



CSIR IN Media

A Daily News Bulletin

1st November , 2016

Page: 1

Pune-based scientist elected American Physical Society fellow

CSIR-NCL

His work has attracted attention and funding from the Government of India as well as from companies such as Reliance, Indian Oil Corp (IOC), General Electric, Procter and Gamble, Honeywell, DuPont, General Cable Corporation.

Guruswamy Kumaraswamy, a scientist from the CSIR-National Chemical Laboratory (CSIR-NCL), Pune, has been elected a fellow of the American Physical Society (APS). This is a prestigious recognition, as the international scientific community elects fewer than 0.5% of APS' membership as fellows.

In a statement, the NCL said Guruswamy was honoured for his research project on 'Opening new routes to templated polymeric structures using mesophases and crystallization, and elucidating their physics'. Guruswamy is a 1996 graduate in BTech from IIT Bombay. He also holds an MS and PhD, received from the California Institute of Technology, USA, in 1996 and 2000 respectively. He did his postdoctoral research at the Max Planck Institute for Colloids and Interfaces, Germany, and joined CSIR-NCL in 2001.

Guruswamy's research falls into the broad area of soft matter that includes industrially-important materials such as polymers, surfactants, liquid crystals and nanoparticle colloids, added the statement. His group conducts experiments to understand and design the structure and properties of such materials. His work has attracted attention and funding from the Government of India as well as from companies such as General Electric, Procter and Gamble, Honeywell, DuPont, General Cable Corporation, Reliance, Indian Oil Corporation, among others.

Guruswamy's work has been previously recognised with the CSIR Young Scientist Award in Engineering Sciences in 2005, and the NCL-Research Foundation Scientist of the Year award for 2012-13. In addition to his research, Guruswamy has been actively involved in science outreach for school students and coordinates the Exciting Science Group. He received a commendation from the NCL Director in 2010, for his efforts towards promoting interest in science through the group.

October 31, 2016

Source: energy.economicstimes.indiatimes.com/news/oil-and-gas/pune-based-scientist-elected-american-physical-society-fellow/55147775///

CSIR-IICT

A due recognition

HYDERABAD-BASED RESEARCH SCIENTIST DR PRATHAMA S. MAINKAR BAGGED THE OPPI WOMAN SCIENTIST AWARD

RESHMI CHAKRAVORTY
DECCAN CHRONICLE

Taking inspiration from Marie Curie's life, Hyderabad based Dr Prathama S. Mainkar has dedicated her life to research. She is the Senior Principal Scientist of CSIR-Indian Institute of Chemical Technology and was recently awarded the Woman Scientist Award by the Organisation of Pharmaceutical Producers of India (OPPI).

OPPI represents research-based pharmaceutical companies in India and has been appreciating work done in the pharma field since 1965. This recognition is bestowed on her for the remarkable contributions made to the pharmaceutical industry, both in early drug discovery and process development for generics.

Dr Prathama ventured into the field of research in 1996 and has worked in various capacities like early drug discovery, expertise in catalysis, organometallic chemistry and organic chemistry. Her contributions include identification of new chemical entities for treatment of cancer, tuberculosis and CNS related diseases. "My first tryst with pharmaceuticals was as a kid, when my father bought me Marie Curie's biography. After reading it, I knew this was it for me — I would enter the field of research," she says.

Dr Prathama has done her schooling and professional training from Hyderabad. "I am a complete Hyderabad and have done all my studies here. Even my PhD on 'Synthesis of some biologically active compounds' was done here," she shares.

According to her, one should be open to take up challenges in the field. "There would be challenges and one should face it sportively. There are no shortcuts in our field. Everyone needs drugs; it is an industry which is never going to die. As long as human race is alive, drugs will be an integral part of our life. In order to get a drug out for public usage, it takes 10-12 years of hard work and approvals," she adds.

There are not many women research scientists in India. Dr Prathama points out the probable reason, "Sometimes, parents don't allow it as one has to work really hard for several years and people these days are not that patient. Somewhere in between studies and research, people get married and things post marriage may not work accordingly."

But it's not just work all the time for Dr Prathama. She enjoys reading and listening to music when she is not busy with her research.

After reading Marie Curie's biography, I knew this was it for me — I would enter the field of research

**PRATHAMA S. MAINKAR
SCIENTIST**

WOMAN OF SCIENCE: Dr Prathama wishes that more women make a mark in the field of science



Deccan Chronicle | November 1, 2016

Greens threaten to move court over felling of trees

CSIR-NEERI

Expressing concern over the felling of trees near Mahatma Gandhi Mission (MGM) campus for constructing a memorial of Bal Thackeray, environmentalists have demanded the civic body to immediately stop the activity and also threatened to move court.

