CSIR in Media

Platinum Jubilee 1942-2016

75 Years of

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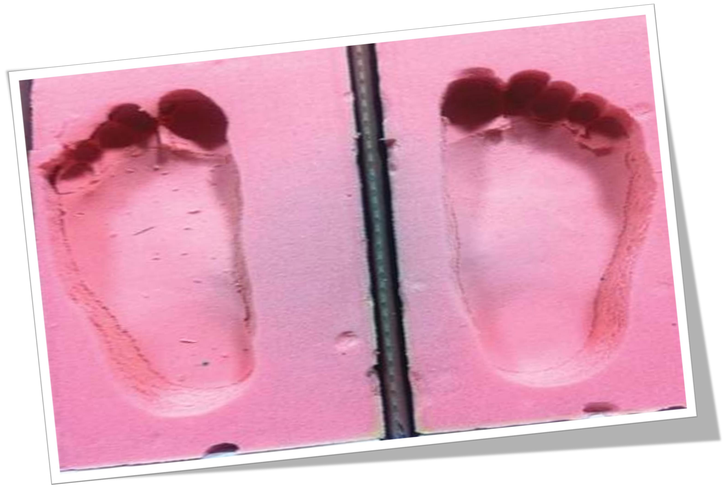
A Daily News Bulletin
15th May 2017



Produced by Unit for Science Dissemination, CSIR, Anusandhan Bhawan, 2 Rafi Marg, New Delhi

CSIR

15th May 2017

डॉ. हर्षवर्धन ने सीएसआईआर टेक्नोलॉजी शोकेस लांच किया

5

नई दिल्ली (ब्यूरो)। विज्ञान व तकनीकी मंत्री डॉ. हर्षवर्धन ने काउंसिल ऑफ साइंटिफिक एंड इंडस्ट्रियल रिसर्च (सीएसआईआर) के टेक्नोलॉजी शोकेस का उद्घाटन किया। इस पोर्टल पर सीएसआईआर की तकनीक के बारे में जानकारी हासिल की जा सकेगी।

Published in:

Amar Ujala, Page 5

CSIR-CCMB scientists' findings give vital clues to contain obesity

CSIR-CCMB

14th May 2017

In a significant breakthrough, a group of scientists from Center for Scientific and Industrial Research-Center for Cellular and Molecular Biology (CSIR-CCMB) have found vital clues to contain obesity.

As part of the research to find out how food is converted into energy and fat, M. Suvarsha Rao, a research scholar, from CCMB guided by Dr Mohan Rao, former director of CCMB and Dr Thangirala Ramakrishna, carried out an initial study and identified a protein called 'Clusterin' responsible for depositing fat in the body. In fact this protein is also regarded as a protecting agent for other proteins in the body.

According to Dr Mohan Rao, the Clustrin protein is having two strands of atomic chains alpha and beta clubbed together. By cloning method they separated the protein into alpha and beta chains and developed antibodies to inject these separated alpha and beta proteins into two Rabbits to find out their functioning.

Upon studying both the rabbits injected with separated Clusterin alpha and beta chains for about a month, the researchers found the rabbit injected with beta chain of protein increased 40 per cent in weight, while the rabbit injected with alpha atomic chain of protein did not have any difference in its weight but could observe that except the necessary required lean fat there was no excess deposit of fat in the rabbit injected with alpha protein chain.

"It is a significant observation. Our research team has found out that the two separated atomic strands of the same protein were functioning differently when injected in two different animals. While the one was responsible for increase in the weight, the other was responsible for generating energy. We are further embarking on a detailed research so that a vital solution can be found out to contain the prevailing problem of obesity," informed Dr Mohan Rao.

According the researchers, the main cause of obesity of increased deposit of fact in the vital body parts like liver, heart and other organs which will lead to various diseases like heart attack, blood pressure etc. "The main reason for this excess deposit is that, the food that we consume is converted into energy and if this energy is generated more than we require it will be deposited in the form of fact in the body by the Clusterin protein," he said.

To ascertain and reaffirm the functioning of the Clustrin protein, the scientists have injected the same protein into a large number of mice. The results were found similar to that of the rabbits. "We observed that when the protein with both strands is injected into the animals it did not have any gain in weight. However when it was broken into two separate chains it has shown two differently opposite function where in one case it showed increase in weight, and in the other it had no significant change. This means Clusterin protein can be tapped to treat obese patients for this more research is needed," said Dr Thangirala Ramakrishna.

