CSIR Celebrates 70th Foundation Day

INDIA'S largest chain of scientific laboratories celebrated its 70th Foundation Day on 26 September 2012 with a grand function in Vigyan Bhawan, New Delhi. The Council of Scientific and Industrial Research (CSIR), known for its practical and ingenious solutions for the industry and also for the country's rural and remote areas, was complimented by Prime Minister Dr Manmohan Singh for "proving its professional worth in every phase of India's growth".

The seventy-year journey of the Council of Scientific and Industrial Research (CSIR) has been closely intertwined with the sixty-five year journey of independent India. Addressing the large gathering in Vigyan Bhawan, Dr Manmohan Singh said: "In the early days of Independence, it (CSIR) was a champion of import substitution, rebuilding our industrial base in the face of shortages and resource crunch. When India became a victim of technology denial, CSIR laboratories created advanced products and technologies, such as India's first supercomputer, radiation shielding glasses and components for aerospace and satellites, emerging as a credible partner for our strategic sector. During this time, the Council also catapulted India as the top generic drug producer."

However, the Prime Minister emphasized that while aiming for global excellence and competitive advantage in science, CSIR must not lose sight of the mandate of science in our country that Jawaharlal Nehru spoke about – of thinking in terms of the huge population of the country. In this context, he commended CSIR's efforts at working towards affordable scientific interventions to improve the quality of life of the people at the base of the economic pyramid through its 'CSIR 800' programme. "The Council's thrust on research and innovation in renewable energy, in water, environment and waste management also reflect its awareness of contemporary challenges that our country faces," he said.

The Academy of Scientific and Innovative Research created by CSIR also came in for appreciation from the PM. He said, "AcSIR promises to train our young scientists and engineers in trans-disciplinary skills by tapping into the entire resources and infrastructure of the CSIR fraternity. This is a good initiative and I look forward to early results."

CSIR Innovation Award for School Children 2011

To enhance creativity among school children, CSIR gives away the Diamond Jubilee Invention Award for School Children. Following are the winners of the award for the year 2011:

First Prize (Rs 1,00,000/-): No prize this year.

Second Prize (Rs 50,000/-): Master Sanat Anand, Class 10th, Welham Boys School, Dehradun for *Stand alone GPS system*

Third Prize (Rs 30,000/-):

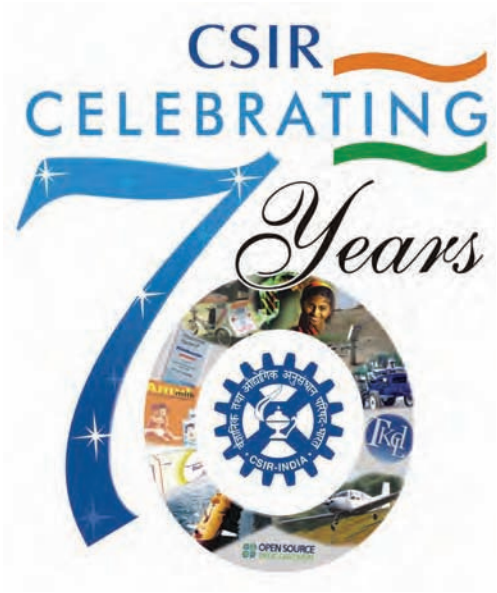
1. **Master Aditya Arun,** Class 9th, Gear Innovative International School, Bangalore for *A novel idler gear for non-planar application*
2. **Master Sailesh Patra,** Class 11th, D.A.V. Public School, Bharatpur, Orissa for *Wind o' nova—An innovative wind farm*
3. **Master G. Brahadees,** Class 12th, The Velammal International School, Panchetti, Tamilnadu for *All in one air treatment machine*