They said a study conducted earlier by city-based scientists in collaboration with National Environmental Engineering Research Institute (NEERI) and Council of Scientific and Industrial Research (CSIR) had revealed that 14 of the 17 locations in Aurangabad recorded high pollution levels.

"It is shocking that despite reports of the study revealing high pollution levels in such places triggering a red alert and only one place, MGM campus, being able to maintain standard norms because of the dense garden there, the Aurangabad Municipal Corporation (AMC) is bound to destroy the green lungs in the name of erecting the memorial," said environmentalist Kishore Pathak.

He said a group of environmentalists, including Milind Girdhari and advocate Swapnil Joshi, recently highlighted the issue and urged the municipal commissioner not to carry out any development activities and destroy the green lungs of Priyadarshini garden on MGM campus in Cidco at the cost of environment.

"The municipal commissioner has also assured us that no trees will be cut. But it is shocking that more than 50 huge trees were hacked by the civic body by pressing a bulldozer into service in an insensitive manner," Girdhari said.

"According to the report, the average concentration of PM10 (particulate matter) in the city ranged between 82.1 and 343.9 microgram per metric cube (g/m³), of which 14 locations reported alarming situation, while two fell under the worst category. Despite such alarming situation in the city, the authorities are turning out to be destructors in the name of development instead of taking care of the environment," said Rekha Shelke, principal of MGM's College of Journalism & Mass Communication, adding that if the civic body does not stop the destruction of green cover, she will be compelled to approach the court.

"Since 1982, MGM has been developing this green zone and has nurtured more than 1,000 trees of different species. In the meantime, the civic body has taken over the charge of the 17-acre land and started mercilessly hacking trees nurtured for years," she said.

MGM secretary Ankushrao Kadam has written a letter to the municipal commissioner demanding to stop tree felling immediately and also to initiate strict action against the culprits.

Vijay Patil, garden superintendent in the AMC, said no trees have been cut so far. "Only the shrubs have been cleared considering the safety and security of those visiting the garden. If needed, we will translocate the trees but will not hack them," he added.

Oct 29, 2016

Source: timesofindia.indiatimes.com/city/aurangabad/Greens-threaten-to-move-court-over-felling-of-trees/articleshow/55127925.cms

Dr Jitendra leads 'Run for Unity' organized by IIIM

CSIR-IIIM

The whole nation is celebrating National Unity Day (Rashtriya Ekta Divas) today to pay tribute to former Home Minister of India and a great freedom fighter Sardar Vallabhbhai Patel. At Jammu, to commemorate the 141st Birth Anniversary of Sardar Vallabhbhai Patel, the Iron man of India, Run for unity was organized at different places today.

CSIR-Indian Institute of Integrative Medicine, (IIIM) Jammu also celebrated the day as National Unity day by organizing run for unity marathon in which hundreds of people from all walks of life participated.

This Run for Unity marathon was led by Union Minister of State in PMO, Dr Jitendra Singh who was the chief guest on the occasion.

It was organized by Indian Institute of Integrated Medicines (IIIM) from its main campus, Canal road to Belicharana and back to IIIM Canal road.

Hundreds of volunteers including the staff and students of IIIM under the chairmanship of its Director Dr Ram Vishwakarma also participated in the Run for Unity.

While paying glowing tribute to Sardar Patel on his birth Anniversary, Dr Jitendra Singh described him among the towering personalities of the country who played a leading role in freedom struggle and uniting the whole India.

Terming Sardar Patel a symbol of dignity and unity of country, Dr Jitendra Singh said historians are of the opinion that merger of 500 princely States into Indian Union was not possible without his assertiveness. Sardar Patel was architect for the formation of Indian Republic, he added.

Dr Singh said Sardar Patel was known for his rectitude, conviction and quick decision making. It is a matter of vindication for all of us that after more than six decades of independence, in 2014, the Government had declared his birthday as National Unity Day, he added.

He said the run for unity was also taken out at various other places of the country.

Dr Singh said it is occasion for us to rededicate ourselves for unity and integrity of the country as cherished by Sardar Patel.

He congratulated Dr. Ram Vishwakarma and his staff for organizing run for unity besides doing world class science as this would have great impact on nation building. Besides the officials of the IIM, social activists and prominent citizens also participated Run for Unity on the occasion.

