

STEPS involved in Recognizing Research Activity of organizations & Industrial in house R&D units and approving Fiscal Incentives

STEP 1	DSIR Recognition & Registration		
WHO	In House R&D unit in industry	SIRO's	PFRID
HOW	Apply online as per DSIR guidelines	⇒ Discussion & Presentation at DSIR	⇒ Or Field Visit by DSIR team
BENEFITS*			
Customs duty exemption on imports for R&D			
Other government of India approved incentives			
* These benefits are subject to conditions			

STEP 2	DSIR Approval in <u>FORM 3CM</u> u/s 35(2AB) of IT Act, 1961 for in-house R&D units only		
WHO	Business of Biotechnology	Manufacturing of any article other than those specified in Schedule 11	Valid DSIR Recognition
HOW	Apply online in Form 3CK	⇒ Agreement with DSIR	⇒ Submission of undertakings as per DSIR guidelines
BENEFITS *			
Eligibility for Weighted tax deduction under Section 35(2AB) of IT Act			
* These benefits are subject to conditions			

STEP 3

Report in form 3CL (approving revenue and capital expenses) to DGIT (E) u/s 35(2AB) of IT Act, 1961

WHO

Companies having valid DSIR approval in form 3CM

HOW

Submission of Annexure IV as per DSIR guidelines every year in October

Publish R&D expenditure in Annual Report or audited financial statement

BENEFITS

Weighted tax deduction of a sum equal to 2 times of any expense incurred on scientific research (not being any expenditure in nature of cost of any land or building) in certain areas specified by **Section 35(2AB)** of IT Act

* Benefits are subject to conditions

NEWS UPDATE

National Research Development Corporation (NRDC) an enterprise under the Dept. of Scientific & Industrial Research, Ministry of Science & Technology and M/s Reliance Industries Limited, Mumbai executed an agreement for commercialization of technology “A Novel Super absorbent Hydro gels” developed by Indian Agricultural Research Institute, New Delhi.

A novel indigenously developed hydrophilic super absorbent polymer, specifically designed to meet the requirements of water productivity in Agriculture. The scientists have successfully demonstrated the potential of resolving the problem of poor water use

efficiency in agricultural crops. Besides, improved nutrient use efficiency, an array of other benefits has been achieved by using this product.

Hydrogel absorbs a minimum of 350 times its weight of pure water at 50°C. It exhibits absorbency at high temperatures suitable for semi-arid and arid regions. Besides low rate of application, it also improves physical properties of soil such as porosity, aggregate stability and hydraulic conductivity. No undesirable effect on the crops raised in the fields treated with hydrogel has ever been observed or reported by the experimenters or the end users, the farmers.

‘NRDC has already executed agreements with five companies for this technology.’

DSIR recognized Industrial R&D unit working towards “Make In India” concept -

Veera Tarmac Udyog Pvt Ltd, Bangalore has claimed to have developed the Tarmac Coach comparable to world standards. The bus is a special application bus used only inside the airport for the movement of passengers from the terminal to aircraft and vice versa. Company claims the bus is as per AHM 950 of IATA, completely with indigenous technology without depending on



any support from outside. Bus is said to have carrying capacity of 106 passenger with the packaging of the power train thus giving a fuel economy. Company has submitted that currently India is importing these buses by spending about



Rs 2.80cr per bus. Cost of Company developed bus is claimed to be only about Rs 1.50cr per bus.

Research activities of Industrial In house R&D units & organizations recognized by DSIR.

This quarter around 25 in-house R&D units of industry received fresh recognition by DSIR. These centres taken as a whole constitute an important segment of nations S&T infrastructure. Research activities of these in-house R&D centres are focussed towards product development, process development, commercialisation of indigenous technologies and absorption and up gradation of imported technologies. Outstanding R&D achievements claimed by some of these in-house R & D centres and their contributions to the industrial development in the country are outlined below:

Development of BBD163248P2RS (DOUBLE ROW BALL BEARING WITH WIDE INNER RING) – NRB Industrial Bearings Limited, Mumbai

The special double row ball bearing with wide inner ring is developed for TOP ROLLER application of high speed spinning machine used in textile industry. One side of bore of inner ring is provided with taper for ease of adoptability. Unlike other bearings, inner ring bore is only precisely machined. Two locating groove are provided on the outer ring to facilitate the bearing mounting. Two rows of race ways are designed to ensure high performance of bearing even on high speed and unbalanced load. Outer ring is provided with one hole in the centre for re-lubrication. All the bearings are pre-lubricated with high performance grease. This product is developed for 100% export.



