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CSIR News

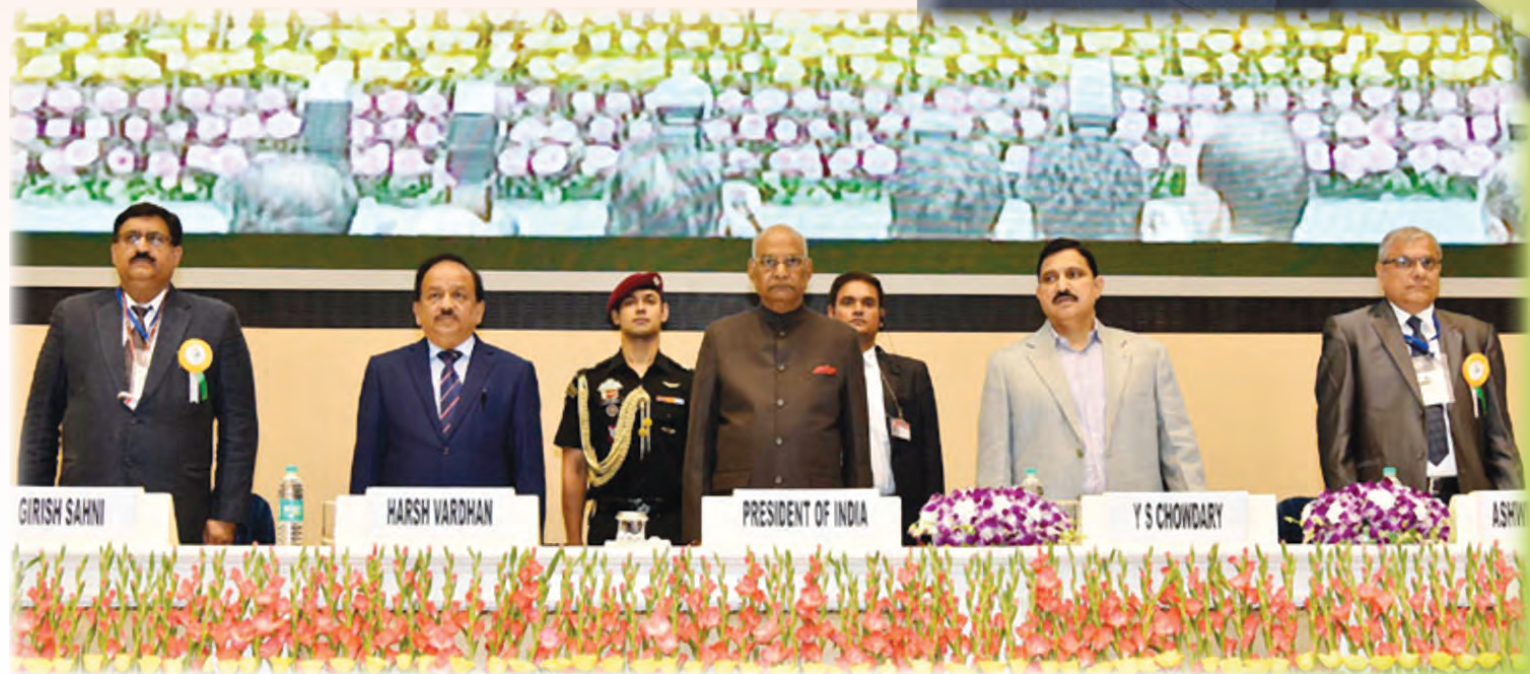
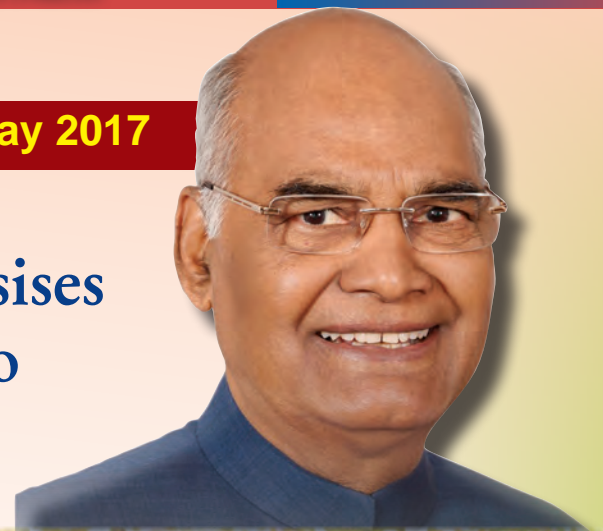
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In The News

CSIR Platinum Jubilee Foundation Day 2017

President of India Emphasises CSIR's Contribution to Nation Building



The President, Shri Ram Nath Kovind at the Foundation Day of CSIR and Celebration of conclusion of CSIR Platinum Jubilee Year. The Union Minister for Science & Technology, Earth Sciences and Environment, Forest & Climate Change, Dr. Harsh Vardhan, the Minister of State for Science & Technology and Earth Sciences, Shri Y.S. Chowdary, DG, CSIR, Dr. Girish Sahni and Dr. Ashwini Nangia, Director, CSIR-NCL are also seen

CSIR Platinum Jubilee Function



APPRECIATING the work of CSIR in bringing about sustainable improvements in the quality of life of Indians, as well as in helping business and industry with specific applications of science and technology, the Hon'ble President of India Shri Ram Nath Kovind called upon CSIR to continue to

make new technologies as well as basic research relevant to our developmental hopes.