Published in:

PharmaBiz

सीबीआरआइ मे आज मनेगा प्रोद्योगिकी दिवस

CSIR-NBRI CSIR-CIMAP

15th May 2017

पहली बार टॉप-20 में आयुर्वेद की दवा

नई दिल्ली। वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद द्वारा विकसित मधुमेह की आयुर्वेदिक दवा बीजीआर-34 को पहली बार टॉप-20 दवाओं में शामिल किया गया है। शोध एजेंसी ने पिछले दो साल के दौरान बाजार में उतारी गई 6000 से अधिक दवा ब्रांड के अध्ययन के बाद यह नतीजा निकाला है। बीजीआर-34 को 14वां स्थान हासिल हुआ है।

दवा के शीर्ष 20 ब्रांड में पहली बार आयुर्वेद भी

उपलब्धि

नई दिल्ली | विशेष संवाददाता

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) द्वारा विकसित मधुमेह रोधी दवा बीजीआर-34 को टॉप-20 दवाओं में शामिल किया गया है। शोध एजेंसी ने पिछले दो साल के दौरान बाजार में उतारी गई छह हजार से अधिक दवा ब्रांडों के अध्ययन के बाद यह नतीजा निकाला है।

एआईओसीडी लिमिटेड ने पिछले दो साल में बाजार में आए 6,367 दवा ब्रांडों की बिक्री, प्रभाव, बाजार में हिस्सेदारी आदि मानकों पर अध्ययन कर रैंकिंग तैयार की। इस रैंकिंग में टॉप 20 में बहुराष्ट्रीय दवा कंपनियों मैकलेड्स, स्नोफी, नेटको, आस्ट्रेजिनेका, जाइडस, ल्यूपिन, सन फार्मा आदि के ब्रांड ही छाए रहे। लेकिन आयुर्वेद की दवा बीजीआर-34 भी इसमें 14वां स्थान पाने में सफल रही। यह पहला मौका है जब किसी आयुर्वेद दवा को विश्व स्तरीय रैंकिंग में शीर्ष 20 में स्थान मिला हो। सामान्यत :आयुर्वेद की दवा बाजार में ज्यादा बिक नहीं पाती हैं और वे ऐसे सर्वेक्षण में बहुत पीछे रह जाती हैं।

कसौटी पर आयुर्वेद फॉर्मूले

इसीएसआईआर के एक वरिष्ठ अधिकारी के अनुसार आयुर्वेद में वर्णित कई और दवाओं पर भी सीएसआईआर की प्रयोगशालाएं कार्य कर रही हैं। उन दवाओं को एलेपैथिक दवाओं की तर्ज पर विकसित किया जा रहा है, ताकि उन्हें और प्रभावी बनाया जा सके। एनबीआरआई, सीमैप, सीडीआरआई तथा हिमाचल प्रदेश और जम्मू- कश्मीर में स्थित सीएसआईआर की प्रयोगशालाएं इस पर कार्य कर रही हैं।

इसका श्रेय सीएसआईआर के वैज्ञानिकों के जाता है, जिन्होंने आयुर्वेद के फार्मूले को आधुनिक दवा की भांति विकसित किया। आयुर्वेद के फार्मूलों पर प्रयोगशलाएं कार्य करें तो ऐसी कई और दवाएं बन सकती हैं।

केके शर्मा, अध्यक्ष एमिल फार्मा

Published in:

Hindustan, Page 1, 15

Jagran.com

Indian scientists unveil home-grown gold standard

CSIR-NPL

13th May 2017

Bharatiya Nirdeshak Dravya weighs 20gm and has the dimensions of a 'Parle-G' biscuit

India now has its own standard bar of gold that is 99.99% pure and can be used to verify the purity of gold sold in shops. Despite India being one of the largest markets for gold, goldsmiths so far depended on imported reference gold bars to check the purity of their biscuits, coins and jewellery.

Called the Bharatiya Nirdeshak Dravya (BND 4201), the bar, weighing 20gm and with the dimensions of a 'Parle-G' biscuit (in the words of a scientists associated with its development), will mean that Indian jewellers will no longer need to import gold bars to check the purity of ornaments.