SEMI SOLID FOOD WASTE DISPOSAL BIOGAS PLANT AND IT'S PROCESSING TO GENERATE INNOVATIVE VALUE ADDED PHOSPHO RICH ORGANIC MANURE (PROM) - Patanjali Bio Research Institute (PBRI, Pvt. Ltd.), Haridwar

Research Centre has developed a PROM (Phospho Rich Organic Manure) out of the spent biogas slurry from a 6000 Cu.m semi solid waste biogas plant. The technology uses the vedic concept of prana and pancha mahabuta. Using this principle they have developed herbal extracts to solubilize phosphate, activate silica and calcium to help in fixation of cosmic energy in the soil.



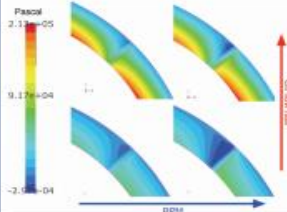
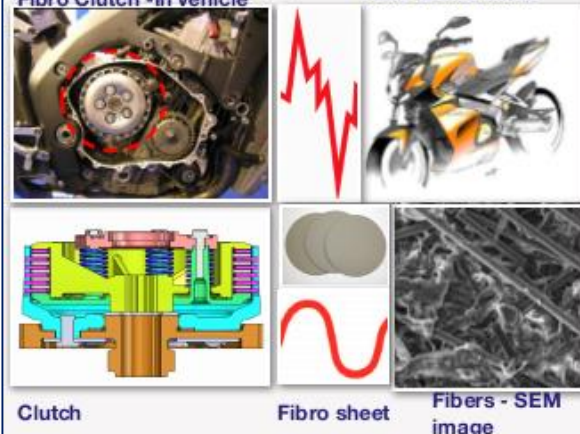
The advantages are DAP replacement, Superphosphate, organic, provides micronutrients, yield increased from 10-15% and is Eco friendly.

BIRLA KHADI – Century Textiles and Industries Ltd., Mumbai

Birla Khadi fabric developed at Birla Century is the fabric with blended yarn of high absorbent Lyocel (re-generated cellulosic) fibre with Natural Linen fibre, and spun in very special way to create hollow channels in yarn. This makes fabric high absorbent with high moisture transportation, making it high comfort, dry feel with cool effect and special soft touch to skin / body. The presence of Linen imparts natural antimicrobial effect to fabric and make this fabric more Hygienic. Due to special blend of fabric, it has differential dyeing effect and makes the fabric unique and special appearance & look. Besides, the Natural Linen blend yarn in weft gives a very special traditional and unique national appealing feel.

Wet Clutch Technology- Fibro Friction Material (For New-generation Vehicle) - Makino Auto Industries Pvt Ltd., Noida

Clutch Function is to engage and disengage the transmission from engine to the remaining parts of transmission (to allow the engine to be separated from rest of the transmission system). They are major contributors for Consistent, Smooth & Jerk-free ride.

<p>Cork and Rubber Based Clutch Disc</p> 	<p>Fibro Friction Based Clutch Disc</p> 	<p>Absorb High Heat and remained cool</p> 
<p>Fibro Clutch -In vehicle New-Gen. Vehicle</p>  <p>Clutch Fibro sheet Fibers - SEM image</p>		<p>Fibro Friction Material (For New-generation Vehicle)</p> <p>Fibro Friction Material imparts better cooling characteristics and material Can withstand high temp (250 ~ 400 °C), very low Degradation of Dy. Coefficient of Friction ,wear at High temp and high inertia. (Approx..1/3 rd of traditional friction material -Rubberized cork type) Consistent performance through out life as no natural raw material used. Less stickiness property of fibro friction material gives Smooth Gear shift and less clutch Drag that results fuel saving.</p>

