# CSIR TECHNOLOGY AWARDS - 2012

## GUIDELINES & PROFORMAE FOR NOMINATIONS



Planning and Performance Division Council of Scientific & Industrial Research

Anusandhan Bhawan 2, Rafi Marg, New Delhi -110 001 2012

### CSIR TECHNOLOGY AWARDS

#### **BRIEF DETAILS**

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

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

Whilst, the awards in the category (i) to (iv) 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.

#### CRITERIA

The criteria for the awards in Life Sciences and Physical Sciences including Engineering shall be 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 will be 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 will be 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" will be awarded once in five years, coinciding with the plan period, to such technology which has proven in the market place, atleast for 5 years. Accordingly, the X plan period technology (ies) will be considered in XII plan period. Thus, all technologies that have been implemented in X plan period, irrespective whether it has received an award or not, are eligible for nomination, under this category

#### NOMINATIONS

Nominations are invited from Directors, Director Level Scientists and RC Chairmen of CSIR laboratories. These nominations should reach CSIR by **May 18, 2012**. A technological achievement may be nominated for consideration of the Award for a maximum of three times only. A nominator for the award should not himself be the member of the group nominated for the award. The nominations should be accompanied with supporting documents in respect of claims made in the nomination. Only those nominations meeting the above criteria will be shortlisted for the consideration of the Award Selection Committee.

#### TECHNOLOGY AWARD FOR LIFE SCIENCES/ PHYSICAL SCIENECES INCLUDING ENGINEERING (SPECIFY AS APPROPRIATE)

#### **APPLICATION PROFORMA**

#### (Two copies on A-4 Size paper to be submitted along with soft copy)

1. **Title of development** (Know-how/ Technology/ Process/ Technique/ Services etc.)

#### 2. Inventors and contributors

- (a) **CSIR**: Name(s) of Group leader(s) and other major S&T personnel:
- (b) External to CSIR: Name(s) and address(es) of person(s)/ group(s):

#### 3. General features

- (a) Brief description
- (b) Date of commencement and completion of the project(s)
- (c) Level of development
- (d) Details of inputs made by intra-lab groups and inter-lab contributors
- (e) Details of inputs by external person(s)/group(s) (if any)
- (f) Estimated financial inputs for development (Rs. Lakh)

#### 4. Special features of the development

- (a) Novelty/ innovativeness
- (b) S&T challenges overcome
- (c) Comparative positioning
- (d) Any other (specify)

#### 5. **Commercialization details (support by documents)**

- (a) Details of Technology transfer
  - (i) Mode of transfer
  - (ii) Role of external contributors (if any)
- (b) Name(s) of the Licensee(s) utilizing the Development(s)
- (c) Monies realized by the laboratory through licensing of the Development
- (d) Net surpluses generated

#### 6. Soft outputs pertaining to the development

- (a) Patents filed/granted (give title, year & country)
- (b) Publications (give titles, journal name/ year)
- (c) Technical reports brought out (give titles, year and enclose best report)
- (d) Papers presented in symposium/ seminars (give details)

#### 7. Impact of the development (support by documents)

- (a) Economic Impact:
  - (i) Estimated value of annual and cumulative output derived by each party
  - (ii) Quantify the contribution directly attributable to this technology/ development
  - (iii) Others (Specify)
- (b) Societal Impact:
  - (i) Employment generated
  - (ii) Value addition to raw materials and natural resources, if any
  - (iii) Environmental issues (pollution mitigated, averted etc.)
  - (iv) Others (please specify)
- (c) Strategic Impact, if any, please explain
- 8. Feedback from the licensee(s) (support by documents)
- 9. Formal recognition and awards conferred for the development (support by documents)
- 10. Any other significant aspect not highlighted above
- 11. Name, title and address of the nominator

Date:

(Signature of Nominator)

#### **TECHNOLOGY AWARD FOR 'INNOVATION'**

#### **APPLICATION PROFORMA**

#### (Two copies on A-4 size paper to be submitted along with soft copy)

- 1. **Title of Innovation**
- 2. **S&T field of Innovation**

#### 3. Innovators and Contributors

- (a) **CSIR:** Name(s) of Group leader(s) and other major S&T personnel
- (b) **External to CSIR:** Name(s) and address(es) of person(s)/ group(s)

#### 4. **Profile of Innovation**

- (a) Brief description of the innovation
- (b) Technical challenges overcome
- (c) **Positioning of innovation -** Is it an improvement over existing one or a new one employing an original approach?
- (d) Comparative placement of the innovation in the specific area (national/ international)

Are you aware of any competitor working on a similar innovation? If so, how is your approach / innovation superior to theirs?