November 1, 2016

Source: [www.dailyexcelsior.com/dr-jitendra-leads-run-for-unity-organized-by-iim//](http://www.dailyexcelsior.com/dr-jitendra-leads-run-for-unity-organized-by-iim/)

Amidst tensions, Diwali celebrated with religious fervour across Jammu

CSIR-IIIM

Scientists from the Indian Institute of Integrative Medicine (IIIM) also visited a BSF camp in Paloura in Jammu to celebrate Diwali.

Diwali, the festival of lights symbolising the victory of good over evil, was celebrated with religious fervour and gaiety across Jammu region on Sunday. People were seen exchanging greetings and sweets and bursting fire crackers. A huge rush of shoppers was also witnessed across the region with people purchasing sweets and gift items.

Elaborate security arrangements have been put in place across the region in the wake of the heightened tensions on the International Border and the Line of Control and the increase in infiltration attempts from across the border. "Elaborate security arrangements have been kept in place across the region, especially on the routes connecting the border areas with the city, to thwart the nefarious designs of anti-national elements," a police officer said.

A large number of people also went to border areas to celebrate the festival with soldiers guarding the frontiers in the region. Reports of Diwali celebrations also poured in from other districts of the region. Sixteen scientists, including four women scientists, from the Indian Institute of Integrative Medicine (IIIM) also visited a BSF camp in Paloura here and celebrated Diwali with the personnel.

The scientists visited to show solidarity and convey their best wishes on the occasion of Diwali to troops, a BSF spokesman said.

Oct 30, 2016

Source: www.dnaindia.com/india/report-amidst-tensions-diwali-celebrated-with-religious-fervour-across-jammu-2268833

No more odd-even in capital? Delhi set to install air purifiers to tackle air pollution

CSIR-NEERI

To give Delhi a clean sigh of relief, air purifying systems will be installed at five locations and a mist fountain will also be installed at one major intersection to purify the air.

As part of a pilot project, air purification systems will be installed at five major intersections of the city within two months, the Delhi government said.

Delhi Transport Minister Satyendar Jain said a mist fountain will also be installed at one major intersection to help purify the air.

"We have identified five major intersections in Delhi where comprehensive air treatment systems will be installed. If the pilot project is successful, it will be expanded to other intersections as well," Jain said.

The system has been designed by the National Environmental Engineering Research Institute (NEERI) along with the Indian Institute of Technology Bombay (IIT-B).

The five locations where the systems will be installed are Sarai Kale Khan, Anand Vihar, Kashmere Gate, ITO and IIT Delhi/AIIMS.

"It is a modular system and can be scaled based on the space available at the intersections. It can even be installed on the central verge of the road," Jain said.

Jain added that a mist fountain will come up at one location.

"Experts say that it can have a big impact on pollution by arresting the pollutants in the air. Recycled water can be used in this fountain which will be supplied by Delhi Jal Board," Jain said.

PURIFICATION SETUP

A government statement said the purification systems will tackle carbon monoxide, nitrogen oxide and hydrocarbons. "The system has potential to reduce carbon monoxide and particulate emission by 40 per cent to 60 per cent in 20 to 30 metre radius during peak hours of traffic," the statement said.

The decision was taken at the third meeting of the inter-ministerial task force set up by Delhi Chief Minister Arvind Kejriwal to tackle the issues of air pollution and garbage disposal.

MORE THAN THAT

During the meeting, the government also decided that Rajghat power plant will be converted into waste-to-energy plant by December 2017. Jain had announced on Wednesday that the government is considering the proposal.

"During the first phase, we will build a capacity of processing at least 4,000 tonnes of garbage. We intend to increase it to 6,000 and 8,000 tonnes in subsequent phases," Satyendar Jain, who heads the task force, said after the meeting.

According to a Gulf News report, when asked if Delhi government will implement odd-even scheme during the coming winters, Jain said the government's main focus right now is to enforce bus lane policy which makes it mandatory for buses to ply in the designated lane.

"For that, we will need to remove encroachment on the roads which will significantly reduce congestion and will be more effective than odd-even scheme to curb pollution," Jain added.

Farmready, a profit & potent turmeric variety

M SOMASEKHAR

Hyderabad, October 25

Turmeric farmers in India have some good news. A new variety named CIM-Pitamber is available for commercial cultivation.

It holds much promise for a large number of traditional Indian homes where turmeric (*curcuma longa*) is not just one of the popular spices, but also a valuable first aid-cum medical ingredient to tackle a range of anti-inflammatory problems.