Last November, the India Government Mint (IGM), a unit of Security Printing and Minting Corp of India Ltd, signed an agreement with the Bhabha Atomic Research Centre (BARC) and CSIR-National Physical Laboratory (NPL) to develop the first gold standard.

The NPL is the repository of standard units — such as the kilogram, the second, the centimetre — in India and provides calibration services. So far, 200 gold bars — each 35mm long, 15 mm wide and 1.5mm thick — have been made, Director of CSIR-NPL, Dinesh Aswal, told The Hindu. He added that these could be a major source of a major source of revenue in future.

"The gold bar would be 25% cheaper than the imported version and as a business (reference gold bars being bought by dealers for tests) could be worth nearly ₹1000 crore per annum," he added.

While the bars will be made by the IGM, technical aspects such as measurement would be done by the BARC and certifying the purity of the bars would be the responsibility of the NPL.

Mr. Aswal added that most of the gold references that India imported was sourced from Canada and Switzerland. The new bars being developed were 99.99% pure with impurities of only 100 parts-per-million.

"Development of this reference material indigenously will add to the Make in India campaign and will save foreign exchange as well as minimise dependency on foreign countries," the IGM said in a statement.

The Department produces Standard Gold Bars of standard fineness and purity of 10g, 50g, 100g, 500g & 1000g denominations.

According to the World Gold Council, demand in India jumped 19% to $3.62 billion (approx. ₹19,000 crore) this quarter, with volumes up 16% to 92.3 tonnes.

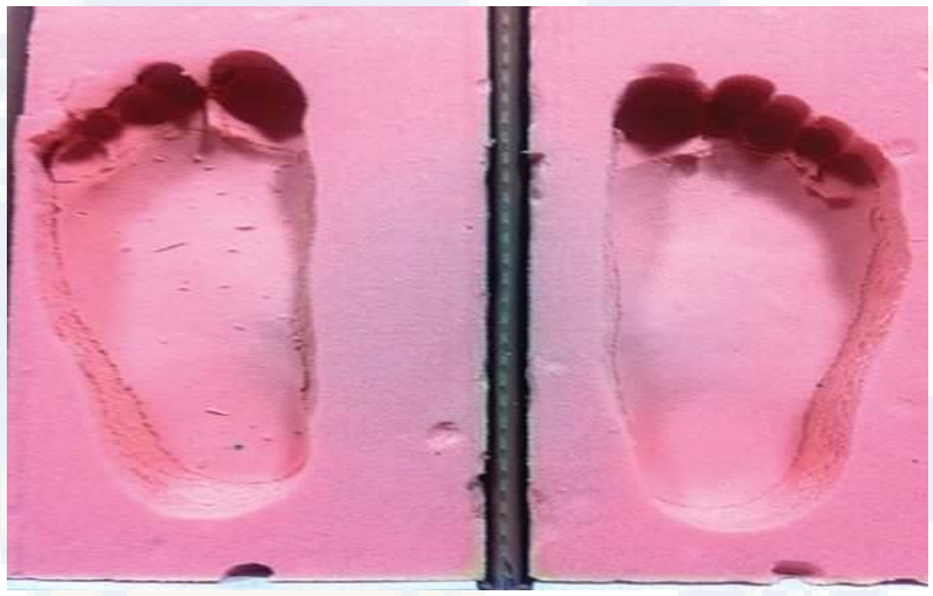
Published in:
The Hindu

Coming: Affordable, high-performance shoes for athletes

CSIR-CLRI

15th May 2017

CHENNAI: To encourage and nurture budding Indian athletes, the Central Leather Research Institute (CLRI) is leading a national initiative to design and develop high-performance indigenous 'affordable' sports shoes that cater to the needs of domestic talent.



The idea was sowed by Prime Minister Narendra Modi during the 70th foundation day ceremony of the Council of Scientific & Industrial Research (CSIR) last year. Now, the project has officially taken off with the CLRI preparing a roadmap while roping in other research institutes and industry partners. An MoU is likely to be signed with the Centre for Sports Science (CSS) in Sri Ramachandra University (SRU) to utilise scientific research and analysis.

CLRI director B Chandrasekaran told Express that developing affordable footwear has been accorded top priority. Top brands like Nike, Adidas and Puma, with a base price of Rs 6,000, are out of bounds for many young sportsmen from poor backgrounds.

