

INDIAN CHEMICAL COUNCIL

ICC Acharya P. C. Ray Award For Development of Indigenous Technology

Nomination for this Award should be for considerable research and development work done during the previous 5 years and commercialization during the previous 2 years.

Contents of the application should be as under:

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital & Financial Structure.
- IV. Range of principal manufacturing activities/ engineering services.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years

B. Reasons for Nomination/Application for the Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award justifying and highlighting your specific contribution to the development of technology to merit this Award.

Briefly describe process / product and highlight novelty / uniqueness emphasising on cutting edge aspect of technology. Also highlight competitive advantages on quality, inherent safety, energy minimisation, waste (air, liquid and solid) reduction, effluent treatment and operating efficiencies vis-à-vis competing technologies worldwide.

Please indicate patents obtained / or applications made in India or abroad. Also state whether they are commercially exploited. Also please furnish additional data on the following:

- I. Whether Development was entirely in-house or otherwise acquired from outside Institutions and if acquired, state name of Institution collaborating, extent of its contribution and other relevant data.

- II. Whether there is any contribution from imported know-how foreign collaborators to the innovation and if so, please provide full details thereof.
- III. Details of your R&D organisation base, number of scientists & engineers involved, annual budgets of the division & types of R&D areas on which development is focused.
- IV. Was the design and engineering of the plant done by you in-house or by a contracting/consulting firm of engineers and if so, name of the service company and its contribution to the services.
- V. Please attach proof of attaining all competitive advantages described in highlights given earlier.

C. Performance Status of Plant Using New Technology:

Please furnish following specific information about the plant performance:

- I. For setting up commercial plant did you go through Pilot Plant? If so, for how long? Briefly describe problems faced during development / design / scale up with solution thereof.
- II. How long it took to build commercial plant and approximate cost of the plants?
- III. Indicate when trial production started and how long it took to stabilise operations on commercial scale.
- IV. Furnish information on capacity of plant and capacity utilisation achieved. Also furnish actual production, in quantity and value, since start up and current rate of production.

**ICC Award for Excellence in
Chemical Plant Design & Engineering**

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital and Financial Structure.
- IV. Range of principal manufacturing activities / engineering services.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Reasons for Nomination/Application for the Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award justifying and highlighting your specific contribution to the Project/Client to merit this Award.

Briefly highlight novelty / uniqueness / complexity and advantages with special reference to and comparison with state-of-the-art technology worldwide.

Please indicate patents obtained / or applications made in India or abroad. Also state whether they are commercially exploited.

Also please furnish additional data on the following:

- I. Whether this Development of Components / Equipment / Systems of Chemical Plants was developed totally by in-house engineering expertise? If not, to what extent you had the benefit of drawing upon other outside engineering services, local or abroad, and their contribution to this effort. Please also list any other similar or identical plant engineering done by your firm earlier.
- II. At what stage of the Project you were associated with the client in Development of Components / Equipment/ Systems of Chemical Plants? Were you required to develop the entire package from the start to the end? Please also clarify if assistance was provided at the stage of pilot plant for process technology culminating in the final commercial transfer.
- III. Did you act as prime contractor to the entire project with full responsibility in Development of Components / Equipment / Systems of Chemical Plants? Were these services all in-house? If not, the size of sub-contracting for specific areas and their related contribution.
- IV. Any other relevant material/data about your contribution as may help to assess the merit of your nomination for Award (If feasible, some photographic material may be enclosed).

INDIAN CHEMICAL COUNCIL

**ICC D. M. Trivedi Lifetime Achievement Award for Contribution
to Indian Chemical Industry
(Management of Industry and Education & Research)**

Nominations by way of invitation only

INDIAN CHEMICAL COUNCIL

ICC Award for Excellence in Management of Health / Safety / Environment

Note: This Award is for composite company performance and not for any specific operating site/s. The applicant company must be Responsible Care signatory and must have obtained ISO 14000 certification for all its sites (attach copies of certificates)

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital & Financial Structure.
- IV. Range of principal manufacturing activities / engineering services.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Please send Nomination as per details given below:

Please tick (✓) appropriately

Category I : Companies having annual sales revenue above Rs. 500 crores :

Category II : Companies having annual sales revenue below Rs. 500 crores :

C. Reasons for Nomination/Application for the Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award justifying and highlighting your significant contribution towards improving overall —

- a) Environment in and around your operations using innovative strategies for continuous control and / or
- b) Application of newer strategies in safety / health / environment to merit this Award
- c) Receipts of Awards related to Safety / Health / Environment.