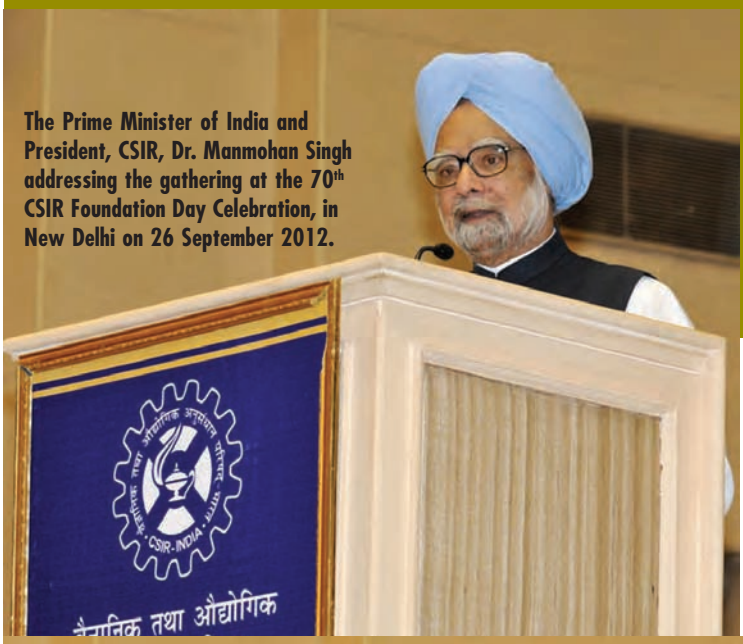
Fourth Prize (Rs 20,000/-):

1. **Master Yash Kothari, Master Gulshan Sahu, Master Ayush Sharma, & Master Saransh Tiwari,** Class 9th, Kendriya Vidyalaya, Dhamtari, Chhattisgarh for *Energy converter system*
2. **Master Monawwer Mahfuz, Master Anjaney Kumar, Master Abhishek Anand & Master Rahul Kumar,** Class 10th, Jawahar Navodaya Vidyalaya, Saharsa, Bihar for *Multi-purpose and eco-friendly shoe*
3. **Master Abhijit Pal,** Class 11th, D.A.V. Model School, Durgapur, West Bengal for *Solar energy calculator*
4. **Miss Pallavi Sharma,** Class 11th, Sacred Heart Senior Secondary School, Chandigarh for *Water purifiers*

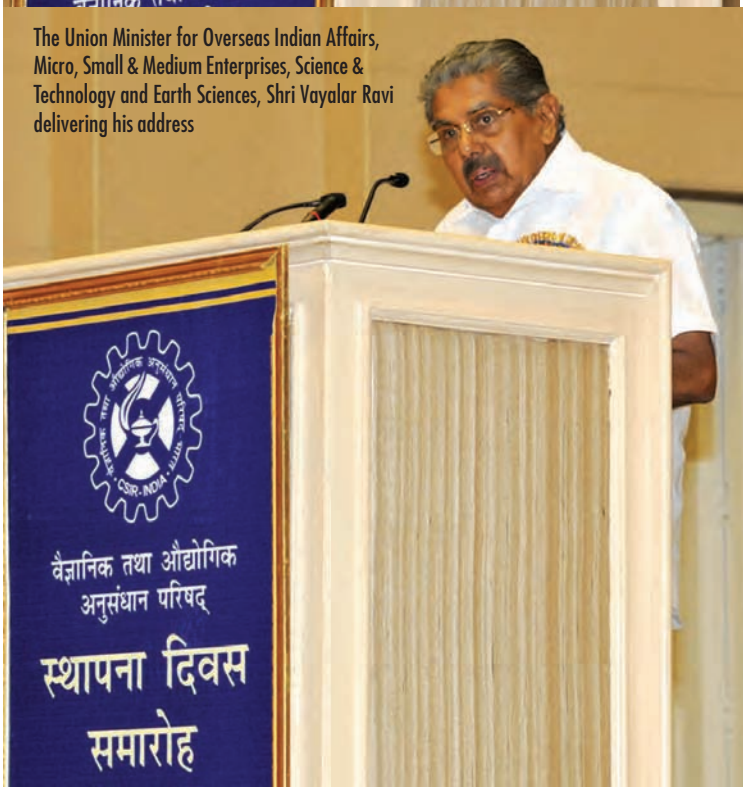
Fifth Prize (Rs 10,000/):