#### (e) Competitiveness

- (i) Has the innovation potential to bring in paradigm shift?
- (ii) Would it poise for a major development to create a niche?
- (iii) Does Innovation possess potential of providing global leadership to India?

#### (e) Elaborate further developments planned on the innovation

(f) Role of external contributors (if any)

#### 5. Market Potential

- (a) Areas of application
- (b) What are the markets available for the innovation?
- (c) How is the laboratory planning to market the innovation?

#### 6. **Outputs pertaining to the Innovation**

- (a) Patents filed/granted (give number, title, year, country & enclose abstracts)
- (b) Publications (give titles, journal name/ year of publication)

#### 7. Envisaged impact of the Innovation

- (a) Economic Impact:
- (b) Societal Impact:
- (c) Strategic Impact:

## 8. Formal recognition and awards conferred for the Innovation or on the persons for the Innovation

- 9. Any other significant aspect not highlighted above
- 10. Name, title and address of the nominator

Date:

(Signature of Nominator)

#### **TECHNOLOGY AWARD FOR BUSINESS DEVELOPMENT & TECHNOLOGY MARKETING**

#### **APPLICATION PROFORMA**

#### (Two copies on A-4 Size paper to be submitted along with soft copy)

#### 1. Contributors

Name(s) of Group leader(s) and other personnel:

#### 2. Business generated

(a) External Cash Flow generated (Please indicate for last 3 years)

Source Contract R&D Consultancy GIA Technical Services Royalty/Premia

Industry

(Pvt./PSUs)

- Govt. Deptt.
- International
- Others
- (b) Annual net earning/ surpluses accrued/ lab reserve generated or likely to accrue

## 3. Specific outstanding contribution(s)/ achievement(s) in business development and knowledgebase/ IP marketing (under the following categories)

- (a) Knowledgebase/ IP Licensed:
- (b) Contract Research materialized (Sponsored, Collaborative, Grant-in-aid):
- (c) Consultancy assignments materialized:
- (d) Technical services contracted:
- (e) Others ( please specify) :

#### 4. New clients added in the last 3 years

#### 5. Specific initiatives taken in

- (a) Identification/establishing linkages with prospective client(s)
- (b) New business mechanisms operationalized
- (c) Negotiations, pricing & contracting
- (d) Knowledge alliances catalyzed
- (e) Incubation setups facilitated
- (f) Assistance in transferring/ commercialization/ diffusion/ utilization of the knowledgebase i.e. for:
  - (i) Technology & IP mapping
  - (ii) Evaluation & up-scaling
  - (iii) Packaging the knowledgebase
  - (iv) Identification of new applications/ around the knowledgebase
  - (v) Special marketing including publicity efforts
  - (vi) Any other (please specify)

- (g) Enhancing customer satisfaction/delight
- (h) Any other (please specify)

## 6. Status of implementation/utilization of the marketed knowledgebase (support by documents)

- (a) Name of parties utilizing/formal beneficiaries of the marketed knowledgebase
- (b) Annual (estimated) value of output/ exports/benefit derived by each party/ beneficiary
- (c) Cumulative (estimated) value of output/ exports/ benefit derived by each party/ beneficiary
- (d) Exports of knowledgebase (give details of parties, countries etc.)
- (e) Societal Impact (quantify)
  - (i) New employment generated (man-days/years)
  - (ii) Environment pollution mitigated/ averted (explain)
  - (iii) Quality of life improved (health/hygiene levels etc.)
  - (iv) Enhanced safety/reduced hazards/risks
  - (v) Others (please specify)
- (f) Strategic Impact (please explain)