Statistics to be furnished for last three years for all manufacturing site/s on the following:

Safety:

- ❖ Accident Severity Rate (Statutory)
- ❖ Accident Frequency Rate (Statutory)
- ❖ Total Recordable Injury Rate (TRIR)
- ❖ Details of LWC, MTC & RWC
- ❖ No. of near miss incidents

- ❖ Safety Training man-days
- ❖ Details of Process Safety Management System

Health:

- ❖ Occupational Health Safety Index
- ❖ Absence of any Industrial Health Impairment

Environment:

- ❖ Life Cycle Analysis if carried out
- ❖ Greenhouse Gas Inventorization
- ❖ Environment Sustainability Index
- ❖ Compliance with all the statutory standards such as air, water and land, of State Pollution Control Board and Environment Protection Act
- ❖ Reduction in wastes as per environment statement

Major accidents during the previous 4 years and fatalities, if any, should be clearly brought out and discussed. This will include Root Cause Analysis and action taken report.

- I. Basic information on the strategic concept for environmental improvement (in respect of gaseous/ liquid / solid wastes control & disposal, house-keeping & landscape architecture & development and details of implementation).
- II. Strategies & techniques applied for continuous monitoring of environment and feedback mechanism for correcting / preventing any run-away operations for achieving stable operations.
- III. Cost benefit ratio in respect of investment in inputs v/s benefit realised in converting liabilities to assets giving brief details of such operations. Please indicate whether these measures resulted in any improvement upstream of the plant. Please elaborate.
- IV. Outline the effort made in reuse and recycle of water and for better water management.
- V. Any other factors you may wish to supplement for consideration of your nomination for Award.

INDIAN CHEMICAL COUNCIL

ICC Award for Efficient Waste Management

Note: This Award is for composite company performance and not for any specific operating site/s. The applicant company must be Responsible Care signatory and must have obtained ISO 14000 certification for all its sites (attach copies of certificates)

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital & Financial Structure.
- IV. Range of principal manufacturing activities / engineering services.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Please send Nomination as per details given below:

Please tick (✓) appropriately

Category I : Companies having annual sales revenue above Rs. 500 crores :

Category II : Companies having annual sales revenue below Rs. 500 crores :

C. Reasons for Nomination/Application for the Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award justifying and highlighting your significant contribution towards :

- a) Is there any waste management policy in place for all the waste generated in company's manufacturing facilities, off-site warehouses and toll manufacturers?
- b) Innovative strategies and their applications in management of gaseous emissions, liquid and solid wastes (including e-wastes) in and around your operations i.e. Conservation of resources using 4Rs (Reduce, Recycle, Reuse & Replace)
- c) Please specify if any value is recovered from the wastes generated by your organization directly or through any other industry
- d) Status of compliance i.e. statutory requirements. Preference will be given to those applicants who have internal standards set-up well beyond the legal requirements

- e) Outstanding Education Program for others, including supply chain partners about the need for and benefit of recycling and waste reduction.
- f) Outstanding technological achievements widely recognized in the field of waste management;
- g) Any other factors you may wish to supplement for consideration of your nomination for the award.
- h) The applicant companies may be visited by nominated representatives of the Awards Selection committee

D. Statistics to be furnished for all manufacturing site /s for the last 3 financial years on the following :

	Base-line * Levels of Specific Emission / Generation / Consumption	Targeted Specific Reduction	Planned Actions	Percentage Achieved
i. <u>Liquid</u> a. <u>Water Consumption</u> (Please specify the sources including waste water, purified & used water) b. Plant effluents & its treatment c. Domestic effluents & its treatments				
ii. <u>Gaseous Emissions</u> a. Greenhouse gas emissions b. VOCs c. Other toxic emissions				
iii. <u>Solid Wastes</u> a. Hazardous Wastes b. Non-Hazardous Wastes				

*** Please mention the base-line year and method of measurements**

INDIAN CHEMICAL COUNCIL

ICC Award for Excellence in Energy Conservation and Management

Note: *This Award is for specific site performance.*

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital & Financial Structure.
- IV. Range of principal manufacturing activities / engineering services.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Please send Nomination as per details given below:

Please tick (✓) appropriately

Category I : Companies having annual sales revenue above Rs. 500 crores :

Category II : Companies having annual sales revenue below Rs. 500 crores :

C. Reasons for Nomination /Application for the Award:

1. Please provide briefly (in about 3-page note) reasons for seeking this Award justifying and highlighting your specific contribution to Energy programme to merit this Award:
2. Briefly indicate energy indices eg. Specific Energy Consumption for last three years expressing MTOE (Million Tonnes of Oil Equivalent) and write-up of company's efforts to improve energy conservation.
 - I. Basic concept on the modified energy plan related to specific measures viz:
 - a. *Energy Conservation both at design stage and in operation*
 - b. *Benchmarking studies carried out*
 - c. *Innovative change over to total energy integration strategy*
 - d. *Use of non-conventional source of energy / application*
 - e. *Techniques used for energy conservation e.g. Pinch Analysis, Modelling using software etc.*
 - II. Effective reduction in energy consumption both in absolute terms of inputs for given unit of output & overall savings realised qualitatively and quantitatively.