"Good sports shoes are a basic requirement. They are used not only to heighten performance but to protect the feet. There is no local manufacturer who produces performance shoes, so the Union Ministry of Science and Technology and Union Ministry of Earth Sciences have entrusted the responsibility to us. We plan to produce a sports shoe, which costs about Rs 1,000," he said.

Chandrasekaran said the CLRI has the know-how in material science and gait analysis. "The Union government is planning to set up nine industrial complexes. One such complex can be dedicated to the manufacture of indigenously developed sports shoes. There is a huge market for sports like cricket, hockey, kabaddi and football. Domestic leagues are encouraging more to take up sport as a profession. We have a full-fledged material testing laboratory, dedicated polymer group, shoe design centre and miniature production facility," he said.

The National Institute of Design in Ahmedabad and Footwear Design and Development Institute have been roped in for finalising designs, while the National Chemical Laboratory in Pune and Advanced Material and Process Research Institute in Bhopal are bringing in their expertise in the selection of materials. Inter-ministerial efforts are also on to fast-track the project. "We are also in touch with non-leather manufacturers from New Delhi, Kolkata and Kerala, which is a huge source of natural rubber."

Sadiq Mohammed, chief scientist, Shoe and Product Design Centre, CLRI, said brands like Bata and Liberty came out with the casual sports shoes which were not athletic in nature. "With Sri Ramachandra Centre for Sports Science, we will be carrying out a joint anthropometric study, which will give us authentic data. We have also written to a brand called Kangaroo through the Federation of German Footwear Industry for joint R&D."

Dr KA Thiagarajan, in-charge, Centre for Sports Science, SRU, said that the sports shoe industry is like Pepsi and Coca-Cola as 90% of the product's cost goes into marketing.

Three components

- The insole is usually a thin layer of man-made ethylene vinyl acetate (EVA)
- The midsole, which provides the bulk of the cushioning, generally consists of polyurethane surrounded by gel, liquid silicone or foam
- The outsole is made of carbon rubber, which is hard, or blown rubber, a softer type, although manufacturers use an assortment of materials

Key to design

- Contemporary shoe designers focus on the anatomy and movement of the foot
- Using video cameras and computers, they analyse factors as limb movement, foot position and the effect of different terrains on impact
- Computers calculate how best to accommodate conditions like pressure points, friction patterns and force of impact
- Designers then develop prototypes based on their studies of joggers and runners

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Published in:

Indian Express

NAL'S AIRBOAT COULD HELP DE-WEED CITY'S LAKES

CSIR-NAL

15th May 2017

The National Aerospace Laboratories (NAL) has developed an airboat that can be deployed for the cleaning up of polluted waterbodies, including the Bellandur Lake.

The city-based laboratory involved in the research and development of civilian aerospace sector has developed the boat as part of its societal applications mission.

"The airboat will have an air propulsion system which will push it forward. The boat will also have a flat bottom. This kind of boat is ideal for cleaning water bodies. The boat can be pushed into the water and can be scooped out easily. Besides, they have good buoyancy," said NAL chief scientist S Selvarajan.

He explained that the difference between an airboat and a regular motor boat is that the former is equipped with an air propulsion system, which makes it more powerful compared with the latter, and this feature would help it to clear weeds from lake's surface.

"Airboats can operate easily on marshy waters. The huge propellers on the boat are above the water and the power is generated from air instead of water to prevent the engine from getting jammed. Besides, the powerful propellers can easily push forward the floating weeds and plants to one corner of the lake from where they can be bundled up to be lifted out of the lake," he said. This makes it ideal for cleaning of polluted lakes, such as the Bellandur Lake.

Selvarajan said the development programme for the air-propelled ferry system started a few years ago and a few models have been developed by NAL.

A new powerful version the airboat has been developed by the laboratory and its integration is currently on.

"In a couple of weeks, we intend to test the airboat at the Ulsoor Lake along with the Army's Madras Engineers Group personnel. If the trials are successful, it can be taken up for production by the industry," he said.

"The NAL campus borders the Bellandur Lake and it could be tested there; though NAL would not directly be involved in the cleaning process," Selvarajan added.

Published in:
Bangalore Mirror

ISRO all set to launch GSLV Mark III

CSIR-IICT 13th May 2017

The Indian Space Research Organisation (ISRO) is willing to transfer lithium ion battery technology that it has developed for satellites to the automobile industry.

