



APRIL 2004

NATIONAL AWARDS FOR R&D EFFORTS IN INDUSTRY - 2004

(Open to all industries irrespective of DSIR recognition)

In order to give encouragement to research and development in industry, DSIR instituted National in-house R&D awards for outstanding R&D achievements of Indian Industry in the year 1988. These awards are in the form of shields made of sterling silver and are presented alongwith citations at the inaugural session of the Annual National Conference on in-house R&D in industry. During the past 16 years, 139 such R&D awards have been presented by DSIR.

NATIONAL AWARDS - 2004

DSIR invites applications from all industries, irrespective of DSIR recognition, for National Awards in the following sectors/ areas:

1. Chemical and Allied Industries

For outstanding R&D achievements in natural products, organic and inorganic chemicals, speciality chemicals, dyestuffs,

pesticides, petroleum and petrochemicals, polymers and plastics, fertilisers, catalysts, protection from corrosion, paints and pigments, gases and other chemicals and chemical products.

2. Drugs and Pharmaceuticals Industries

For outstanding R&D achievements in the area of drugs and pharmaceuticals, drug intermediates, drug delivery systems and other related areas.



Vacuum brazed aluminium plate fin compact heat exchangers for light combat aircraft developed by Bharat Heavy Plate & Vessels Ltd., Visakhapatnam

An Information Update from
Department of Scientific & Industrial Research
 Ministry of Science and Technology
 New Delhi

3. Bio-tech Industries

For outstanding R&D achievements in biotechnology and development of bio-tech based products.

4. Electrical Industries

For outstanding R&D achievements in power generation, transmission and distribution; equipment, tools, components and materials; cables; electrical instruments, welding equipments, test equipment and others.

5. Electronic/Optoelectronic Industries

For outstanding R&D achievements in all areas of electronics / optics / opto - electronics including components and systems with / without embedded software, appliances, industrial / power electronics, communications including telecommunications, audiovisual equipment, electronic measuring instruments, microwave engineering, semiconductors, laser based systems and others.

6. Computer Software

For outstanding R&D achievements in the area of computer software including networking software, internet applications, e-commerce and GIS software.

7. Mechanical Engineering Industries

For outstanding R&D achievements in all areas of engineering industry including industrial machinery, boilers, turbines, engines, tractors and farm machinery, automobiles and other transportation systems, CNC machines, compressors, valves, machine tools, robotics, tribology, industrial engineering; and for development of capital goods for major industrial sectors such as chemicals, man-made / synthetic fibres, polymers, processing industries, metallurgical industries, textiles,

electronics and engineering industries, bulk transportation, earth moving machineries, material handling equipment, mining machineries, power generation and distribution, etc.

8. Infrastructure Development

For outstanding R&D achievements in the areas of design, engineering and construction of civil engineering projects, highways, bridges, public transportation systems, ports, airports, public health engineering, water management, flood control and hydroelectric projects.

9. Processing Industries

For outstanding R&D achievements in ferrous and non-ferrous metallurgy, alloys, semis, wires, welding electrodes, glass and ceramics, refractories, cement, mining and mineral processing, utilisation of natural resources, jute, textiles, leather and rubber processing, paper and others.

10. Agro and Food Processing Industries

For outstanding R&D achievements in cultivation technology, plant tissue culture, improved variety of seeds, biomass production and conservation; animal husbandry, milk processing and dairy products, poultry research, aqua-culture, post harvest technologies, food processing and preservation industries.

11. New Materials

For outstanding R&D achievements leading to development of new materials including composites and special materials for wide range of applications.

12. Renewable Energy Systems

For outstanding R&D achievements in new and renewable energy systems, and harnessing of renewable energy sources, photovoltaic systems and others.

13. Energy Conservation

For outstanding R&D achievements leading to energy conservation in energy intensive sectors such as metallurgy, ceramics, refractories, cement, textiles, paper, fertilisers, petrochemicals and electrochemical industries, power generation, transmission, distribution and utilisation.

14. Pollution Control and Environmental Protection

For outstanding R&D achievements leading to pollution abatement, environmental protection, regeneration of natural resources degraded due to pollution, etc.

15. Technology Exports

For outstanding R&D achievements leading to development and export of competitive technologies; such efforts may also include improved designs, and setting up of demonstration plants.

16. Technology Absorption (*of imported technologies*)

For outstanding R&D achievements leading to absorption and upgradation of imported technology; unpackaging of imported technology, know-how / know-why; technology demonstration; product / process upgradation leading to quality improvement and cost reduction, etc.