The President was speaking on the occasion of the conclusion of the Platinum Jubilee Year celebrations of CSIR at Vigyan Bhawan, New Delhi on 26 September 2017.

The President also said that it is very telling that the staff of CSIR constitutes only about three to four per cent of India's scientific manpower but contributes nearly 10 per cent of India's scientific output. "This is extremely creditable and emphasises how important CSIR is to the nation building process," he said.

The Hon'ble President said that from the earliest days of our Independence, our country has been clear about the use and deployment of science and technology to achieve the goals of social development. This has meant both exploiting India's rich wealth of traditional knowledge and intellectual property – of which CSIR is the custodian – as well as being open to the latest in science and technology, not



President of India Shri Ram Nath Kovind addressing the gathering



Hon'ble President of India releasing the CSIR technology "Ksheer Tester" for checking adulteration in milk

CSIR Platinum Jubilee Function

being afraid of cutting-edge research and its discoveries, and where possible using these to help our common citizens.

“This aspiration remains important as ever as we strive to achieve a New India by 2022, when we complete 75 years as a free country,” he said. “Our ambitious national programmes – such as Start-up India, Make in India, Digital India, Swachh Bharat, Namami Gange and the Smart Cities Mission – cannot be successful without our scientists and our technology incubators, particularly CSIR, contributing.”

In all these areas, the President said, the need for socially inclusive and yet cost-effective applications and products of science and technology are a national priority. Once these are realised, they can become a model for other developing countries. For us, this has always been and will always be a paramount goal. For India, science and technology is a force multiplier in the quest for development.

“In this context,” the President said, “I am pleased to note the widespread social benefits of the two CSIR technologies that are being dedicated to the nation today. The first is a hand-held milk tester that will allow us to more easily identify

adulterants in milk. The second is Waterless Chrome-Tanning Technology that eliminates the use of water in two processes before and after tanning – and also reduces the solids dissolved in wastewater during tanning. This has an obvious environmental impact.”

He also mentioned that CSIR’s



The Hon'ble President examines the “Ksheer Tester” as Hon'ble Minister Dr. Harsh Vardhan looks on



Hon'ble President of India Shri Ram Nath Kovind interacts with school children

CSIR Platinum Jubilee Function



anaerobic digester was making a big difference to the Swachh Bharat mission, as it converts biodegradable kitchen waste to biogas and manure that can be used for family kitchen gardens. Each anaerobic digester has the capacity to convert up to three kg waste per day and produce 400 litre of biogas, which can be used as a clean fuel.

“Another commendable CSIR creation I have been told about is DivyaNayan - a reading device for the visually challenged,” he said. “Inventions and innovations such as these provide simple and user-friendly solutions to the most underprivileged and deprived sections of our people. They make science and technology so meaningful – and I should say potentially so magical – as India seeks to achieve the Sustainable Development Goals.”

Shri Ram Nath Kovind said that technology had taken human society to the edge of a brave new age. “Dazzling technological products are changing our lives almost in real time,” he said. “And the Fourth Industrial Revolution is set to transform our world in ways we still cannot imagine. We are entering

an era of Artificial Intelligence and Robotics, 3D manufacture and custom-made biological and pharmaceutical products, even driverless cars. The relationship between human and machine is evolving before our eyes. In the midst of all this, we cannot let the excitement of technology and newer and newer products divert our attention from basic science research. For that remains fundamentally important.”

Shri Ram Nath Kovind also called for taking accelerated steps to promote the participation of girl students and women in science and technology. “If this disparity is not addressed,” he said, “our scientific achievements will always be less than perfect and less than desirable.”

Shri Ram Nath Kovind said the participation of women in science in India was distressingly small – less than two of every 10 scientific researchers in India are women. Of those who join the Indian Institutes of Technology each year, just about 10 per cent are women. “These numbers are simply not acceptable,” he said.



Hon'ble President of India Shri Ram Nath Kovind, Minister of S&T and ES Dr. Harsh Vardhan, Minister of State Mr Y.S. Chowdary and Dr. Girish Sahni, DG-CSIR posing with Directors of CSIR laboratories

Welcome Address Dr. Harsh Vardhan

Earlier, in his Welcome Address, Dr. Harsh Vardhan congratulated CSIR for having lived up to the challenge posed by Prime Minister Shri Narendra Modi a year back where he appealed to CSIR to work on at least 100 new technologies which we could deliver to the people of India. "I feel so happy that just after 365 days, we are not only working on 100 technologies but at least 250 new technologies which are absolutely people-centric," he said.

