interest in the technology developed by us and with our help combined jute also with it,” said Dr Manoj Gupta, a CSIR-AMPRI scientist forming part of the research group.

Talking to this paper at the ongoing India International Science Festival (IISF-2022) in Bhopal on Sunday, Dr Gupta (whose research group is headed by scientist Dr Ashokan Pappu), said in 2020, the Haryana government had approached them for rendering a similar solution to their Parali related woes.

“One Week One Lab” A New Initiative By CSIR-IMMT

CSIR-IMMT

25th January, 2023

“One Week One Lab” an extended nationwide campaign of CSIR to showcase the technological breakthroughs and innovations of CSIR-IMMT Bhubaneswar was inaugurated by Dr. (Mrs.) N. Kalaiselvi, Honorable Director General CSIR & Secretary, DSIR in presence of Shri Hemant Sharma, IAS, Principal Secretary to Govt. Of Odisha Industries Department (Govt. of Odisha), Prof. (Dr) S. Basu, Director, CSIR-IMMT Bhubaneswar.



Dr. (Mrs.) N. Kalaiselvi visited CRTDH and Design & Project Engineering Slurry Pilot Plant, Mineral processing Pilot plant, Advanced Material Technology Dept. and Centre for Waste Utilization and Hydro & Electrometallurgy Dept. and Sea Bed Mineral Pilot Plant alongwith the officials of the respective departments.

Inaugurating “One Week One Lab” initiative Dr. (Mrs.) N. Kalaiselvi, said, Here at CSIR-IMMT, I visited the labs and found everything in its place and it is just beyond imagination that, I came here only with the expectation for metals & minerals but I could see number of medicinal values also here. It’s a great agglomeration of different facets which are required for equipment have their live as heavenly life on Rare Earth. Today we are happy to announce the launch of CSIR’s One Week, One Lab Campaign: it is the Council of Scientific and Industrial Research (CSIR)’s campaign to opportunities through deep tech Start-ups ventures.

Present on this occasion Shri Hemant Sharma, IAS, Principal Secretary to Govt. Of Odisha Industries Department said, It’s my pleasure to be here at CSIR -IMMT to celebrate the curtain raiser programme of One week One Lab which is the brainchild of our honorable PM.

Our Industry Department and the MSME department work closely with CSIR-IMMT. Metal, mineral and Industry ecosystem of Odisha. IMMT plays a crucial role in maintain the On behalf of Govt of Odisha, I promise to extend all support to CSIR- IMMT for the great works.

Speaking about the initiative Prof. (Dr.) S Basu said, Today for the 1st time after Dr. Kalaiselvi became DG of CSIR & Secretary DSIR visited IMMT and we are celebrating the a curtain raiser program on one week one lab which is a programme Vision by PM Today we are establishing for the grater reach to the technocrats, industrialists, general public , Stakeholders like student, research scholars, will be show casing our lab and today is the prelude to that which we early take curtain raiser programme. Eeverything we will talk about & we will showcase that end-to-end resourcing material or metal which is the mineral and making of Metal & Alloys and from their fictionalization of metal or material to work or to give a specific work function to that material so that we can go to the device all end to end working on IMMT that is the punch line that end to end we work to sourcing to the application.

An MoU was signed between IMMT Bhubaneswar VCMD and APMD Govt of Andra Pradesh. Commenting on the signing of MoU Mr MVG Venkat Redy, Director mines VCMD and APMD regarding the pulling in black shell and beatification of bar-rites BSO_4 in Berrium safe which is in Bungum fet and per annum of 3 million tonnes of ore we are going to extract now, in another mine is also going to come up shortly so this beatification that low grade to high grade so we want to do MoU. So that I came here- VG Venkat Redy Director mines VCMD and APMD

On this occasion the dignitary guests unveiled MinMart -the e newsletter of CSIR ITTM and the Hindi annual magazine Abhibyakti Dr. Sujata Chaklanobis, Head, CRTDH, and her team visited and expressed her happiness with the activities and developments happening at CSIR-IMMT

Published in:

[Orissadiary](#)

India to be model of global science, tech and innovation by 2047: CSIR chief

CSIR

22nd January, 2023

India will become the model of global science, technology and innovation in 2047 and will be among top three countries in the field in 2030, Council of Scientific and Industrial Research (CSIR) Director General Dr Nallathamby Kalaiselvi has said.

