



सीएसआईआर प्रौद्योगिकी पुरस्कार 2021
CSIR TECHNOLOGY AWARDS - 2021

नामांकन हेतु दिशानिर्देश तथा प्रपत्र (proforma)
GUIDELINES & PROFORMAE FOR NOMINATIONS

प्रौद्योगिकी प्रबंधन निदेशालय - उद्योग इंटरफ़ेस
Technology Management Directorate – Industry Interface

वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर)
Council of Scientific & Industrial Research (CSIR)

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संक्षिप्त विवरण

प्रौद्योगिकी विकास, अंतरण और वाणिज्यीकरण हेतु बहु-विषयक आंतरिक टीम प्रयासों और बाह्य अंतः क्रियाओं को प्रोत्साहित करने के लिए वर्ष 1990 में 'सीएसआईआर प्रौद्योगिकी पुरस्कारों' को आरंभ किया गया था। ये पुरस्कार निम्नांकित श्रेणियों के अंतर्गत दिए जाते हैं:

- जैव विज्ञान (लाइफ साइंसेज़);
- अभियांत्रिकी (इंजीनियरिंग) सहित भौतिक विज्ञान;
- नवोन्मेष (किसी भी क्षेत्र में पेटेंट किए गए सर्वोत्तम नवोन्मेष को पुरस्कृत किया जाना);
- व्यापार विकास एवं प्रौद्योगिकी विपणन; और
- पंचवर्षीय योजना अवधि की सबसे महत्वपूर्ण सीएसआईआर प्रौद्योगिकी।

जबकि, श्रेणी (i) से (v) तक के पुरस्कारों में से प्रत्येक के लिए 2 लाख रुपये का नकद पुरस्कार है, तथापि "पंचवर्षीय योजना अवधि की सबसे महत्वपूर्ण सीएसआईआर प्रौद्योगिकी" की श्रेणी के लिए 5 लाख रुपये की नकद धनराशि का पुरस्कार है। यह पुरस्कार धनराशि नामांकित टीम के सदस्यों के बीच साझा की जानी होती है। संयुक्त विजेताओं को पुरस्कार प्रदान किए जाने की स्थिति में, दोनों को पूरा नकद पुरस्कार मिलता है। इसके अलावा, विजेता को एक ट्रॉफी और एक प्रशस्ति पत्र भी मिलता है। **चूंकि वर्ष 2020 में पंचवर्षीय योजना अवधि की सबसे महत्वपूर्ण सीएसआईआर प्रौद्योगिकी को पुरस्कृत किया गया था इसलिए इस श्रेणी के नामांकनों को सीटीए 2021 के लिए शामिल नहीं किया जाएगा।** सीएसआईआर प्रौद्योगिकी पुरस्कारों की पहली 4 श्रेणियों के नामांकनों पर विचार किया जाएगा और विजेता (विजेताओं) को 26 सितम्बर, 2021, सीएसआईआर स्थापना दिवस पर प्रेज़ेंटेशन के लिए घोषित/चयनित किया जाएगा।

मानदंड

लाइफ साइंसेज़ तथा इंजीनियरिंग सहित भौतिक विज्ञान में पुरस्कारों के मानदंड स्पष्ट होंगे और औद्योगिक/आर्थिक/सामाजिक गतिविधि, उच्च वैज्ञानिक सामग्री, अभिनव विशेषता, वैश्विक नवीनता और प्रौद्योगिकीय विकास (विकासों) की प्रतिस्पर्धात्मकता पर उच्च कोटि का सतत प्रभाव छोड़ेंगे। नवोन्मेष हेतु प्रौद्योगिकी पुरस्कार किसी भी क्षेत्र में पेटेंट कराए गए सर्वश्रेष्ठ नवोन्मेष को दिया जाएगा। व्यापार विकास एवं प्रौद्योगिकी विपणन हेतु प्रौद्योगिकी पुरस्कार सीएसआईआर ज्ञानाधार के व्यापार को बढ़ाने की दृष्टि से महत्वपूर्ण योगदान दिए जाने के लिए है और यह नवीन व्यापार एवं विपणन पहलों, विकसित एवं कार्यान्वित रणनीतियों, सृजित एवं साकार किए गए व्यापार के परिमाण के लिए दिया जाएगा। इसके अतिरिक्त, सुस्पष्ट एवं सुसंरचित आवेदनों को महत्व दिया जाएगा।