Dr. Harsh Vardhan said, "We feel so happy that last year amongst the 5000 private and public aided scientific institutions in the world, as per *Scimago* rating we were the only Indian Institution that enjoyed the 99th position. But today after one year our position has become 75th. Last year we were 12th amongst a list of 1200. Today I feel so happy to announce that from that 12th also, we have come down to 9th. I think this is no small achievement."

He said that during the last one year many successful events have been organized with the help of CSIR, for instance the India International Science Festival with participation of over 5 lakh people, over 10,000 scientists and hundreds and thousands of students.

Apart from the large number of exhibitions organized by CSIR laboratories all over the country, Dr. Harsh Vardhan informed that an ambitious programme *Jigyasa* was launched during the Platinum Jubilee Celebrations. "We are now trying to



develop scientific passion amongst over a lakh of students from Kendriya Vidyalayas every year," he said.

He also appreciated CSIR for taking up 75 Skill Missions ensuring that those who don't get enough of education in their life could be imparted good quality skills so that they can be adopted by industries.

Dr. Harsh Vardhan said that we must reassert our pledge and ensure that the next five years would be the greatest years for CSIR's great history. He said the Prime Minister had given us a very ambitious goal of delivering a new India to 125 crore Indians by the year 2022. An India where we can wipe out the miseries of the people and where we can bring back smiles on everybody's faces. "I am sure you can be the most worthy tool for helping our Prime Minister in delivering the new India," he said.



DG-CSIR Dr. Girish Sahni's Report



Dr. Girish Sahni said, “The areas in which we work vary from Pharma, Health, Mining, Minerals, Strategic sector, Filing patents, Publications, Producing technology, Transferring technology, Nurturing technology and helping industry to take it to the society.”

Presenting the CSIR Report, Dr. Girish Sahni, Director General, CSIR said, “The mission of CSIR is linked to excellence in science, development of technology and using both as a magic combination to connect to society, poorest of the poor, mightiest of the mighty, mighty industries, village industries, medium and small industries. So, it's a very wide canvas that CSIR chose for itself and a role that our founding fathers destined for us.”

Dr. Sahni further said, “I feel, in future, our role will not be limited to only help or enable. We would want to be the major driver in the progress of the country. We expect ourselves to contribute maximum in future.”

He said that through the 75 years of existence, at every junction CSIR rose to the challenges the society and the nation gave it. “From the times of import substitution, at the time when foreign exchange was a priority, we gave the foundation of not only the chemical industry of the country but the pharma industry as well,” he said. “Today India happens to be the generic drugs capital of the world, in major part due to contributions from our labs.”

DG-CSIR also said that CSIR with its rich legacy and richness of soil in terms of fundamental research, in terms of the scientific strength that we have, and also the patents that we filed and also the public mindscape that we occupy in terms of service to society, the *Scimago* rating which is a composite of all these properties has rated CSIR 9th in the whole world amongst government supported institutions. “This is a thing of great pride but this also goads us to go forward and look at getting the number one position,” he said.

Dr. Girish Sahni said, “Last year Shri

Narendra Modi Ji came here, inspired us and gave us firm directions and told us to become connected to the common men and women, and solve the problems of society. With Dr. Harsh Vardhan and Shri Chowdhary at the helm, we are poised to go forward. The areas in which we work vary from Pharma, Health, Mining, Minerals, Strategic sector, Filing patents, Publications, Producing technology, Transferring technology, Nurturing technology and helping industry to take it to the society.”

“In recent times,” he said, “when globalization set in, the challenges were to rise and become innovative, file patents, file meaningful patents, create value for patents. CSIR happens to be the number one in the country filing patents. The challenge now is to see which are valuable patents, how to take them forward, how to connect them with industry, how to see that the recipe does not remain a recipe but becomes a product and the product is taken for the benefit of the last man and the last woman who looks to the nation and the scientists for the solution to their problems.”

DG-CSIR informed that CSIR had recently launched a herbal medicine for diabetes which is doing great. “Our contribution to the production of India's first world class Light Combat Aircraft, the fighter Jet LCA-TEJAS is also very significant,” he said. Dr Sahni informed that the carbon-fibre body of the aircraft, the control systems, the head-up display are all from CSIR Labs.

Another contribution is standardization of coal so that the real calorific value is obtained and genuine quantification of the coal prices is made. New varieties of rice, helping the farmers, milk testing, earthquake

CSIR Platinum Jubilee Function

early stage warning, India's first transmissometer on air fields, these are among the many achievements of CSIR in recent years, he said. The socio-economic impact of only a handful of technology has been rated to be more than 30,000 crores, the combined budgetary support in the last several decades of its existence. So, the contribution towards society from CSIR is virtually immeasurable.

He said, "Now we have refocused our attention and our energy in such a way that outcomes in healthcare, outcomes in energy sector and outcomes in strategic sector are the focus of our attention, not the subject areas alone. Subject areas are the means to an end where we will deliver tangible



outcomes. We have resolved to solve societal problems. Right now we are close to 300 projects in which the direct outcomes in the next two years would be of direct benefit to the society."