Talking to PTI, she also denied that young scientist awards have been discontinued and said people will see definitely see a multi-dimensional growth in the science sector in the coming days.

Kalaiselvi, the first woman director general of CSIR, established by the government in 1942, was in Bhopal to participate in the 8th India International Science Festival (IISF)-2022 which began on Saturday. The theme of the four-day event is 'Marching towards Amrit Kaal with Science Technology and Innovation'.

"In 2030, India will be one among the top three nations, in 2047, the country will become the model of global STI (science, technology and innovation). In 2070, the entire globe will accept that India is a ruling power (in science). Because this will become a reality in 2070, this is my strongest belief as a scientific researcher," Kalaiselvi said.

Asked about media reports claiming that CSIR has stopped giving young scientists awards and prizes, Kalaiselvi said, "Nothing has been stopped, young scientist-related programmes are happening everywhere, at every level, even the students are called young scientist students, so everywhere science, researches and researchers are getting celebrated."

"If you feel that something looks like getting stopped, I think you will definitely see multi-dimensional growth in the coming days," she added. On women's role in science, Kalaiselvi noted this is a critically, historically and scientifically important era wherein Prime Minister

Narendra Modi has also said that in the 'Amrit Kaal' "we have escalated ourselves in science, technology and innovation." "The government of India has already identified that women in science can really do wonders and women have also started reaching various heights, Kalaiselvi said, adding that is why she got identified as a woman scientist.

"Therefore, I am not here as Kalaiselvi, but as the recognition given to women in science," she said.

Kalaiselvi, who is also secretary of the Department of Scientific and Industrial Research, said when the country starts celebrating not only science and researches but also women in science, when it is trying to give women an additional support through a number of projects, "I think days are not far when India should be among the top three nations (in the field of science)."

She said the CSIR was coming up with dedicated programmes for women.

On women's participation in the IISF, Kalaiselvi said the participation of women is very unique everywhere and here as well.

The CSIR DG said she is thrilled to see the next generation, both males and females, coming forward in the field of science and it is no wonder that males are taking up the job farther.

"...but nowadays, girls are also coming forward and they have started sharing the responsibility not only in terms of family but also in science and technology, in the nation's development, in maintaining and making sustainable growth, and development of India's tradition and culture through science and technology," she said.

Asked about the new innovations being showcased at the IISF, she said the participants are exhibiting what they have done and they have been told to make the CSIR community understand the critical challenges they are facing.

"I just told them (participants) if they are coming up with some kind of critical challenges that could really be addressed by scientific researchers, they can make the CSIR community understand."

Kalaiselvi said they have 37 labs across the nation and they will be able to find solutions through them.

"If we are getting five to ten issues faced by these people and if we are able to solve one out of it, that will be a success of this kind of an event," she said.

On the future CSIR programmes, she said, "The country is getting ready for 2047 (Amrit Kaal period). We in the CSIR are already geared up for 2030. So from 2030 we will move to 2042, which is our 100th year, then we will move to 2047."

CFTRI may help U.P. in setting up processing units in farm varsities

Ministers from Yogi Adityanath government visit CSIR-CFTRI in Mysuru

The Hindu Bureau
MYSURU

An action plan will be prepared soon for setting up food processing units in agricultural universities located across Uttar Pradesh so that impactful work is done in the field of food processing in the State, said UP Agriculture Minister Surya Pratap Sahi.

"I'm happy that I visited this institute which has made significant contributions in the areas of food security and food processing. Its contribution in developing skills among students is also commendable," said the Minister after visiting the CSIR-CFTRI with two other ministers in the Yogi Adityanath government in Uttar Pradesh.

Dinesh Pratap Singh, Minister of State (independent charge) for Horticulture, and Baldev Singh Aulakh, Minister of State for Agriculture accompanied Mr. Sahi along with Manoj Kumar Singh, Additional Chief Secretary, Government of UP, Anjani Kumar Singh, IAS, and officials from the Department of Agriculture, UP and Karnataka, recently.