17. Successful Commercialisation of Technologies acquired from Others

For acquiring and commercialising technologies / R&D results generated in national laboratories and other Government agencies ; Government funded organisations, IITs, NITs, universities and other S&T organisations; co-operative research associations, voluntary scientific and industrial research organisations, in-house R&D of any company, other than the

commercialising company and individual inventors.

ELIGIBILITY

All units of Indian industry, which are registered in India as corporate companies, private limited companies, partnership / proprietaryship concerns, who are engaged in R&D activities (irrespective of their recognition status with DSIR), are eligible to apply for awards.

HOW TO APPLY

The application proforma alongwith guidelines are available at the **DSIR website : <http://www.dsir.nic.in>** Industries desirous of applying for the award(s) may submit 15 sets of the application as per prescribed proforma alongwith **one page summary** of all aspects covered in the application for consideration. The duly filled in applications may be submitted to the **Scientist - G and Head (RDI), Department of Scientific and Industrial Research, Technology Bhavan, New Mehrauli Road, New Delhi - 110 016.**

Last date for receipt of applications in DSIR is **31 May 2004.**

PRESENTATION OF AWARDS

All applications received by 31 May 2004 will be carefully evaluated by High Level Screening-cum-Technical Evaluation Committees drawn from national laboratories, R&D institutions, universities / IITs, Government Departments, industry and industrial associations. A Selection Committee-cum-Jury will finally select the winners. Names of the companies selected for the awards will be announced in September 2004. The awards will be presented at the 18th Annual National Conference on in-house R&D in Industry to be held sometime during October 2004. Decision of the Department of Scientific & Industrial Research on the awards is final.

Application Proforma for the award for outstanding R&D achievements in specified industrial sector / area (Sl. Nos.1 to 15 in the brochure)

(This is only an abridged version of proforma. The full version of proforma, instructions and guidelines for filling up the same are available at DSIR website : <http://www.dsir.nic.in> Only the detailed proforma must be used.)

PART - A

(General information)

1. Name & address of the applicant firm and location of the in-house R&D centre, alongwith fax and e-mail numbers and name and telephone number of the contact person.
2. Nature of business (products manufactured).
3. Company structure:
4. Category of the firm: (SSI/IDR, others)
5. Technical and financial collaborations, if any.
6. Annual R&D expenditure as percentage of annual turnover for the past three years.
7. R&D manpower (scientific & technical only): a) Full time b) Part time c) Total

PART - B

1. Industrial sector/Area of award.
2. Title(s) of the R&D project, month of start, month of completion, month of start of commercial production and cost incurred on most successful R&D projects/programmes (not more than five in the order of importance for which you are making a claim for the award).
3. Name, qualifications and designation of the R&D personnel associated with achievements claimed, separately for each achievement.

4. Nature and full details of achievements (product / process / new services) claimed in quantitative terms, separately for each achievement.
5. Explain the novelty of the development with respect to competing technologies available / in use (in India / internationally), separately for each achievement along with following details : a) Give names of competing products / processes and names of the suppliers / developers of products / processes and users separately for each achievement;
b) Give a comparison of your technology / product / process, separately for each achievement with competing technologies in India / globally in respect of material usage, energy usage / saving, cost, environmental protection, pollution / emission levels, serviceability / ease of maintenance, any other aspect (pl. specify).
6. Details of patents / designs / copyrights obtained / applied for including name of patentor, assignee (if any), name of inventor, date of IPR application, separately for each achievement.
7. Chronology of development and upscaling, separately for each achievement.
8. Economic potential of the project (s) separately for each project / achievement / programme(s), realised so far, expected to be realised in future with respect to : resources utilisation, import substitution, export potential, energy conservation, environmental protection, cost reduction, other economic benefits.
9. Status of commercialisation (separately for each project / achievement) : status of development,

investment in plant / machinery, production so far, year - wise quantities, and value (specify units), quantities sold so far in India, year - wise quantities & value of sales starting from the latest completed accounting year, exports (year - wise & country - wise break up in terms of quantities and value of sales starting from the latest completed accounting year.)

10. Give a write up on difficulties encountered during development, if any, and remedial measures taken, separately for each achievement.
11. Please give details separately for each achievement of consultancy support, outside R&D assistance obtained, if any, etc.
12. Societal impact, separately for each achievement.
13. Scientific and technological advancement resulting out of project / programme, spin off benefits, if any, separately for each project.
14. In case the product / process developed by you uses any imported raw materials, components, assembly or capital goods, please give following details for each of achievement given in award application :
 - a) Names of each major raw material, component, sub -assembly and capital goods;
 - b) Share in the ex-factory price (exclusive of excise duty) of - cost of imported raw materials - cost of imported components - cost of imported sub assemblies;
 - c) Cost of imported capital goods in the total cost of the plant set up for commercialisation of each of the R&D achievement.