- III. Greenhouse Gas inventorization and changes in last 2/3 years
- IV. Cost benefit ratio in terms of capital expenditure and savings realised related to pay-off period.
- V. Is energy conservation the result of any basic technology change in plant hardware or process innovation? If so, please provide details of such changes and their effectiveness.
- VI. If outside engineering services and/or supply sources were used, please furnish details and their contribution to the effort.
- VII. Any other relevant factors about this programme on which to assess the merit of your nomination for Award (if feasible please enclose photographic illustrations).

3. Please provide details of the Energy Management System in place.

INDIAN CHEMICAL COUNCIL

**ICC Award for Water Resource Management in
Chemical Industry**

Note: This Award is for specific site performance.

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- I. Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- II. Year of Establishment.
- III. Capital & Financial Structure.
- IV. Range of principal manufacturing activities / engineering services / main product / products.
- V. Location, Number of Employees & Organisation Structure.
- VI. Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Please send Nomination as per details given below:

*Please tick (✓)
appropriately*

Category I : Companies having annual sales revenue above Rs. 500 crores :

Category II : Companies having annual sales revenue below Rs. 500 crores :

C. Reasons for Nomination / Application for the Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award.

Give details of an Integrated Approach used for water technology and management including item wise investment and savings (if any). Describe reduction in water use, optimisation of water use and reuse and recycle of water. In each case, briefly describe application of known technologies in a novel way, process changes or systems changes, integrated water management initiatives, and development and application of new technology etc.

Briefly highlight data on water consumption for the last 3 years at site (Process water, Utility water, Make up water – Chilled water & Cooling water circuit, Non Process water, Amount of water reprocessed / recycled, Total water taken in at the site and Amount of waste water generated, etc. Briefly highlight specific consumption of water for major products for the last three years (m³ of water per ton of product).

Highlight any problem areas faced regarding water and wastewater. This could include availability of water, quality of raw water available, cost of treatment etc. Also highlight technologies used for managing water requirement at your site.

INDIAN CHEMICAL COUNCIL

ICC Award for Social Responsibility

Note: *This Award is for direct contribution and impact by the company and its employees.*

A. Corporate Profile:

Please give data about the Company with specific reference to the following:

- (i) Name and Status of Company viz. Private, Public Ltd., Joint Sector Company, Co-operative Sector etc.
- (ii) Year of Establishment.
- (iii) Capital & Financial Structure.
- (iv) Range of principal manufacturing activities/engineering services.
- (v) Location, Number of Employees & Organisation Structure.
- (vi) Instead of copies of Annual Reports, submit brief financial statements for last three years.

B. Please send Nomination as per details given below:

Please tick (✓) appropriately

Category I : Companies having annual sales revenue above Rs. 500 crores :

Category II : Companies having annual sales revenue below Rs. 500 crores :

C. Reasons for Nomination/Application for Award:

Please provide briefly (in about 3-page note) reasons for seeking this Award highlighting and justifying your specific contribution for introduction of innovative and purposeful programmes as part of corporate objectives emphasising awareness of social responsibility of business to merit consideration for this Award.

Also please furnish additional data on the following:

- I. Please list specific programmes/ projects initiated in the social community around and beyond your enterprise zone giving brief details of each project, coverage, impact on the recipient, and the nature of management involvement including financial and service contribution. State yearly budgetary provisions for these programmes.
- II. Duration for which such projects are continuing, monitoring procedures, nature of community participation sought and encouraged for self reliance and local initiatives.
- III. Growth trends for generating new employment opportunities through development of ancilliaryisation, subsidiary work opportunities for women and handicapped at their place of living, providing facilities through workshop practice & training for development of skills/crafts to meet growing societal demand.

- IV. Have you developed any special programmes for generating creative entrepreneurship amongst your own employees to enable them to launch an enterprise as independent small-scale manufacturers?
- V. Programmes designed to improve quality of life of the community such as improving hygiene & medical care, providing educational aids in the form of reading materials, film shows, assisting family regulation & welfare programmes, advisory role in improving living environment, landscaping, promotion of aesthetic arts and scientific temper.
- VI. Specific programmes designed to improve awareness of community about corporate enterprise goals and strategies to meet any emerging situation developing within the plant and measures to meet such emergencies with their co-operation.
- VII. Promotion of some form of annual get-together with prominent community members through some form of fairs, melas / festival functions to discuss, disseminate and assess community perceptions about corporate functioning as a means of reviewing & innovating on strategies and projects.
- VIII. Any other factors of local importance relevant to consideration for the Award (Any photographic illustration enclosed supporting the projects will be appreciated).