Foundation Day Lecture

Later, delivering the CSIR Foundation Day lecture, Prof. Rajendra Srivastava, Dean of the Indian School of Business (IBS) said, "When I hear the statistics about CSIR, it's really amazing and aspirations are just the right aspirations. CSIR provides 3% of the manpower in research but 10% of the output. That is a great achievement."

Prof. Rajendra Srivastava is the Dean of the Indian School of Business (IBS). He comes with an experience of over 30 years as an academic and administrator. He has held several tenured faculty and administrative positions during his career. Before joining the ISB, he was Provost and Deputy President of Academic Affairs at the Singapore Management University.



Prof. Rajendra Srivastava

CSIR Platinum Jubilee Function



Prof. Rajendra Srivastava said that emerging markets need Innovation; Process & Product Innovation Integration; Labs and Markets Integration; Frugal & Reverse Innovation, and Innovation for Emerging Markets. He advised young scholars to focus on use-driven innovation, integrate theory and practice, seek multidisciplinary assignments and focus on impact-learning from the future.

Prof. Rajendra Srivastava said that research coming out from CSIR has been increasingly cited globally and at the same time impact factor has also gone up. The question is, are we good enough? Globally India does not rank well in scientific research and innovation at the moment. So we have a long way to go. We are number 1 in Central and South Asia but that number 1 is not very good when you start comparing it to global standards.

Our aspirations should be what Dr. Sahni noted – to be number one in the world. We provide the talent to Silicon Valley, to Cambridge research; why can't we utilize this talent at home.

If we look at the cell phones that we hold, if a cell phone is a year old, it has probably lost about 50% of the value, so we are losing 1% a week. So time is of essence. I think it's important to recognize the value of speed these days. If I go back 30-40 years ago, the technology cycles were very slow. But now, technology cycles are a year, 18 months or 2 years.

He said those companies that fail to recognize the need for change become moments in history. Kodak is still much known for the Kodak moments but that company doesn't exist anymore. Kodak was a chemical company believing in silver halide, but the new technology was digital.

He also cited the example of Sony that developed a reader in 2006. The price point was about 350 but the Sony reader is hard to be found these days. On the other hand Amazon Kindle came up with a product a year later but their focus was on ecosystem. What will be the connectivity, what will be the downloading mechanism and what will

be the pricing of the books that will be available. "Amazon Kindle as everybody knows had a global share of 48% back in 2011 but now it has really taken over the market," he said. "If we go to the Sony product, it was technologically better; its screen was brighter and used lower power. But I want to you understand that the best product doesn't always win, the best network product wins."

He said Cisco India built a router that would operate in the heat and on low energy. The first order they got was not from India, but from AT&T, USA for 10 million dollars. So, we need to not only do well by doing good things but we also need to innovate for emerging markets. Nutrichoice, took two years to develop a product that has low sugar and high fiber as in India about 30% people are diabetic, a very big market for business. The product failed in the market as they forgot to innovate the product according to Indians, who have a habit of dipping the biscuit in the tea which then disappears immediately after dipping.

He said that emerging markets need Innovation; Process & Product Innovation Integration; Labs and Markets Integration; Frugal & Reverse Innovation, and Innovation for Emerging Markets.

He advised young scholars to focus on use-driven innovation, integrate theory and practice, seek multidisciplinary assignments and focus on impact-learning from the future.

He said there is lot of potential, lot of human talent and it is not just a CSIR responsibility, it is a responsibility for all the academic institutions and all the research organizations.

CSIR Platinum Jubilee Function

CSIR Foundation Day Function 2017 Awards



- CSIR Young Scientist Awards 2017
- G N Ramachandran Gold Medal 2017
- CSIR Innovation Award for School Children 2017
- CSIR Technology Awards 2017
- SSB Awards 2017



The Hon'ble President of India giving away various prizes flanked by the Union Minister for Science & Technology, Earth Sciences and Environment, Forest & Climate Change, Dr. Harsh Vardhan, the Minister of State for Science & Technology and Earth Sciences, Shri Y.S. Chowdary, DG, CSIR, Dr. Girish Sahni and Dr. Ashwini Nangia, Director, CSIR-NCL



CSIR Young Scientist Awards 2017

The Council of Scientific & Industrial Research introduced, in 1987, a scheme of awards for Young Scientists in CSIR system in order to promote excellence in various fields of science and technology. These awards are known as 'CSIR Young Scientist Awards'. CSIR scientists, below 35 years of age, as reckoned on 26 September (CSIR Foundation Day) of the preceding year, are eligible for the award. These awards are given annually in the following disciplines:

- **Biological Sciences**
- **Chemical Sciences**
- **Earth, Atmosphere, Ocean and Planetary Sciences**
- **Engineering Sciences**
- **Physical Sciences (including instrumentation)**

The Council of Scientific & Industrial Research introduced, in 1987, a scheme of awards for Young Scientists in CSIR system in order to promote excellence in various fields of science and technology. These awards are known as 'CSIR Young Scientist Awards'.

Each award consists of a citation, a cash prize of rupees fifty thousand and a plaque. CSIR Young Scientist Awardees are also entitled to a research grant of rupees five lakh per annum for a period of five years and an honorarium of rupees seven thousand and five hundred per month till the age of 45 years.