PART - C

I certify that all particulars furnished above are correct and complete and I agree

to abide by the decision of the DSIR in all matters relating to award(s).

I also certify that no technology was imported directly or indirectly for the product / process for which award for indigenous technology development has been applied for.

Place : Sign. of the Chairman / M.D.

Date : Name & Designation

Application Proforma for the award for outstanding R&D achievements for absorption / upgradation of imported technology (ies) (Sl.No. 16 in the brochure).

(This is only an abridged version of proforma. The full version of proforma, instructions and guidelines for filling up the same are available at website : <http://www.dsir.nic.in> Only the detailed proforma must be used.)

PART - A

(General information)

1. Name & address of the applicant firm and location of the in-house R&D centre, alongwith fax and e-mail numbers and name and telephone number of the contact person.
2. Nature of business (products manufactured).
3. Company structure :
4. Category of the firm : (SSI / IDR, others)
5. Technical and financial collaborations, if any.
6. Annual R&D expenditure as percentage of annual turnover for the past three years.
7. R&D manpower (scientific & technical only) : a) Full time b) Parttime c) Total

PART - B

(Separately for each imported technology)

1. Title of the project(s)/programme(s).
2. Source of imported technology/know-how and the agency from whom it was acquired, when and on what payment terms? Enclose a copy of the relevant foreign collaboration agreement without fail.
3. Give salient details of technology package imported such as lab scale know - how, partially upscaled / commercial level know - how, basic / detailed engineering, expatriate technological manpower assistance, manpower training etc, as also full details of the efforts made by you in absorbing, indigenising and upgrading the technology.
4. Assistance obtained from other indigenous sources such as consultants, capital goods suppliers etc. in implementation of the imported know-how and putting up production facilities.
5. Highlight how various elements of technology package were modified to suit domestic conditions (such as raw materials, capital goods available, specialised requirement of domestic market etc), as also similar details of modification if any, made for export markets.
6. Specify benefits derived in quantitative terms by absorption / upgradation efforts. This should include details of items indigenised, capital goods specially developed, raw materials indigenised, their name and value, share in the cost of product / capital cost of plant etc.
7. Estimate of foreign exchange saved / earned by way of technology absorption and upgradation.

8. Annual turnover of the product/process whose technology was absorbed / upgraded and details of exports (year-wise for last 3 years), if any.
9. Explain how your efforts in absorbing, upgrading the technology have been successful in upgrading the technology and how does your technology compare with other similar technologies in India, abroad. Give a comparison of your technology with that of your collaborator. State whether products emanating out of imported technology are export worthy and if so, what is the share of exports in the turnover of the products.

PART - C

I certify that all particulars furnished above are correct and complete and I agree to abide by the decision of the DSIR in all matters relating to award(s).

Place : Sign. of the Chairman /M.D.

Date : Name & Designation

Application Proforma for the award for outstanding R&D achievements for Successful Commercialisation of Technologies acquired from Others (Sl.No. 17 in the brochure).

(This is only an abridged version of proforma. The full version of proforma, instructions and guidelines for filling up the same are available at website : <http://www.dsir.nic.in> Only the detailed proforma must be used.)

PART - A

(General information)

1. Name & address of the applicant firm and location of the in-house R&D centre, alongwith fax and e-mail numbers and name and telephone number of the

- contact person.
2. Nature of business (products manufactured).
 3. Company structure :
(Indicate sector and also foreign equity, if any)
 4. Category of the firm : (SSI/IDR, others)
 5. Technical and financial collaborations, if any (give details of year of collaboration, name of collaborator, item of manufacture, technology payments, assistance provided by collaborator etc. Enclose a copy relevant collaboration agreement)
 6. Annual R&D expenditure as percentage of annual turnover for the past three years.
 7. R&D manpower (scientific & technical only) :
a) Full time
b) Part time
c) Total

PART - B

1. Title of the project(s)/programme(s).
2. Source of technology/know-how and the agency from whom it was acquired.
3. Level/scale of technology acquired (for instance lab scale technology, pilot scale, commercial scale etc).
4. Details of the technology as obtained from national laboratory / other indigenous public funded agency and efforts made by you in implementing / commercialising the technology package.
5. Indicate efforts put in upscaling the technology and innovation, if any, involved in the process of upscaling.