CSIR-CFTRI Director Sri-devi Annapurna Singh received the UP Ministers' delegation and an interaction was held at Cheluvamba Hall of CFTRI



The Ministers from Uttar Pradesh during their visit to CFTRI. SPECIAL ARRANGEMENT

where a presentation was made about the contributions of CFTRI and its role in agro-food processing.

Success stories

The director shared the success stories of CFTRI such as AMUL (the baby food), leaf cup making machine, spice oils and oleoresins, high amylase rich energy food, spirulina chikki, nutri bar etc. She emphasised the role of millets on health, machinery for millet processing and innovative technologies on millets developed at CFTRI.

She also spoke about efforts made to address malnutrition and supplementary foods for severely acute malnourished children in Odisha

and Karnataka.

The dignitaries visited the CFTRI facilities such as the food engineering pilot plant, International School of Milling Technology and Food Safety and Analytical Quality Control Laboratory. The scientists of the Food Engineering Department demonstrated food processing machinery housed at the pilot plant and the dosa making machine. The delegation saw the Mobile Food Processing Unit that is designed and developed by the CFTRI and tomato processing was demonstrated.

The delegation lauded innovative ideas for reaching out to farmers at the rural level and also appreciated the role of CFTRI in training farmers through

PMFME, and ODOP programmes. It also commended the infrastructure developed for the stakeholders. During their visit to the wheat milling facility, the scientists explained the importance of a one-year ISMT certificate course in roller flour milling which has benefited both India and developing countries from Africa and South East Asia, a press release from CFTRI said.

The Minister and his team members also visited FSAQCL Department where they were apprised of various labs and instrumentation facilities related to food safety such as detection of heavy metals and contaminants, pesticide residue analysis, etc.

CSIR-NCL celebrates the 73rd Foundation Day

CSIR-NCL

25th January, 2023

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, recently celebrated its 73rd Foundation Day. Ajit Kembhavi, Professor Emeritus and Former Director, IUCAA, Pune, delivered the Foundation Day oration on “From Galileo to the James Webb Space Telescope: The Forward March of Astronomy.” A website for the Central Analytical Facility was also launched at the hands of the chief guest.

In his speech, Kembhavi talked about how astronomy has moved forward from the time of Galileo Galilei (who first did his observations) in 1609 to the present time. He highlighted the discovery of Jupiter’s satellites: Io, Europa, Ganymede, and Callisto.

He said that imaging, photometry, spectroscopy, polarimetry, and variability studies are the major tools of an astronomer. He talked about different telescopes, including Great Forty-Foot Telescope developed by William Herschel. He gave a couple of examples of modern telescopes like reflecting telescope, Himalayan Chandra Telescope, Palomar, 5m Hale Telescope, Very Large Telescope (VLT) from Cerro Paranal Chile, Segmented Mirror Telescopes like the Keck Telescope and Betelgeuse Telescope, Thirty Meter Telescope, Hubble Space Telescope, James Webb Space Telescope (launched in December 2021).

Earlier, in his welcome remarks, professor Ashish Lele, Director, CSIR-NCL, provided brief updates on significant progress made in projects aligned with the roadmap of CSIR-NCL for the 2020-2030 decade. The roadmap was developed keeping in mind the key challenges and opportunities presented to Indian Chemical and allied industries in view of some of the global megatrends such as climate change, sustainability, energy transition, supply chain disruption, self-reliance and the emerging deep tech innovation system, etc.

Published in:

[Times Of India](#)

CSIR-IICT, Hyderabad and Luminous Power Technologies Join Hands to Develop Sustainable Battery

CSIR-IICT

24th January, 2023



Aligning with the 'Make in India' and 'Innovate India' programs, Luminous Power Technologies Pvt. Ltd., Gurugram and CSIR-Indian Institute of Chemical Technology, (CSIR- IICT), Hyderabad have joined hands to develop a Rechargeable Aluminium Battery (RAB). An MOU was signed and exchanged between Preeti Bajaj, MD, Luminous Power Technologies and Director, CSIR-IICT in the presence of Amlan Kanti Das, Sr Vice-President; Abhishek Choudhury, IP & Technology Consultant on behalf of Luminous Technologies and Dr D. Shailaja, Chief Scientist & Chair, Business Development & Research Management, Dr J Vatsala Rani, Principal Scientist and Dr Pratyay Basak, Sr Principal Scientist from CSIR-IICT. Luminous Power Technologies has a strong market presence in providing energy storage solutions for solar and inverter applications. Over the years, the company has created a strong product portfolio in power backup solutions including the recently launched advanced Lead-acid gel batteries.

