**CSIR TECHNOLOGY AWARDS-2014** 



### **CSIR**

**Council of Scientific & Industrial Research** 

Anusandhan Bhawan, Rafi Marg, New Delhi - 110001



#### CSIR's Vision

Pursue science which strives for global impact, technology that enables innovation-driven industry and nurture trans-disciplinary leadership thereby catalysing inclusive economic development for the people of India

### About the CSIR Technology Awards

CSIR Technology Awards were instituted in 1990 to encourage multidisciplinary in-house team efforts and external interaction for technology development, transfer and commercialization. These awards are in the category of:

- Life Sciences;
- Physical Sciences including Engineering;
- Innovation (to be awarded to the best innovation that has been patented in any area);
- Business Development and Technology Marketing; and
- **♦** Most Significant CSIR Technology of the Five Year Plan Period.

Whilst, all the awards carry the cash prize of Rs. 2 lakh each, the award for the "Most Significant CSIR Technology of the Five Year Plan Period" has a cash prize of Rs. 5 lakh. The prizes are shared among the individual/ members of the teams/group(s). In case the prize awarded to joint winners, both receive the cash prize in full.



### CSIR Technology Awards Criteria

The criteria for the awards in Life Sciences and Physical Sciences including Engineering is visible and sustained impact of a high order on the industrial/economic/societal activity, high scientific content, innovative character, global novelty and competitiveness of the technological development(s).

Technology Award for Innovation is given to the best innovation that was patented in any area.

Technology Award for Business Development and Technology Marketing is for making significant contributions for enhancing the business of CSIR knowledgebase and is given for the new business & marketing initiatives, strategies evolved and implemented, quantum of business generated and realised.

The award in the category "Most Significant CSIR Technology of the Five Year Plan Period" is awarded to such technology which has proven in the to such technology which has proven in the market place, atleast for 5 years.

# CSIR Technology Award for Physical Sciences Including Engineering - 2014

The Technology Award for Physical Sciences including Engineering goes to CSIR - Indian Institute of Chemical Technology (CSIR - IICT), Hyderabad for developing the process of Misoprostol – a drug useful for medical abortion

CSIR-IICT has developed the process knowhow for Misoprostol – an important prostaglandin based drug, declared by the WHO as essential medicine to induce labour induction. The drug is also used in combination with pain killers as an anti-ulcer agent. The technology was transferred to AVRA Laboratories. The AVRA has successfully commercialized the Misoprostol. The CSIR-IICT technology has successfully reduced the cost of production of the drug and it has become affordable to common people in the country. CSIR recognizes the significant contribution of Dr. A. V. Rama Rao, former Director, CSIR - IICT and Chairman and Managing Director, AVRA Laboratories Pvt. Ltd., Hyderabad for scale up and commercialization of the drug.



Dr. A. V. Rama Rao



Dr. J. S. Yadav



Dr. S. Chandrasekhar



Dr. D. K. Mohapatra





## CSIR Technology Award for Innovation - 2014

The Technology Award for Innovation goes to CSIR - Indian Institute of Petroleum (CSIR - IIP), Dehradun for developing a process for simultaneous production of U.S. grade gasoline and high purity benzene from C6 heart cut of FCC gasoline

The developed process produces benzene lean gasoline by recovery of high purity benzene from unprocessed cracked gasoline fraction by extractive distillation without the requirement of any preprocessing of the feedstock ahead of the extractive distillation unit. CSIR recognizes the contribution of Reliance Industries Limited, Navi Mumbai in development of the process.

There is no instance of an extractive distillation plant anywhere in the world which is currently processing FCC gasoline heart cut fraction for the dual purpose of producing benzene lean gasoline as well as high purity benzene. Reliance Industries plan to implement developed process for processing nearly 600,000 MT per annum of the FCC C6 Heart Cut Gasoline stream from their DTA refinery site at Jamnagar.



Dr. M. O. Garg



Dr. B. R. Nautiyal



Shri Prasenjit Ghosh



Smt Nisha



Shri N.S. Murthy



Dr. S. M. Nanoti



Shri Sunil Kumar



Shri Jagdish Kumar



Smt Pooja



Shri M.R. Rao

### CSIR Technology Award for Business Development & Technology Marketing - 2014

The Technology Award for Business Development and Technology Marketing goes to CSIR - Institute of Microbial Technology (CSIR - IMTECH), Chandigarh for significantly enhancing the business and markets of its knowledgebase

CSIR-IMTECH played a vital role in the quest of the country towards scientific and technological leadership and providing scientific solutions to the industries and adopted several new strategies and developed business models for smooth flow of technologies to industry. The laboratory has developed a portfolio of clot buster life-saving cardiac drug Streptokinase and has successfully transferred it to industry. After introduction of CSIR-IMTECH's streptokinase, prices have dropped (by upto 65%)' these occupy nearly 50% of Indian market. The value creation by CSIR-IMTECH's streptokinase for the nation is nearly Rs. 20,000 crore.



Dr. Girish Sahni



Mr.Rajendra Soni



### CSIR Technology Award for Most Significant CSIR Technology of the Five Year Plan Period - 2014

The Technology Award for Most Significant CSIR Technology of the Five Year Plan Period goes to CSIR - National Metallurgical Laboratory (CSIR - NML), Jamshedpur for the development and commercialization of column flotation technology for the beneficiation of low-grade mineral deposits

The technology is for production of high quality mineral concentrates with better recoveries. It replaces multi-stage conventional flotation. The developed flotation column of CSIR-NML has gained widespread industrial acceptance due to its improved metallurgical performance in comparison with conventional flotation cells. CSIR-NML has transferred the technology to several industries including Indian Rare Earths Ltd. and M/s McNally Bharat Eng. Co. Ltd.



Dr. G. Bhaskar Raju



Dr. S. Subba Rao



Dr. S. Prabhakar



N Vasumathi



TV Vijaya Kumar

### CSIR@80: Vision & Strategy 2022



#### Science

Strive for global scientific impact

#### **Technology**

Catalyse innovation-driven industry

#### **Human Resource**

Nurture transdisciplinary leadership

#### **Empowerment**

Enable inclusive economic development

### CSIR - Post Independence Indian Innovation System for Self Reliance in Non-strategic Sectors





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