1. **Master Amit Kumar,** Class 10th, Rajkiya Sarvodaya Bal Vidyalaya, Kondli, Delhi for *Designer pen (Lekhni)*
2. **Miss Aditi Raj, Miss B J Sadhana, Master C Shrijanand, Master Kartik Mathur, Master T Sai Praneet & Master Vaghul K V,** Class10th, Bhartiya Vidya Bhawans Public School, Hyderabad for *Turning a turn buckle*
3. **Master Rohit Patel,** Class 10th, Delhi Public School, Bhilai, Chattisgarh for *Innovative car*





The Prime Minister of India and President, CSIR, Dr. Manmohan Singh addressing the gathering at the 70th CSIR Foundation Day Celebration, in New Delhi on 26 September 2012.



The Union Minister for Overseas Indian Affairs, Micro, Small & Medium Enterprises, Science & Technology and Earth Sciences, Shri Vayalar Ravi delivering his address

However, he cautioned against becoming complacent. "As a nation, we have not succeeded in mobilizing enough private investment into science to raise our investment in scientific research to 2% of GDP," he said. "We need to recognize that excellence has not percolated across all our research and academic institutions. We have not been able to make an impact on a world scale commensurate with our large scientific manpower pool. CSIR, therefore, will need to devote itself to these national challenges in the years to come."

Also present on the occasion was Shri Vayalar Ravi, Minister of Science & Technology and Earth Sciences and Vice President, CSIR. The Minister said, ever since independence CSIR had always performed as per its assigned mandate. "From chemicals to glass and ceramics; from physics to metallurgy; from tractors and food products to fuel research…CSIR was everywhere; meeting the needs of the people of a new Nation. Most importantly it also began to build trained human resource, which in the final analyses, is the deciding factor transcending every other resource."

Shri Vayalar Ravi said that even though the scientific staff of CSIR constitutes only about 3-4% of India's scientific manpower, they contribute to 11% of India's scientific outputs. Major industry houses of India and innumerable MSMEs have benefitted from CSIR, he said.

Earlier, in his Welcome Address Prof. Samir K. Brahmachari, Director General, CSIR said, "the visionaries and foot soldiers of CSIR worked tirelessly to create institutions founded on science and technology which were ahead of their time, withstood the vagaries of time through the seven decades and continue to flourish and be relevant even today".

As a commitment to its philosophy of inclusive development, he said, CSIR has recently fostered a major strategic partnership with the setting up Cluster Innovation Centres to promote innovation at the grass root level particularly in Micro, Small & Medium Enterprises (MSMEs) sector. "Through this initiative, we are providing innovative S&T solutions to small industrial clusters such as the Krishnagiri cluster in Tamil Nadu which is the largest producer of mangoes and the brass cluster at Moradabad touching the life of millions of people," he said.

Prof. Brahmachari also said, "In the 12th Plan, CSIR is committed to create hamlets of technology enabled villages, called CSIR TECHVILs, with typically 40,000 inhabitants of which more than 50% live below the poverty line. At 24 such locations across the country, these TECHVILs will bring to the villagers rural technologies developed by CSIR over the years. However, going beyond mere demonstration of technology, these TECHVILs will also gauge the needs of the villagers and look for innovative solutions from all sectors of society such as NGOs, universities and entrepreneurs."

On its 70th Foundation Day, CSIR also remembered its gratitude to leaders who steered the organization ever since independence, felicitating former Director Generals of CSIR and other eminent scientists. Among the former DGs felicitated were Prof. M.G.K. Menon, Dr. S. Vardarajan and Dr. R.A. Mashelkar. Among the distinguished scientists to be honoured were Prof. R. Kumar, Prof. M.M. Sharma (in absentia), Dr. P. Pama Rao (in absentia), Dr. V.S. Ramamurthy, Prof. N. Vijayan, Prof. Asis Datta and Dr. N.K. Ganguly.