Published in:

[Aninews](#)

German envoy visits NBRI, talks of tie-up

CSIR-NBRI

24th January, 2023

German ambassador to India Philipp Ackermann appreciated the rich plant collection at the Cactus house of the CSIR-National Botanical Research Institute (NBRI) on Monday. Ackermann along with science counsellor Kaspar Meyer of the German Embassy in India saw presentations made by NBRI director Prabodh Kumar Trivedi and director of the



Indian Institute of Toxicology Research Bhaskar Narayan that elaborated on the research and development activities being carried out at their respective institutes.

The duo was also briefed about the contributions and achievements of both the institutes towards science and society.

The German ambassador also visited the botanical garden of the institute and planted saplings of Rudraksha and Sita Ashok trees.

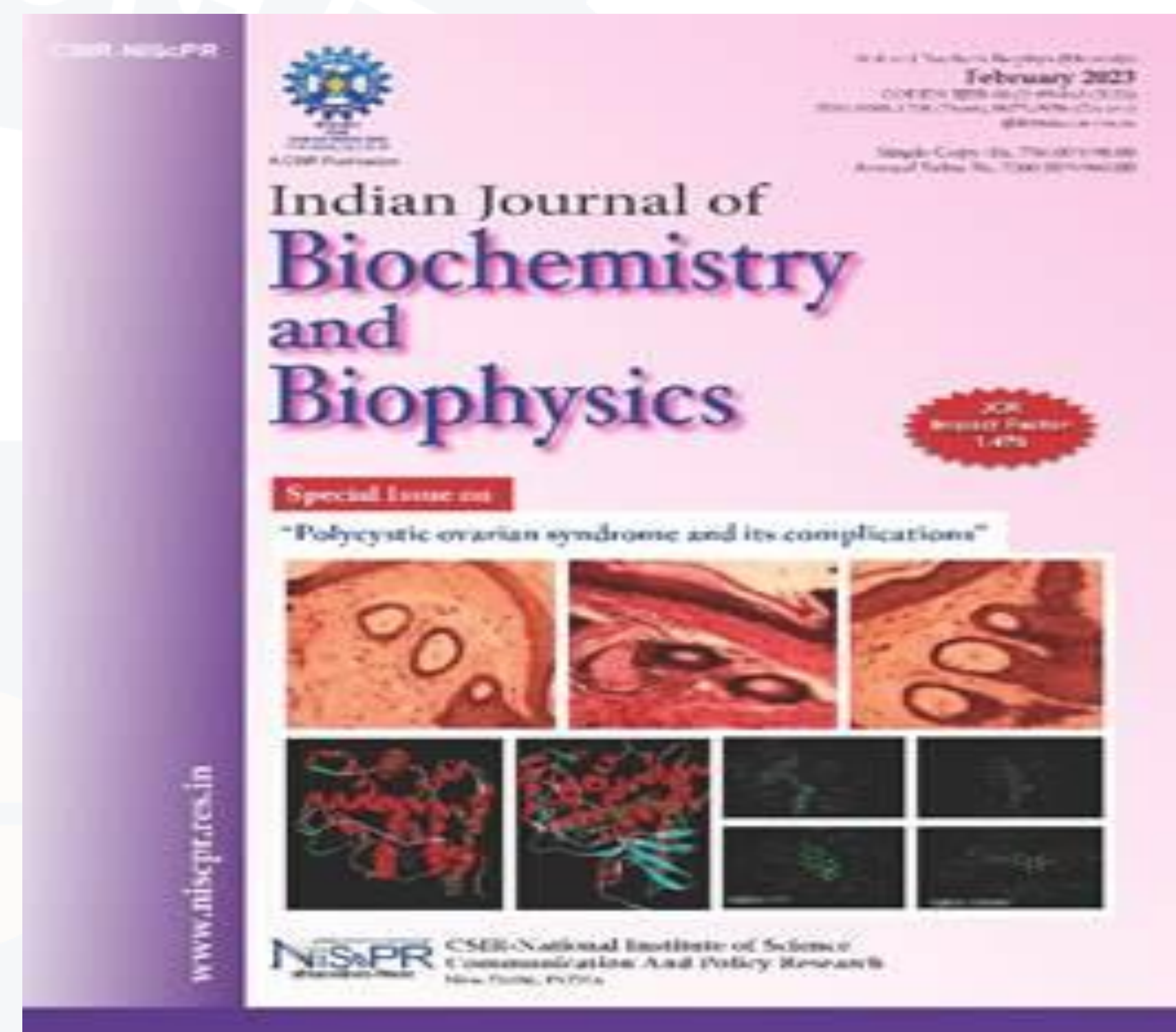
The duo also interacted with the senior scientists of both the institutes and discussed the possibilities of future collaboration in the field of plant science, toxicology and environmental research specifically for the welfare of society and for the advancement of science in general.