The award winners this year are:

Dr. Sakya Singha Sen

The CSIR Young Scientist Award for the year 2017 in Chemical Sciences has been awarded to Dr. Sakya Singha Sen of CSIR-National Chemical Laboratory, Pune for his innovative and explorative work in developing new inexpensive catalysts for a variety of organic transformations of potential commercial applications.

Dr. Prosenjit Das

The CSIR Young Scientist Award for the year 2017 in Engineering Sciences has been awarded to Dr. Prosenjit Das of CSIR-Central Mechanical Engineering Research Institute, Durgapur, for his outstanding contributions towards understanding and developing novel automotive products through semisolid processing for industrial use.

Dr. Sathravada Balaji

The CSIR Young Scientist Award for the year 2017 in Engineering Sciences has been awarded to Dr. Sathravada Balaji of CSIR-Central Glass & Ceramic Research Institute, Kolkata, for his outstanding contributions towards developing novel extended IR transmitting low phonon oxide glass for various laser and photonic applications.

Dr. Amit Laddi

The CSIR Young Scientist Award for the year 2017 in Physical Sciences (including instrumentation) has been awarded to Dr. Amit Laddi of CSIR-Central Scientific Instruments Organisation, Chandigarh, for his important contributions on the development of novel drive control systems for mobility carts for people with motor disability; based on minimal physical inputs like finger, facial features or head gestures.

G N Ramachandran Gold Medal for Excellence in Biological Sciences & Technology 2017

CSIR instituted a Gold Medal in 2004 in the fond memory of Prof. G.N. Ramachandran, a pioneer of protein chemistry and the founding father of structural biology in India, for recognizing excellence in the interdisciplinary subject/field of Biological Sciences & Technology.

The winner this year is:

Prof. Kandala Venkata Ramana Chary

The G.N. Ramachandran Gold Medal for Excellence in Biological Science and Technology for the year 2017 has been awarded to Prof. Kandala Venkata Ramana Chary of Tata Institute of Fundamental Research, Mumbai, for his contributions in the development of NMR methods for structural biology, especially, Protein NMR. He applied these methods to determine structures of proteins, which have provided insights into their biological functions.

CSIR Innovation Award for School Children-2017

CSIR announced the Diamond Jubilee Invention Award for School Children on 26 April 2002 in order to enhance creativity amongst school children. The day is also celebrated as the 'World Intellectual Property Day' throughout the world. The objectives of this competition are to capture creativity and innovativeness amongst school children and create awareness about IPR. From the year 2011 the Award has been renamed as 'CSIR Innovation Award for School Children.

During the last fifteen years, i.e. from 2002 to 2017, 5008 proposals were received for these Awards from various parts of the country and 101 inventions/innovations were selected for various prizes by High Level Awards Selection Committee.

In the year 2016, 2017, the competition has been renewed

with an intervening training-cum-awareness programme. CSIR received 450 innovation proposals which were screened. Total four innovation proposals were selected for the award. The award comprises a cash prize, trophy and a certificate.

The following 6 children are being awarded for four innovations, one First Prize, one Second Prize and two Third Prizes:-

First Prize (Rs 1,00,000/-)

Artificial Gill System for Divers and Commandos

A class IX & VII students, Atharva Avinash Dhebe and Pavan Shankar Ingale of Sainik School Satara, Maharashtra have proposed a device to breath under water using artificial gills. The device comprises of two



CSIR instituted a Gold Medal in 2004 in the fond memory of Prof. G.N. Ramachandran, a pioneer of protein chemistry and the founding father of structural biology in India, for recognizing excellence in the interdisciplinary subject/field of Biological Sciences & Technology.

CSIR Platinum Jubilee Function



The President, Shri Ram Nath Kovind presented the CSIR Innovation Awards for School Children-2017, at the Foundation Day of CSIR and Celebration of conclusion of CSIR Platinum Jubilee Year, in New Delhi on September 26, 2017. The Union Minister for Science & Technology, Earth Sciences and Environment, Forest & Climate Change, Dr. Harsh Vardhan, the Minister of State for Science & Technology and Earth Sciences, Shri Y.S. Chowdary and the DG, CSIR, Dr. Girish Sahni are also seen.

compartments, compartment-one extracts oxygen from seawater using high oxygen affinity chemical and compartment-two dissociates this oxygen received from compartment-one using catalyst or reducing agent. Oxygen is further carried to the mouth piece by a rubber pipe for breathing.

Second Prize (Rs 50,000/-)

Innovative method of raising rice seedlings by an economically viable and ecologically sustainable method

A class IX standard student A. Siva Bharathi of N.S.N. Matriculation Higher Senior Secondary School, Nehru Nagar, Chennai, has developed an innovative method of raising rice seedlings in an innovative medium which is bio degradable, comprising 50% of coconut coir, 30% of pressmud from sugarcane industry and 20% of rice husk (Percent by volume). It takes only 14 days for seedlings to grow and the irrigation frequency is just once in a day and water consumption is 4.5 times lesser as compared to conventional practice. Innovative seedling mat grown in this way is 50% lighter in weight and can be easily rolled up for transportation.