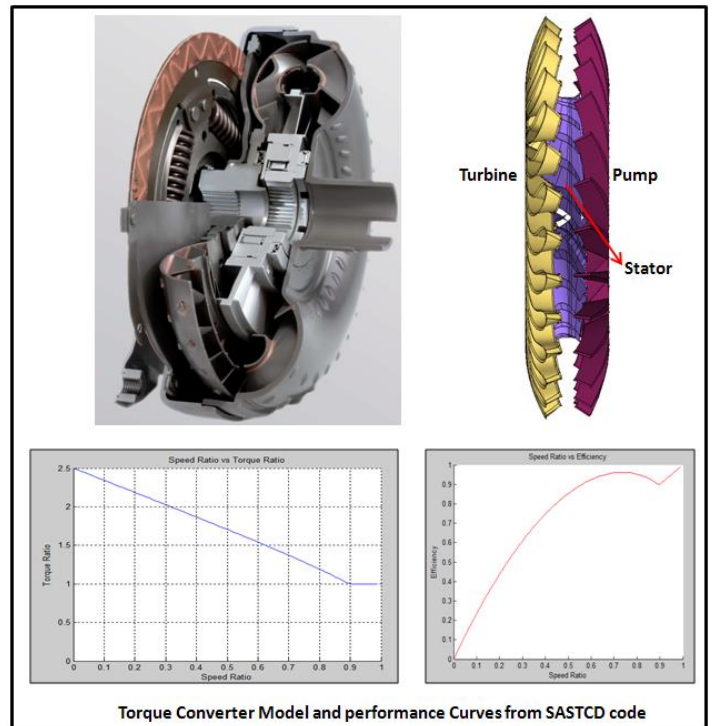
The R&D units recent innovation is the new technology Friction Material developed with high performance fibers. Different technique such as TGA , FTIR , XRD , SEM , EDX and Makino Internal Tests bench have been used to evaluate and compare fibro friction material degradation results with the current Rubberized cork technology. With Patented Production Processes and Machineries for OE customers, FIBRO Clutch is claimed to be new revolutionary material leading to high heat resistance, smoother gear changes and longer life. Company reports that it is tested, validated and now approved by various OEMs in India.

Embrace Science, Create Business....Embrace Science, Create Business....

M.S. Ramaiah University of Applied Sciences (MSRUAS), Bangalore - Automotive Torque Converter Design Code Development:

MSRUAS has submitted details of their project aimed at development of the design code for automotive torque converter since it is manufactured by limited commercial enterprises in India. The project is funded under DRDO-CARS scheme for CVRDE-Transmission Division, Chennai.

Torque converter multiplies the torque when there is a substantial difference between engine and transmission rotational speed providing an equivalent of reduced gear. Moreover, the continuous development of transmission for various combat vehicles has led to the need for developing a design procedure for torque converter for various power ratings. In this project, torque converter design methodology is finalized and a standalone program-SASTCD.exe is developed using available open source software. The proposed design code for the development of torque converter facilitated better understanding of the flow field inside the converter to minimize the flow losses leading to improved overall performance of torque converter. This research project has resulted in the development of highly competent code for design of different ranges of torque converter which can be used by automotive, locomotive and naval applications. Organization had earlier transferred the technology of Semi active suspension system using MR dampers to Mahindra & Mahindra and ARAI, Pune.



Bioscience Research Foundation,

Chennai is working on issues related to environmental safety for agricultural community of Tiruvallur and Kancheepuram district to avoid pesticide accumulation in human beings and ecosystem. Organization has evaluated new herbicides in agricultural fields. These herbicides show promising results without leaving any residues in plant part of straw, grain and soil, as claimed by the organization. The organization is also evaluating plant derived crude extracts and their compounds against agricultural pests, vector mosquitoes and human pathogenic bacteria. They have proposal to move from lab to field by developing formulations with support of environmental safety evaluation studies. The Research Foundation claims to promote ecofriendly pest management, crop cycling and growing resistant variety of crops.

In house R&D units of Industry recognized by DSIR during October- December

During October- December 2014, DSIR has granted fresh recognition to the in-house R&D units of the following firms:

Engineering & equipment machinery

1. M/s Servall Engineering Works Pvt. Ltd., Coimbatore
2. M/s A2Z Filtration Specialities Pvt. Ltd., New Delhi.
3. M/s Makino Auto Industries Pvt. Ltd., Noida
4. M/s GRP Ltd., Bharuch
5. M/s Kalyani Carpenter Special Steels Ltd., Pune
6. M/ s Maxwatt Turbines Pvt. Ltd., Bangalore
7. M/s NRB Industrial Bearings Ltd., Mumbai
8. M/s. WMW Metal Fabrics Ltd., Kolkata

Electronics and Optical Equipments

1. M/s Reverse Logistics Company Pvt. Ltd., Delhi
2. M/ s TAS Powertek Private Limited, Nashik
3. M/s AvioHeliTronics InfoSystems Private Limited, Bangalore

Dyes & Chemicals

1. M/s Gtz (India) Pvt. Ltd., West Bengal
2. M/s Ashu Organics (I) Pvt. Ltd., Thane

Healthcare (Pharmaceuticals, Biologics, Medical Devices)