"Tomorrow's transport vehicle is not going to be dependent on petrol and diesel," said A S Kiran Kumar, Chairman, ISRO, while delivering the A V Rama Rao Technology Award Lecture on the occasion of National Technology Day celebrations held at the Indian Institute of Chemical Technology (IICT) here on Friday.

The batteries developed by ISRO could be used in electric vehicles but the industry needed to further develop the technology to suit its needs and see how it could take it for mass production, he added.

The launch of GSLV Mark III take place on June 5 from Sriharikota and all systems are ready and the assembly of all stages is on.

The launch is much awaited as it is for the first time that ISRO is testing a 4,000 kg payload. Till date, the PSLV with a 2,000 kg payload has been the workhorse of ISRO. Kiran Kumar said, "Till date, if India wanted to launch heavy payloads, it had to depend on others but not anymore."

The ability to transfer discoveries and make them practical for the common man should be the aim of science, he said, and exhorted the young scientists to work towards it. Earlier, IICT director Dr S Chandrashekar presented a memento to A S Kiran Kumar. Dr A V Rama Rao, CMD, AVRA Labs, was also present on the occasion.

Published in:

Hans India

The Hindu

Why India celebrates National Technology Day on May 11, and its theme for 2017

CSIR-NAL

11th May 2017

On May 11, 1998, India successfully test fired the Shakti-I nuclear missile at the Indian Army's Pokhran Test Range in Rajasthan in an operation led by aerospace engineer and late President Dr APJ Abdul Kalam. Two days later, the country successfully tested two more nuclear weapons as a part of the same Pokhran-II/Operation Shakti initiative (Pokhran-I was the 1974 test firing of the 'Smiling Buddha' missile). Following this, the then Prime Minister Atal Bihari Vajpayee declared India a nuclear state, making it the sixth country to join the 'nuclear club' of nations and the first one that was not party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – an international treaty signed by the US, Russia, the UK, France, and China which aims to prevent the spread of nuclear weapons and hopes to achieve nuclear disarmament.

Becoming the world's sixth nuclear state wasn't the only feat India achieved on that day. The country's first indigenous aircraft, the Hansa-3, was flown in Bengaluru while the nuclear tests were being conducted in Rajasthan. Developed by the National Aerospace Laboratories (NAL), a Council for Scientific and Industrial Research (CSIR) lab, the Hansa-3 was a light two-seater general aviation plane used in flying institutes for pilot training, sports, surveillance, aerial photography, and environment-related projects.

That isn't all. May 11, 1998 was also the day on which the Defence Research and Development Organisation (DRDO) completed the final test-fire of the Trishul missile after which it was inducted into service by the Indian Army and Indian Airforce. A short-range, quick-reaction, surface-to-air (SAM) missile, Trishul was a part of India's Integrated Guided Missile Development Programme – a Ministry of Defence initiative that has resulted in the creation of the Agni, Prithvi, and Akash missile systems.