CSIR Platinum Jubilee Function

Cost of this medium is 33% lesser as compared to the conventional practices. (connected through a chain) upwards.

Third Prize (Rs 30,000/- each)

Two-in-One Dustbin

Class of V and VII students, Tanmayi Appasaheb Kokare and Tanishka Appasaheb Kokare of M. E. S. Waghire High School, Saswad have devised a dustbin which is capable of containing both wet and dry garbage in a single unit. This dustbin is divided into two compartments where the lower portion is to contain biodegradable or wet garbage and upper one contains dry garbage. The lower partition can be opened by lifting the interfacing disk

Self-confident Wheel for two Wheelers and Electricity Generation

A class VII student S. Mukkani of Panchayat Union Middle School, Narthangudi, Valangaiman Tiruvarur, Tamilnadu, has designed a two wheeler device with the attachment of a self-confident wheel in the back wheel. By this device one can continue the travel without interruption when the two-wheeler gets puncture in the middle of the journey. Additionally, by adding the dynamo in the saw tooth wheel, electricity can be generated easily.



CSIR Technology Awards 2017

Given annually the CSIR Technology awards were instituted in 1990 with a view to foster and encourage multi-disciplinary in-house team efforts and external interaction for technology development, transfer and commercialisation. Each award carries a cash prize of Rs.2 lakh, a plaque and a citation. The category of awards is:

1. Life Sciences
2. Physical Sciences including Engineering
3. Innovation
4. Business Development and Technology marketing
5. Most Significant CSIR Technology of the Five Year Plan Period

The last of these is awarded once in five years, previously coinciding with the erstwhile five year plan periods, to a technology proven in the marketplace for at least five years. The award was last conferred in 2015 with a cash prize of Rs. 5 lakh, a plaque and a citation.

CSIR Technology Award for Physical Science including Engineering-2017

1. **CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar** award for "Technology for Recovery of Iron Values from Low and Lean Grade Iron ore Resources". CSIR-IMMT has developed and deployed economic, The institute has won the technology

CSIR Platinum Jubilee Function



eco-friendly, sustainable technologies and innovative technology packages for maximised the utilization of iron ores resources for long term sustainability. More than 14 clients, national and international, have benefited from these technologies for production of sponge iron and steels.

2. CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi

The institute has won the technology award for “Sustainable Cold mix Technology for Construction and Maintenance of Roads”. The new technology is green, construction labourer friendly and superior to existing ways of laying roads. The technology saves 1500 litre fuel oil per km (3500m²) of rural road construction, 12% energy in premix construction and 20% energy in mix seal surfacing construction.

CSIR Technology Award for Innovation-2017

1. CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai

The institute has won the technology award for “Waterless Chrome Tanning technology”. The environment friendly technology does not need additional use of water for chrome tanning while also eliminating the need to carry out pickling process associated with the use of acid and salt. It also reduces the TDS in effluents by 20% and brings down the usage of chromium by 15-20%.

2. CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur

The institute has won the technology award for “Development of Community Level Iron Removal Plant & their Implementation in Rural areas to Supply Iron Free Drinking water”. The novelty of the present invention lies in the ability of the device to deliver instantly iron free safe drinking water without affecting water quality parameters and that too without electricity.

CSIR Technology Award for Business Development and Technology Marketing- 2017

CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR), Dhanbad

The institute has won the technology award for “Significantly Enhancing the Business and Marketing of their Knowledgebase”. The institute has

introduced technology partnerships and collaborative business models to address the energy security issue of the country. It also has led to a sustainable and consistent growth of over 400% in its External Cash Flow in a period of five years.

Certificate of Merit CSIR Technology Awards-2017

CSIR-Central Glass & Ceramic Research Institute (CSIR-CGCRI), Kolkata

The institute has won the technology award for “Technology for Manufacturing Special Glass Beads for Nuclear waste Immobilization”. The borosilicate glass beads developed and implemented by the institute

is a precious material required for management of radioactive waste in a closed nuclear fuel cycle that is followed by India. The innovation also assists in recovery and recycles of valuable during nuclear waste immobilization and is of significant importance for nuclear power programs.



Shanti Swarup Bhatnagar Prize (SSB) for Science & Technology 2017

Shanti Swarup Bhatnagar Prize for Science and Technology was instituted in the year 1957, in the memory of late Dr. (Sir) Shanti Swarup Bhatnagar, FRS, the founder director of the Council of Scientific & Industrial Research (CSIR). The SSB Prize is awarded each year on the basis of conspicuously important and outstanding contributions to human knowledge and progress, made through work done primarily in India during the five years, preceding the year of the

prize.