1. M/s Tirupati Medicare Ltd., New Delhi
2. M/s Angiometrix Medequips India Pvt. Ltd., Bangalore
3. M/s ICBio Clinical Research Pvt. Ltd, Bangalore
4. M/s Bioneds India Pvt Ltd., Bangalore

5. M/s Mabpharm Private Limited, South Goa
6. M/s Acme Formulation Private Limited, Solan
7. M/s Zoetis Pharmaceutical Research Pvt. Ltd., Mumbai
8. M/s Cris Pharma (India) Limited, Jaipur
9. M/s. Biosense Technologies Pvt. Ltd., Thane
10. M/s. Spansules Pharmatech Private Limited, Hyderabad

Agriculture

1. M/s Patanjali Bio Research Institute Pvt. Ltd., Haridwar
2. M/s Shivshakti Biotechnologies Ltd, Hyderabad

SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATIONS (SIROs) approved by DSIR during October- December

Fresh recognition as Scientific and Industrial Research Organizations (SIROs) was granted by DSIR to following organizations having well-defined research objectives. The recognition is valid up-to 31.03.2017

1. Bioscience Research Foundation, Chennai
2. Srinivasa Educational Academy, Chittoor
3. Sri Vishnu Educational Society, Hyderabad
4. Karve Institute of Social Service, Pune
5. Lata Medical Research Foundation, Nagpur

In house R&D units of Industry approved by DSIR during October- December for availing Fiscal Incentives u/s 35(2AB) of Income Tax Act, 1961

Electronic System Design and Optical Equipments:

Company	Location	3CM validity
M/s Elin Electronics Ltd.	Ghaziabad	01.04.2014 to 31.03.2015
M/s Reality Automation and Security Systems Pvt. Ltd.	Pune	01.04.2014 to 31.03.2017

Engineering and equipment Machinery

Company	Location	3CM validity
M/s Eastman Exports Gobal Clothing Pvt.Ltd.	Erode	01.04.2014 to 31.3.2016
M/s Padmini VNA Mechatronics Pvt. Ltd.	Dhankot, Dist. Gurgaon	01.04.2013 to 31.03.2017
M/s Nelcast Ltd.	Nelore	21.08.2014 to 31.03.2017
M/s Balkrishna Industries Ltd.	Chopanki (Rajasthan)	01.04.2012 to 31.03.2013 & 04.07.2013 to 31.03.2016
M/s Bimetal Bearings Ltd.	Coimbatore	01.04.2014 to 31.3.2015

Agriculture:

Company	Location	3CM validity
M/s Camson BioTechnologies Ltd.	Bangalore	01.04.2014 to 31.03.2017

Healthcare (Pharmaceuticals, Biologics, Medical Devices)

Company	Location	3CM validity
M/s Gufic Biosciences Ltd.	Navsari, Gujarat	30.05.2014 to 31.03.2017
M/s Seva Healthcare Ltd.	Pune & Sunderanagar	01.04.2014 to 31.03.2016
M/s Agila Specialities Pvt. Ltd.	Bangalore	01.10.2014 to 31.03.2016
M/s BDR Pharmaceutical International Pvt. Ltd.	Vadodara	01.04.2014 to 31.03.2016
M/s Kusum Healthcare Pvt. Ltd.	Alwar, Rajasthan	01.04.2011 to 31.03.2016
M/s Bliss GVS Pharma Ltd.	Andheri (Easst), Mumbai	01.04.2014 to 31.03.2016

Dyes, Chemicals & Petrochemicals:

Company	Location	3CM validity
M/s Indo Colchem Pvt. Ltd.	Ahmedabad	01.04.2014 to 31.03.2016
M/s Raj Petro Specialities Pvt. Ltd.	Kilpauk, Chennai	01.04.2013 to 31.03.2017
M/s United Phosphours Ltd.	(i) Vapi (ii) Ankleshwar (iii) Thane & (iv) Ankleshwar	01.04.2013 to 31.03.2017

*Season's
Greetings
and Good
Wishes for
the New
Year –
2015*

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The Department has issued revised guidelines for approval of Companies and submission of report in form 3CL under section 35(2AB) of the Income-tax Act, 1961.

The new guidelines can be accessed from the following link:
http://www.dsir.gov.in/forms/irdpp/352ab_guidelines_may2014.pdf

DSIR welcomes Feedback/suggestions for improvements. For any specific information on (a) Recognition of in-house R&D centres in industry, (b) Recognition of Scientific and Industrial Research Organisations, PFRI and (c) Fiscal incentives for scientific research and commercialisation of R&D, write to:

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