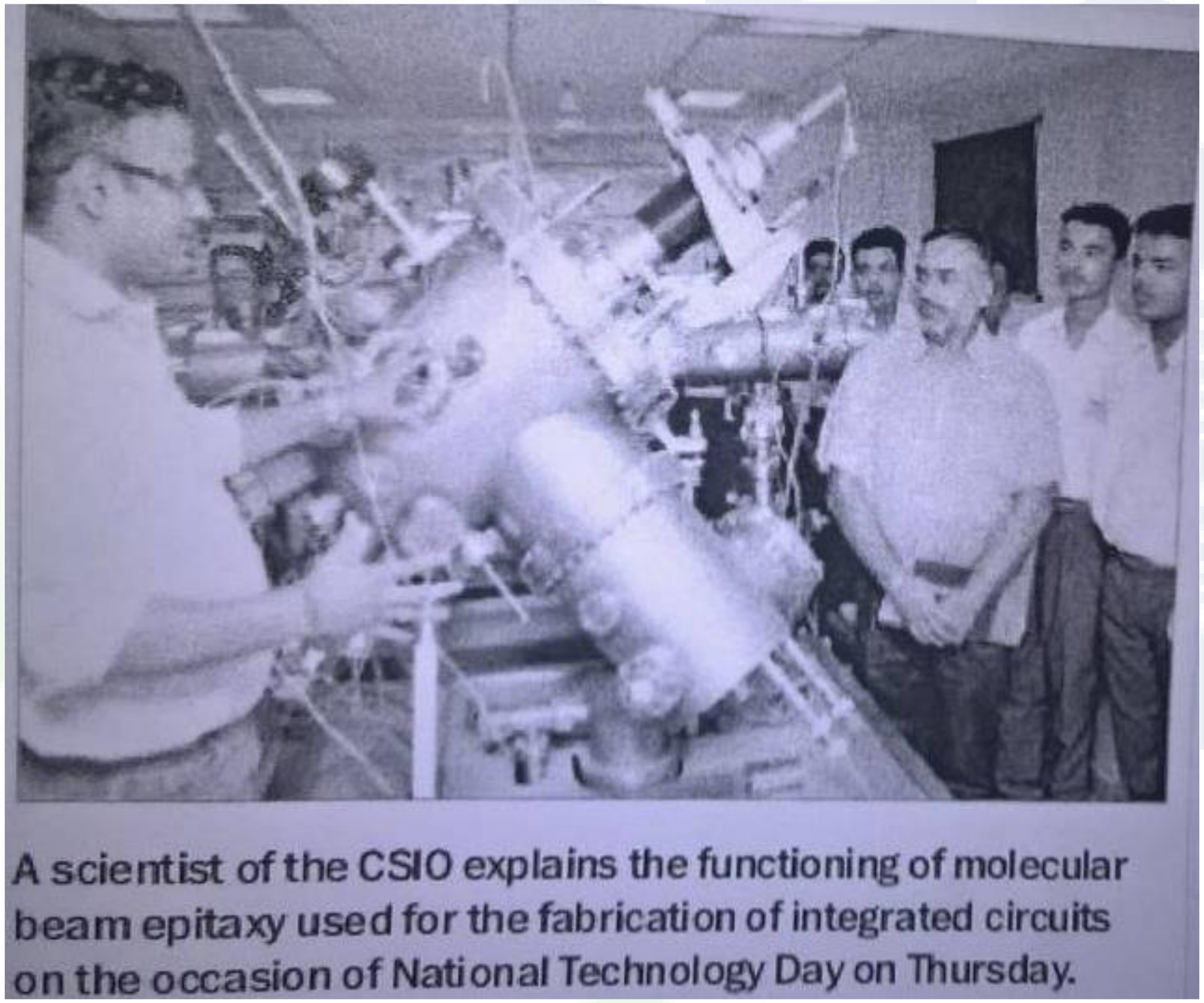
Based on these tremendous breakthrough achievements by the country's scientists, engineers, and technicians, Atal Bihari Vajpayee declared May 11 as the National Technology Day. Every year since 1999, the Technology Development Board (TDB) commemorates the day by honouring technological innovations that have positively impacted the nation. The TDB also selects a theme for each year's event, and the 2017 National Technology Day theme is 'Technology for inclusive and sustainable growth'.

Celebrated as a symbol of quest for scientific inquiry and technological creativity, and their translation into the integration of science, society, and industry, the National Technology Day sees the TDB confer National Awards to the most noteworthy individuals, institutions, and businesses of the year. It is a large-scale event which sees the Department of Science and Technology, Department of Bio-Technology, the Ministry of Earth Sciences, the Council of Scientific and Industrial Research, and several other scientific departments in attendance. The event, conducted in New Delhi, also sees India's President give out the National Awards and launch a range of innovative products as the Chief Guest. Furthermore, several state governments organise local events that see academic institutions, research organisations, and NGOs come together to generate awareness about the latest technological advancements in the country.

Published in:
Your Story

CSIR-CSIO

12th May 2017



A scientist of the CSIO explains the functioning of molecular beam epitaxy used for the fabrication of integrated circuits on the occasion of National Technology Day on Thursday.