Any citizen of India engaged in research in any field of science and technology up to the age of 45 years is eligible to be nominated. Overseas Citizen of India (OCI) and Persons of Indian Origin (PIO) working in India are also eligible. The SSB Prize, comprising a citation, a cash award of Rupees five lakh and a plaque, is given to each person selected for the award in the following disciplines:

- **Biological Sciences**
- **Chemical Sciences**
- **Earth, Atmosphere, Ocean and Planetary Sciences**
- **Mathematical sciences**
- **Medical Sciences**
- **Physical Sciences**
- **Engineering Sciences**

CSIR Platinum Jubilee Function



The recipients of the Shanti Swarup Bhatnagar Prize for Science and Technology are:

Biological Sciences

Dr. Deepak Thankappan Nair

Regional Centre for Biotechnology
National Capital Region - Biotech
Science Cluster
3rd Milestone, Faridabad-Gurgaon
Expressway
Faridabad 121 001

Dr. Sanjeev Das

Molecular Oncology Laboratory
National Institute of Immunology
Aruna Asaf Ali Marg
New Delhi 110 067

Chemical Sciences

Dr. G. Naresh Patwari

Department of Chemistry
Indian Institute of Technology,
Bombay
Powai, Mumbai 400 076

Earth, Atmosphere, Ocean and Planetary Sciences

Dr. S. Suresh Babu

Space Physics Laboratory
Vikram Sarabhai Space Centre (ISRO)
Thiruvananthapuram 695 022

Mathematical Sciences

No Award

Medical Sciences

Dr. Amit Dutt

Advanced Centre for Treatment,
Research and Education in Cancer
Tata Memorial Centre
Navi Mumbai 410 210

Dr. Deepak Gaur

School of Biotechnology
Jawaharlal Nehru University
New Delhi 110 067

Physical Sciences

Dr. Nissim Kanekar

National Centre for Radio Astrophysics
Tata Institute of Fundamental Research
Pune University Campus
Pune 411 007

Dr. Vinay Gupta

OPV Laboratory
CSIR National Physical Laboratory
Dr K S Krishnan Marg
New Delhi 110 012

Engineering Sciences

Dr. Alope Paul

Department of Materials Engineering
Indian Institute of Science
Bengaluru 560 012

Dr. Neelesh B. Mehta

Department of Electrical
Communication Engineering
Indian Institute of Science
Bengaluru 560 012
Foundation Day Celebrations

CSIR Platinum Jubilee Function

Foundation Day Celebrations

CSIR Platinum Jubilee Foundation Day and Hindi Month Celebration at CSIR-NISCAIR



A view of the dignitaries on the dais (from right): Dr. D.K. Aswal, Director, CSIR-National Physical Laboratory (CSIR-NPL), New Delhi; Shri Rajkumar Bhardwaj, Director, Educational Media Research Centre, Roorkee; Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR, New Delhi; Dr. Rajiv Sharma, Secretary, Science and Engineering Research Board, New Delhi; Mrs. Baljeet Kaur, famous Hindi Poetess and Dr. R.S. Beniwal, Chief Scientist, CSIR-NISCAIR

The CSIR-National Institute of Science Communication And Information Resources, New Delhi, celebrated the 75th anniversary of the foundation of the Council of Scientific and Industrial Research (CSIR) on 29 September 2017. A combined function of the CSIR Platinum Jubilee Foundation Day Celebration and Conclusion of Hindi Month Celebration was organised by CSIR-NISCAIR at the AP Shinde Symposium Hall, NASC Complex, New Delhi.

Dr. Rajiv Sharma, Secretary, Science and Engineering Research Board, New Delhi, was the Chief Guest and Mrs. Baljeet Kaur, famous Hindi Poetess, was the Guest of Honour on this occasion. Shri Rajkumar Bhardwaj, Director, Educational Media Research Centre, Roorkee and Dr. D.K. Aswal, Director, CSIR-National Physical Laboratory (CSIR-NPL), New Delhi, were the special invited dignitaries. The function was presided over by Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR.



CSIR Platinum Jubilee Function



Dr. R.S. Beniwal, Chief Scientist, CSIR-NISCAIR, delivered the welcome address. He informed about the various events held during the Hindi Month celebrations such as Quiz Competition, Essay Writing, Samachar Vachan, Panel discussion on “Science writing in Hindi: opportunities and challenges”, and lecture on “Role of Hindi science films in science communication”, etc., organized during the month of September.

Mr. Rajkumar Bhardwaj said that Hindi is our mother. Hindi brings sovereignty, unity, benignity and competence in us. Our language is the symbol of our cultural glory.

Mr. Rajkumar Bhardwaj in his speech highlighted the importance of Hindi in our culture. He remarked that globalisation and industrialisation have influenced our lives greatly and in the blind race we have, somewhere, lost our values. He said that Hindi is our mother. Hindi brings sovereignty, unity, benignity and competence in us. Our language is the symbol of our cultural glory. We need to remember the sole foundations laid by our ancestors and the rich heritage they left for us and it will lead us to respect our values and our language.

Dr. D.K. Aswal, Director CSIR-NPL, remarked that English was



Mr. Rajkumar Bhardwaj, Director, Educational Media Research Centre, Roorkee in his speech highlighted the importance of Hindi in our culture

adopted by us as it was considered a superior language. But Hindi is also equally popular globally. We need to overcome the barriers of language.