Several awards were given out during the function, including the Shanti Swarup Bhatnagar Prizes 2011, CSIR Young Scientist Awards 2012, G.N. Ramachandran Gold Medal for Excellence in Biological Sciences & Technology 2012, CSIR Technology Award 2012 and the CSIR Innovation Award for School Children 2011. The Shanti Swarup Bhatnagar Prizes for the year 2012 were also announced.

Prime Minister Dr. Manmohan Singh with the CSIR Young Scientist Awardees. The Union Minister for Overseas Indian Affairs, Micro, Small & Medium Enterprises, Science & Technology and Earth Sciences, Shri Vayalar Ravi and the DG, CSIR, Prof. S.K. Brahmachari are also seen (left)

Prime Minister Dr. Manmohan Singh with the awardees of the Shanti Swarup Bhatnagar Prizes 2011 and also Shri Vayalar Ravi and Prof. S.K. Brahmachari (below left)

SHANTI SWARUP BHATNAGAR PRIZE FOR SCIENCE & TECHNOLOGY 2012

Biological Sciences

Dr Shantanu Chowdhury, CSIR Institute of Genomics and Integrative Biology (CSIR IGIB), Mall Road, Delhi

Dr Suman Kumar Dhar, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi

Chemical Sciences

Dr Govindasamy Mugesh, Department of Inorganic & Physical Chemistry, Indian Institute of Science, Bangalore 560012

Dr Gangadhar J Sanjayan, Division of Organic Chemistry, CSIR National Chemical Laboratory (CSIR NCL), Pashan Road, Pune

Earth, Atmosphere, Ocean & Planetary Sciences

No Award

Engineering Sciences

Dr Ravishankar Narayanan, Materials Research Centre, Indian Institute of Science, Bangalore

Dr Y Shanthi Pavan, Dept of Electrical Engg, Indian Institute of Technology Madras, Chennai

Mathematical Sciences

Dr Siva Ramachandran Athreya, Theoretical Statistics and Mathematics Division, Indian Statistical Institute, 8th Mile Mysore Road, Bangalore

Dr Debashish Goswami, Stat-Math Unit, Indian Statistical Institute, 203, B T Road, Kolkata

Medical Sciences

Dr Sandip Basu, Radiation Medicine Centre, Bhabha Atomic Research Centre, Tata Memorial Center Annexe, Mumbai

Physical Sciences

Dr Arindam Ghosh, Department of Physics, Indian Institute of Science, Bangalore

Dr Krishnendu Sengupta, Department of Theoretical Physics, Indian Association for the Cultivation of Science, 2A & 2B Raja S C Mullick Road, Jadavpur, Kolkata

The Shanti Swarup Bhatnagar Prizes for the year 2012 were also announced in the function.

The highlight of the celebrations, however, was the inspiring and evocative Foundation Day Lecture by Prof. C.N.R. Rao, one of the most renowned scientists the country has produced. In his lecture titled "Celebration of Science: Glorious Past and Challenging Future", Prof. Rao dwelt on some great developments in science that celebrated their centenary year in 2011.

One of the foremost was the discovery of the atomic structure by Ernest Rutherford. The year 2011 was also the centenary year of the discovery of superconductivity by Kamerlingh Onnes. The year 2011 was also celebrated as the International Year of Chemistry honouring the centenary of the Nobel Prize awarded to Madame Curie. Prof. Rao said that despite being a scientist par excellence, Madame Curie had to fight prejudices, sexism and chauvinism because she was a woman and also because she was Polish.

The year 2011 also marked 100 years of the Solvay Conferences on Physics. The first Solvay Conference held in 1911 was considered a turning point in world physics. Following the initial success of 1911, the Solvay Conferences have been devoted to outstanding problems in both physics and chemistry. The conferences are generally held every three years, but there have been larger gaps.

Prof. Rao also said that the year 2012 was the centenary of the discovery of X-ray crystallography by W.L. Bragg. In fact, Prof. Rao reminded the audience that we stand on the shoulders of great scientists such as Faraday, Maxwell, Einstein, G.N. Lewis, Linus Pauling and many others and should never forget the contributions they made to the advancement of science.

Hasan Jawaid Khan