Published in:

Tribune

CSIR-CSIO

12th May 2017

नेशनल टेक्नोलॉजी-डे पर स्कूल के स्टूडेंट्स के लिए खुली रहीं लैब

चंडीगढ़| सेंट्रल साइंटिफिक इंस्ट्रूमेंट्स ऑर्गेनाइजेशन में वीरवार को नेशनल टेक्नोलॉजी डे का आयोजन हुआ। संस्थान की लैब स्टूडेंट्स के लिए खुली रहीं। इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी खरगपुर के पूर्व डायरेक्टर कस्तूरी लाल चोपड़ा ने कहा कि वर्तमान साइंस युग में नॉलेज से लोगों की जरूरतों को पूरा करने के लिए साइंटिस्ट्स को खोज पर जोर देना चाहिए।

Published in:

Dainik Bhaskar

Kids may get milk for 5 days a week, with chocolate flavour

CSIR-CFTRI

14th May 2017

Bengaluru: Soon, schoolchildren in Karnataka may get to savour chocolate-flavoured milk for five days a week under the Ksheera Bhagya scheme.

An official of the Karnataka Milk Federation (KMF) said they had recently introduced three varieties of flavoured milk in some schools of Belagavi and other districts on a pilot basis and found out that most students have a special likening for chocolate-flavoured milk.

"We are now gearing up to supply flavoured milk powder from June and awaiting the government's nod," he said.

The beneficiaries of Ksheera Bhagya have been demanding that the government provide them with flavoured milk. Many students refuse to drink the milk supplied to them due to bad smell and high water content. Some students and parents had recently complained to chief minister Siddaramaiah at a public interaction programme that the milk given to their children was of poor quality and short of fat and vitamins.

There have been reports about illegalities in milk powder distribution where officials and teachers allegedly diverted or sold unused powder in open market.

Taking this into consideration, the state government had asked the Central Food technological Research Institute (CFTRI) to produce three different flavours of milk powder, including chocolate, vanilla and badam.

A senior official of the finance department said the government has been dilly-dallying on the issue since chocolate-flavoured milk powder would cost more. At present, Rs 510 crore is being spent annually to provide milk thrice a week to 39 lakh anganwadi children and 62 lakh students in government and aided schools. "As the government is planning to extend it for five days a week from June, it will require an additional Rs 300 crore. And if it wants to supply chocolate-favoured milk, it may need an additional Rs 50 crore. As it is a huge financial commitment, the government had been delaying its implementation," he added.

But now several legislators, including some senior ministers, have been batting for flavoured milk for schoolchildren. Tourism minister Priyank Kharge said: "It would be good if children are given chocolate-flavoured milk."
Additional chief secretary to Karnataka government K Ratna Prabha too endorsed his views and said: "Why only children, even adults love flavoured milk."

Published in:
TOI

IITR's be a scientist offer for students

CSIR-IITR

14th May 2017

The Indian Institute of Toxicology Research (IITR) will give students of class VIII to XII an opportunity 'to be a scientist'. The science institute launched 'Be a Scientist' programme under its Empowering Pupil's Innovation and Creativity (EPIC) programme during Technology Day celebrations on Friday.

"'Be a Scientist' will be an opportunity for budding scientists to learn from the experts at our institute. It's a unique opportunity for school students to nurture their scientific creativity and innovation," said IITR director Alok Dhawan. He said that the selected students will get an opportunity to be a scientist for a day at CSIR-IITR. It will ignite their scientific temper through interactive sessions with scientists, an exhibition of various kinds of technologys and a visit to the laboratories, he added.

Dhawan said the students can also submit a research proposal on which they can work at the institute for two-four weeks. The proposal has to be submitted on the official website of the institute.

Published in:

TOI

CCMB launches training programme for medicos

CSIR-CCMB

14th May 2017

The programme was designed in consultation with Directorate of Medical Education and internationally acclaimed clinical research groups of CCMB

To enhance academic and technical skills of medical students in modern and clinical research, the Centre for Cellular and Molecular Biology (CCMB), Hyderabad, launched Medical Student Research Training (MedSRT) programme at CCMB.

The training programme is for undergraduate medical students and was designed in consultation with Directorate of Medical Education, and internationally acclaimed clinical research groups of CCMB.

Speaking at the launch, CCMB Director, Dr Rakesh Kumar Mishra said the research on human health was the need of the hour. The training will help in providing solutions to the health problems and hands-on training to the young medical students.

Dr Mishra said the programme includes lectures and hands-on training on five research areas: Bioinformatics, DNA and RNA based Techniques, Cell biology, Proteins and Immunological Techniques.

The state of the art infrastructure and expertise of CCMB for conducting research in modern biology further enhances quality of the program, he said.

He stated that MedSRT is not only a key addition to the academic and skill development activities of CCMB, but is one of the first of programmes of its kind in the country.