6. Scale of operations upon commercialisation.
7. Role of financial institutions, if any.
8. Role of in-house R&D centre in successful commercialisation of the know-how obtained.
9. Agency which carried out the design / basic engineering / detailed engineering. Role of consultants/NRDC, if any, in commercialisation.
10. Name, qualification and designation of R&D personnel involved in the project with their areas of specialisation.
11. Date of commissioning of the plant.
12. Installed capacity vis-a-vis present capacity utilisation (year-wise details for last 3 years).
13. Annual production turnover and exports if any, of the product/process commercialised (year - wise details in quantity and value for last 3 years).
14. Estimate of foreign exchange saved/earned by way of commercialisation, if any (year- wise for last 3 years).

PART - C

I certify that all particulars furnished above are correct and complete and I agree to abide by the decision of the DSIR in all matters relating to award(s).

I also certify that no technology was imported directly or indirectly for the product / process for which award for successful commercialisation of technologies acquired from others, has been applied for.

Place : Sign. of the Chairman /M.D.

Date : Name & Designation

NEW IN-HOUSE R&D UNITS RECOGNISED BY DSIR

During January - March 2004, the Department of Scientific & Industrial Research has granted recognition to the in-house R&D units of the following firms at locations given in brackets :

Sl. No.	Name of the firm	Valid upto
1.	AE Telelink Systems Ltd., (New Delhi)	31.3.2006
2.	Alpha X-Ray Technologies (India) Pvt. Ltd., (Mumbai)	31.3.2006
3.	Amrutanjan Ltd., (Chennai)	31.3.2006
4.	Aurobindo Pharma Ltd., (Clinical Res. Unit) (Hyderabad)	31.3.2006
5.	Aurobindo Pharma Ltd., (Mumbai Unit) Hyderabad	31.3.2006
6.	Autolive IFB India Pvt., Ltd., (Bangalore)	31.3.2006
7.	Bilcare Ltd., (Pune)	31.3.2007
8.	Cadila Healthcare Ltd., (Ahmedabad) (Zydus Fine Chemical Division)	31.3.2007
9.	Calcom Vision Ltd., (Gautam Budh Nagar)	31.3.2007
10.	Cholayil Pharmaceuticals Pvt., Ltd., (Chennai)	31.3.2007
11.	Dass Hitachi Ltd., (Ghaziabad)	31.3.2006
12.	Dr. Reddy's Laboratories Ltd., (Discovery Res. Centre) (Hyderabad)	31.3.2006
13.	Emcure Pharmaceuticals Ltd., (Pune)	31.3.2007
14.	Engelhard Environmental Systems India Pvt., Ltd., (Kanchipuram)	31.3.2007
15.	Excel Crop Care Ltd., (Mumbai)	31.3.2006
16.	Hi-Tech Gears Ltd., (New Delhi)	31.3.2006
17.	Intervet India Pvt. Ltd (Hyderabad)	31.3.2006
18.	I.P Rings Ltd., (Chennai)	31.3.2007
19.	Krebs Bio-chemicals & Industries Ltd., (Hyderabad)	31.3.2007

20.	Medreich Sterilab Ltd., (Bangalore)	31.3.2006
21.	Megatherm Electronics Pvt. Ltd., (Kolkata)	31.3.2007
22.	Polylefins Rubber Chemicals Ltd., (Navin Fluorine) (Mumbai)	31.3.2006
23.	Ranbaxy Laboratories Ltd., (SAS Nagar Unit, Distt. Ropar, Near Chandigarh)	31.3.2006
24.	Ravindranath G.E. Medical Associates Pvt. Ltd., (Hyderabad)	31.3.2007
25.	Seed Works India Ltd., (Bangalore)	31.3.2007
26.	Sonodyne International Ltd., Kolkata (Ahmedabad)	31.3.2006
27.	Syngenta India Ltd., (Mumbai)	31.3.2007

NEW SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATIONS (SIROs) APPROVED BY DSIR

During January - March 2004, the Department of Scientific & Industrial Research has approved the following Scientific and Industrial Research Organisations (SIROs) :

Sl. No.	Name of the SIRO	Valid upto
1.	Asthagiri Herbal Research Foundation, Chennai	31.3.2006
2.	Centre for Occupational and Environmental Health New Delhi	31.3.2006
3.	Maharashtra State Agricultural Marketing Board (Pune)	31.3.2006
4.	Sadbhav Foundation, Mumbai	31.3.2006
5.	Shanmugha Arts, Science Technology and Research Academy (SASTRA), Thanjavur	31.3.2006
6.	Shivsadan Renewable Energy Research Institute, Sangli	31.3.2005
7.	Society for Welfare of the Handicapped Persons, (Durgapur)	31.3.2006