Scientists at the Lucknow-based Central Institute for Medicinal and Aromatic Plants, CSIR-CIMAP conducted extensive research for eight years to identify and finally develop the high yielding variety. An average yield of 50 tonnes of rhizomes/ha, containing more than 10 per cent curcuminoids has been demonstrated in multi-centre field trials.

One of the super yielding varieties with expected production of 60-65 tonnes of rhizomes/ha also contains more than 12.5 per cent curcuminoids. The general duration of the crop is 180-190 days, scientists said.

The active ingredient curcumin has a wide spectrum of medicinal properties. These include anti-inflammatory, wound healing, anti-cancer, antioxidants, anti-microbial as well as anti-aging properties.

Super clones

The scientists used genetic techniques on 130 germplasms collected from different places to select, cultivate, differentiate characteristics and finally develop super clones. The CIM-Pitamber is tolerant to the common leaf blotch disease, affecting the turmeric crop.

The variety will be able to pro-



duce rhizomes, with 90 per cent more curcuminoids and yields, more than double the existing varieties, and ISR Praribha, now grown in North Indian plains.

This will enable the farmers to double their yields and also significantly raise their income, the institute said. The variety was unveiled by Prime Minister Narendra Modi on the 75th founda-

tion Day of CSIR, which has 38 national labs, on September 16.

Andhra Pradesh, Telangana, Tamil Nadu and the South generally account for 70 per cent of turmeric production. Trading happens in the major markets in Erode (TN), Duggirala (AP) and Nizamabad in Telangana said Kotesw Kumar, in-charge, at CIMAP's Centre in Hyderabad.

India is the largest producer and exporter of turmeric and accounts for nearly 80 per cent of the global production. The spice is cultivated on over 150,000 ha in at least eight large States.

The estimated consumption of the spice domestically is about 100 mg per capita, amounting to around 400,000 tonnes per annum. However, turmeric farmers have been facing trouble with stagnation in yields and inadequate market price.

ICSIR-Neeri revives barren land at Khapri village near Kalmeshwar

LOKMAT NEWS NETWORK
NAGPUR

CSIR-National Environmental Engineering Research Institute (CSIR-Neeri) in its noble endeavour transformed approximately one hectare barren land of Khapri village near Kalmeshwar through the microbe assisted green technology (MAGT) in association with the farmers.

This project was initiated in March 2016 with the aim to provide livelihood in the farmers. 487 bamboo species of different varieties were planted on the degraded land at Khapri village. This is the first time in India more than 50 varieties of bamboo collected from various regions were planted at one place (Khapri) for the benefit of the farmers as part of CSIR-800 programme. Now the growth of the bamboo has reached 20 ft and expected to benefit the farmers from September 2017. informed a press release by Neeri.

Further, in a massive plantation programme organised by CSIR-Neeri in association with the farmers on October 26, 2016, CSIR-Neeri planted 3200 species at Khapri village and 1400 species at Khapri village, which

include bamboo and medicinal plants. Director, CSIR-Neeri Dr Rakesh Kumar, Chief Scientist & Head, Environmental Biotechnology & Genomics Division Dr Hemant Parobhi, Sr. Scientist Dr Lal Singh, who is leading this project were present on this occasion. Sarpanch Khapri Prashant Adole, Gram Panchayat Members Dinesh Joshi and Shudodhan Patil also took part in the programme along with the farmers.

While addressing the farmers, Dr Rakesh Kumar, said that bamboo is a powerful ally for land restoration. Bamboo not only protects the environment but also creates employment opportunities, he added. He advised to link this activity with Mahila Bachat Gat for woman empowerment. Briefing about the uniqueness of the project, Dr Lal Singh informed that a capital investment of Neeri 2.50 lakh results into a return of ₹ 10 to 12 lakh after 4 years, as the bamboo diversity provides products of high value such as timber, decoration materials, raw materials for paper and pulp industry, etc. Sarpanch of Khapri village Ritesh Parwaikar

said that 10-15 Sarpanchs of nearby villages are planning to set up a small scale industry in Khapri village. This is the first time we have seen such a team of scientists working in the field in the interest of farmers, he added.

Dr Ambeish Tharakar (organic farmer), Dr Chaware, chief manager, Bank of Maharashtra, Dr Chaware, environmental engineer, BV Yete, ex DFO Atmaram Rathore, Satal Mitra, Dr SR Singh, Dr BK Sarangi, Dr Anshuman Khardenavis, Dr Anila Qureshi, Dr Nishant Dulle, Dr Prashant Thawale, Hemanta J a m h a t k a r, SRP JRP/RA also took part in the plantation drive.

CSIR-NBRI