Dr Sravan Kumar, Vice Principal, Gandhi Medical College said that 21 medical students are participating in this skill development programme.

Dr Arasu, Principal, Siddipet Medical College said that it is a good golden opportunity for medical students to learn the medical research methodology. This also helps in Cancer research, he said.

Published in:
Telangana Today

CSIR

13th May 2017

హైదరాబాద్‌లో ఇస్రో కేంద్రం

దాంతో పరిశోధకులకు, విద్యార్థులకు టెక్నాహిక వ్యాపారవేత్తలకు ఉపయోగం

- జూన్ 5న అత్యంత శక్తిమంతమైన జీఎస్ఎల్వీ మార్క్-3 డీ1 ప్రయోగం
- ఇస్రో చరిత్రలో ఇదో మైలురాయి: చైర్మన్

హైదరాబాద్, మే 12(ఆంధ్రజ్యోతి): తెలుగు రాష్ట్రాల ఉమ్మడి రాజధాని హైదరాబాద్‌లో ఇస్రో కేంద్రాన్ని ఏర్పాటు చేయనున్నట్లు ఇస్రో చైర్మన్ ఎ.ఎస్.కిరణ్‌కుమార్ ప్రకటించారు. వచ్చే ఆక్టోబరులో జీడిమెట్ల పరిసరాల్లో దీన్ని ప్రారంభించనున్నట్లు ఆయన వెల్లడించారు. ఇస్రో నిర్వహించిన స్పేస్ మిషన్లలో సేకరించిన డేటాను, పరిశోధనల ఫలితాలను ప్రజలకు అందుబాటులో ఉంచుతామన్నారు. నేషనల్ టెక్నాలజీ డే సందర్భంగా శుక్రవారం ఆయన నగరంలోని సీఎస్ఐఆర్ ఆడిటోరియంలో ఏపీ రామారావు టెక్నాలజీ అవార్డు లెక్చర్ ఇచ్చారు. హైదరాబాద్‌లో ఏర్పాటు చేసే కేంద్రంలో ఇస్రో శాస్త్ర, సాంకేతిక విభాగానికి సంబంధించిన సమస్త సమాచారం ఉంటుందని, పరిశోధనలు చేయాలనుకునే వారికి ఆ కేంద్రం ఉపయోగపడుతుందన్నారు. అలాగే కొత్త కంపెనీలు పెట్టాలనుకునే వారికి, పరిశోధకులకు, విద్యార్థులకు మద్దతుగా నిలుస్తుందని. దాన్నుంచి సాంకేతిక సహాయంతో పాటు కొత్త ఐడియాలను కూడా పొందవచ్చన్నారు. అలాగే, చమురు ఇంధనాల వాడకం తగ్గించాలన్న దేశ లక్ష్యాలకు అనుగుణంగా వాహనాలకు, ఇతర అవసరాలకు లిథియం అయాన్ బ్యాటరీ లను వాడాల్సిన సమయం వచ్చిందని కిరణ్‌కుమార్ అభిప్రాయపడ్డారు. ఆ పరిజ్ఞానానికి సంబంధించి ఇస్రో సాధించిన సాంకేతికతను వాణిజ్య అవసరాలకు అందుబాటులోకి తెస్తామన్నారు. ఈ బ్యాటరీలు 10-12 ఏళ్లకు పైగా పనిచేస్తాయన్నారు. కాగా, నాలుగు టన్నుల బరువును రోదసిలోకి మోసుకెళ్లగలిగే శక్తిమంతమైన జీఎస్ఎల్వీ మార్క్-3 డీ1ను జూన్ 5న ప్రయోగించనున్నట్లు కిరణ్‌కుమార్ తెలిపారు. ఇస్రో చరిత్రలో ఇదొక మైలురాయిగా నిలుస్తుందన్నారు. ఇస్రో పరిశోధనలు ఇప్పుడు దాదాపు అన్ని రంగాలకూ ఉపయోగపడుతున్నాయని తెలిపారు. కార్యక్రమంలో ఐఐసీటీ డైరెక్టర్ చంద్రశేఖర్, మాజీ డైరెక్టర్ ఎవి.రామారావు పాల్గొన్నారు.

ఇస్రో చైర్మన్ కిరణ్ కుమార్‌కు సన్మానం

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