Dr. D.K. Aswal, Director CSIR-NPL, remarked that we need to overcome the barriers of language

CSIR Platinum Jubilee Function



Chief Guest, Dr. Rajiv Sharma, Secretary, Science and Engineering Research Board, said that science is creating knowledge but unless we share knowledge, we cannot create it



Chief Guest, Dr. Rajiv Sharma, Secretary, Science and Engineering Research Board, said that science is creating knowledge but unless we share knowledge, we cannot create it. NISCAIR has made immense contributions towards spreading knowledge. “I remember,” he said, “when I was a student I read science magazines like *Vigyan Pragati* and *Science Reporter*. Publications like *Vigyan Pragati* and *Science Reporter* should be published more and we need articles and writers that show and connect the achievements of science to the welfare of human beings.”

In his presidential address, Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR said that Hindi language is moving forward in the whole country and the world. There are several universities across the world where Hindi language is being taught and they have separate Hindi language departments also. In India, there is a Mahatma Gandhi International Hindi University for the promotion and development of Hindi language. There are several centers involved in spreading



Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR said that Hindi language is moving forward in the whole country and the world

functional efficiency and recognition of Hindi language as a major international language. There are so many products from Japan, China etc. in the market which have their catalogues in the Hindi language.

CSIR Platinum Jubilee Function



Later, famous Hindi poetess, Mrs. Baljeet Kaur entertained the gathering with her lively performance and humorous jokes. She especially appreciated CSIR-NISCAIR's custom of honouring the retirees of the institute on the occasion.

Three new publications by CSIR-NISCAIR: *Platinum Jubilee Edition of Golden Treasury of Science & Technology*, an encyclopedic publication of science; the *CSIR-NISCAIR Annual Report 2016-2017* and the Hindi half-yearly publication *Sanchetna*, were released on this occasion.

The function concluded with a prize distribution ceremony. Gifts and certificates were awarded to the winners and participants of various events



Hindi poetess, Mrs. Baljeet Kaur entertaining the gathering with her humorous poems

such as Painting, Quiz and Debate competitions, Sports events and Fun games. Dr. G. Mahesh, Chairperson of the 2017 CSIR Platinum Jubilee Celebration function, proposed the vote of thanks.



Release of the *Platinum Jubilee Edition of Golden Treasury of Science & Technology*. (L to R): Dr. Rajiv Sharma, Secretary, Science and Engineering Research Board; Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR; Mr. Rajkumar Bhardwaj, Director, Educational Media Research Centre, Roorkee and Dr. D.K. Aswal, Director CSIR-NPL

CSIR Platinum Jubilee Function



and time-managed research to bring out pro-people technologies from lab-to-land.

Dr. A.K. Minocha from CSIR-CBRI read out the message of Dr. N. Gopalakrishnan, Director, CSIR-CBRI.

On this occasion, the latest edition of the Central Building Research Institute Annual Report was released.

As an important part of this day, the laboratories of CSIR-CBRI, Roorkee were open to the students and the general public giving everyone the



Dr. A. K. Minocha, reading out the message of Director, CSIR-CBRI Dr. N. Gopalakrishnan

opportunity to become familiar with the R&D work of the Institute and get the opportunity to interact with the scientists.



CBRI Annual Report 2016-2017 Released

CSIR Platinum Jubilee Function



Students participating in the programme

CSIR-CBRI staff members who have completed twenty-five years' service in CSIR and the scientists and staff of CSIR-CBRI superannuated during the year, were felicitated on the occasion. The winners of painting competition and science quiz, organised for students

of classes 6 to 12 in several categories on assorted topics, were also awarded on the occasion. Meritorious students getting more than 90% marks in three science subjects, in the Intermediate Examination, were awarded with a lump sum cash award of Rs. 3000 /-.



Award Ceremony

CSIR Platinum Jubilee Function

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CSIR Young Scientist Awards 2018

The Council of Scientific & Industrial Research (CSIR) invites nominations for CSIR Young Scientist (YS) Awards for the year 2018. The awards are to be given for research contributions made primarily in India. The nominee should be a regular Scientist (as per CSRAP Rules) of CSIR system and should have joined the CSIR laboratory on or prior to 26th September 2017. The age of the nominee should not be more than 35 years as on 26th September 2017.

The YS Awards are given annually in the following disciplines: (1) Biological Sciences, (2) Chemical Sciences, (3) Earth, Atmosphere, Ocean and Planetary Sciences, (4) Engineering Sciences, and (5) Physical Sciences (including instrumentation). The YS Award comprises a citation, a cash award of Rs 50,000 (Rupees fifty thousand only), and a plaque.

Nominations addressed to Scientist Incharge, SSB YSA Unit, Human Resource Development (HRD) Group, CSIR Complex, Library Avenue, Pusa, New Delhi 110 012 should be sent as per the prescribed proforma (original + one copy) latest by 31st January 2018. A CD/DVD/USB flash drive is also required containing photograph (in JPEG format), duly filled proforma and significant publications (in PDF format) of the nominee.

The details of the YS Award and the prescribed proforma for nomination may be obtained from above address or may also be downloaded from **website: www.csirhrdg.res.in**

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