## 7. Response and feedback from the licensees/ beneficiaries/ NGOs and others (support by documents)

#### 8. List information such as

- (a) Evolution & adoption/ implementation of new marketing strategies
- (b) New avenues, markets and mechanisms explored/adopted for enhancement of business and External Cash Flow (ECF)
- (c) Business enhancement/ credibility improvement initiated
- (d) Any other initiatives/ efforts
- 9. Formal recognition and awards conferred for the work done (support by documents)
- 10. Any other significant aspect not highlighted above
- 11. Name, title and address of the nominator

Date:

(Signature of Nominator)

#### APPLICATION PROFORMA FOR 'MOST SIGNIFICANT CSIR TECHNOLOGY OF THE PLAN PERIOD'

#### (Two copies on A-4 Size paper to be submitted along with soft copy)

#### 1. Title of technology package

#### 2. Inventors and contributors

- (a) **CSIR:** Name(s) of Group leader(s) and other major S&T personnel
- (b) **External to CSIR:** Name(s) and address(es) of person(s)/ group(s)

#### 3. Details of technology package

- (a) Brief description of technology including its area of application (enclose plant, product photographs)
- (b) Novelty/Innovativeness
- (c) Identifiable and significant benefits/advantages
- (d) S&T challenges overcome
- (e) Superiority/technological advantages over competing technologies (national/ international)

#### 4. Details of development

- (a) Date of commencement and completion of the project(s)
- (b) Level of development
- (c) Inputs made by intra-lab groups and inter-lab contributors, if any
- (d) S&T inputs by external person(s)/group(s) (if any)
- (e) Estimated inputs for development:
  - (i) In-house manpower & other recurring costs
  - (ii) Equipment utilization (paid for)
  - (iii) Expert services/ consultants inputs
  - (iv) External financial inputs (capital & recurring costs)

#### 5. Details of up-scaling

- (a) Tie-up, if any, in upscaling the technology
- (b) Level of pilot plant/batch production/semi-commercial level/others (specify)
- (c) Details of S&T inputs by external contributors in up-scaling etc., if any
- (d) Estimated cost of up-scaling (Rs. Lakh)
- (e) Rights & obligations of external person(s)/ group(s) in the up-scaled development (enclose copy of the contract document)

#### 6. Outcome

- (a) Soft
  - (i) Intellectual Property generated & secured (give title, year & country)
  - (ii) Publications (give titles, journal name/ year and enclose three best publications)
  - (iii) Technical reports brought out (give titles, year and enclose the best report)

#### (b) Hard (Enclose photograph wherever possible)

- (i) Product(s), Equipment(s), Design(s), Process(es), Know-how, Technique(s), Specialized capabilities/facilities developed
- (ii) Others (please specify)

#### 7. Commercialization details (support by documents)

- (a) Details of Technology transfer/ commercialization of the Development
  - (i) Name(s) of Licensee(s)
  - (ii) Mode of transfer/ diffusion/ utilization
  - (iii) Role of external contributors (if any)
- (b) Monies realized by the laboratory through licensing/ diffusion of the Development
- (c) Net surpluses generated (total money realized total expenditure on Development/ diffusion)

#### 8. Impact of technology package (support by documents/evidences)

#### (a) Economic Impact

- (i) Annual/cumulative productivity resulting from the Development
- (ii) Estimated value of annual/cumulative output/ benefits derived by each licensee/ beneficiary
- (iii) Exports of the development (give details of parties, countries, financial terms etc.)
- (iv) Others (Specify)

#### (b) Societal Impact

- (i) Employment catalysed
- (ii) Quality of life improved
- (iii) Environmental pollution mitigated/ averted
- (iv) Hazards/risks reduction/safety enhancement
- (v) Others (please specify)
- (c) Strategic Impact

## 9. Response & feedback on the technology package (Please enclose supporting documents)

- (a) Response and feedback from the licensees/ beneficiaries/ NGOs and others on development
- (b) Formal recognition and awards conferred for the development or on the persons for the development

#### **10.** Any other significant information

#### 11. Name, title and address of nominator

Date:

#### (Signature of nominator)