“Polycystic Ovarian Syndrome (PCOS) and its Complications”

CSIR-NIScPR

24th January, 2023

Polycystic ovary syndrome (PCOS) is a multifactorial endocrine disorder which is characterized by chronic anovulation. Irregular periods, hirsutism, weight gain are the common symptoms of PCOS. It is the most prevailing female endocrine disorder and the pre-eminent cause of infertility, with the worldwide range of 6-26%, and in India it is 3.7-22.5%. Risk factors that contribute to the development of PCOS include genetics, neuroendocrine system, sedentary lifestyle, diet, and obesity. Though there are synthetic drugs such as metformin and oral contraceptive pills are available for treatment, their



side effects cause concern. Hence, a traditional and herbal medicines has been gaining attention increasingly. However, in terms of indexed publications and awareness, PCOS and Menstrual health need considerable push. In this context, the Indian Journal of Biochemistry and Biophysics (IJBB), one of the premier, peer-reviewed monthly journals from CSIR-National Institute of Science Communication and Policy Research (NIScPR), New Delhi, has brought out its February 2023 issue as a special issue on the theme, “Polycystic Ovarian Syndrome (PCOS) and its Complications” in association with. Technology Information Forecasting Assessment Council, Center of Relevance and Excellence in Herbal Drugs (TIFAC CORE HD) Department of Science and Technology, Government of India, JSS College of Pharmacy, Nilgiris , and JSS Academy of Higher Education & Research, Mysuru.

Among the CSIR-NIScPR journals, IJBB ranks first with the JIF score of 1.472 across the disciplines. With the able guidance and active support of the recently re-constituted editorial

board with reputed national/international experts, the journal has been receiving considerable attention from researchers and academicians in the area of biochemistry, biophysics and biotechnology across the globe. This special issue, with quality contents running into 74 pages, has 1 invited review article and 7 original research papers broadly covering the emerging trends in the Polycystic Ovarian Syndrome (PCOS) and Menstrual Health” in the Indian context .

The articles briefly mention about the achievements and future challenges in the specific subject fields, viz. Combating polycystic ovarian syndrome through In silico techniques, Formulation and evaluation of Buccal mucoadhesive tablets of diclofenac sodium, Role of Herbs at the crossroads of metabolic syndrome and mental illness, Network pharmacology and molecular docking study of the active ingredients in Saptasaram kashayam for the treatment of PCOS, Design, synthesis, characterization and in vitro evaluation of some novel thiol-substituted 1,3,4-oxadiazoles as GlmS inhibitors, TRAIL’ of targeted colorectal cancer therapy, anti-psoriatic activity of the ethanolic extract of the leaves of *Thespesia populnea*, Molecular docking and cytotoxicity interactions of naringenin.

Publication of this special issue was possible only with the consistent support of Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi, Dr Stephen Dimitrov, Chief Editor, IJBB, Dr DN. Rao, Executive Editor, IJBB, Shri RS Jayasomu Chief Scientist, & Dr. G Mahesh, Head Research Journals and the initiative taken by Dr. NK Prasanna, Sr Scientist and Scientific Editor, IJBB, Contributions from the authors, reviewers, and technical support provided by the print production team of CSIR-NIScPR for successful timely publication of this issue is acknowledged.

Published in:

[Pib](#)



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/CSIR-India)



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