नामांकन

सीएसआईआर प्रयोगशालाओं के निदेशकों, निदेशक स्तर के वैज्ञानिकों और आरसी अध्यक्षों से निम्नांकित प्रारूपों में नामांकन आमंत्रित किए जाते हैं। **नामांकन की सॉफ्ट (केवल वर्ड फाइल में) /हार्ड कॉपी प्राप्त करने की**

अंतिम तिथि 31 मई, 2021 है । एक प्रौद्योगिकीय उपलब्धि को अधिकतम तीन बार पुरस्कार के विचारार्थ नामित किया जा सकता है । पुरस्कार के लिए नामित व्यक्ति, पुरस्कार के लिए नामित समूह का सदस्य नहीं होना चाहिए । नामांकन में किए गए दावों के संबंध में नामांकनों के साथ सहायक दस्तावेज़ लगे होने चाहिए । पुरस्कार चयन समिति के विचारार्थ केवल उपर्युक्त मानदंडों को पूरा करने वाले नामांकनों को अल्पसूचीबद्ध (शॉर्टलिस्ट) किया जाएगा ।



CSIR TECHNOLOGY AWARDS BRIEF DETAILS

‘CSIR Technology Awards’ were instituted in 1990 to encourage multi-disciplinary in-house team efforts and external interaction for technology development, transfer and commercialization. These awards are in the categories 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 prize money is to be shared among the Nominated team members. In case the prize awarded to joint winners, both receive the cash prize in full. In addition, the Winner will also receive a Trophy and a Citation. **As the Most Significant CSIR Technology of the Five Year Plan Period was awarded in 2020, nominations for this category will not be included for CTA 2021.** The nominations for first 4 categories of CSIR Technology Awards will be considered and the Winner(s) will be announced / selected for presentation on September 26, 2021, CSIR Foundation Day.

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 realized. In addition, weightage will be given to the applications that are well articulated and structured.

NOMINATIONS

Nominations under following formats are invited from Directors, Director Level Scientists and RC Chairmen of **CSIR laboratories**. **The last date of receiving the nomination, both in offline / online mode is May 31, 2021.** A technological achievement may be nominated for consideration of the Award for a maximum of three times. **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 SCIENCES INCLUDING
ENGINEERING (SPECIFY AS APPROPRIATE)**

APPLICATION PROFORMA

- 1. Title of development** (Know-how/ Technology/ Process/ Technique/ Services etc.)
- 2. Inventors and contributors**
 - (a) CSIR:** Name(s) of Group leader(s) with their contact details and names other major S&T personnel **(please restrict the numbers to 6 only)**
 - (b) External to CSIR:** Name(s) and contact details of person(s)/ group(s):
- 3. General features (pl enclose / upload supporting documents)**
 - (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) Benchmarking and comparative positioning
 - (d) Any other (specify)
- 5. Commercialization details (pl enclose / upload supporting documents)**
 - (a) Details of Technology transfer
 - Mode of transfer
 - Role of external contributors (if any)
 - (b) Name(s) and contact details of the Licensee(s) utilizing the Development(s)
 - (c) Monies realized by the laboratory through licensing of the Development (Gross revenues generated / Turnover)
 - (d) Net surpluses generated
 - (e) Market Potential
 - (f) Market value generated
 - (g) Royalty received
 - (h) Additional Commercialization particulars, if any
- 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 (enclose / upload supporting 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) (Enclose / upload supporting documents)**
- 9. Formal recognition and awards conferred for the development (Enclose / upload supporting documents)**
- 10. Any other significant aspect not highlighted above**
- 11. Name, title and contact details of the nominator**

Date:

(Signature of Nominator)

TECHNOLOGY AWARD FOR 'INNOVATION'
APPLICATION PROFORMA

1. Title of Innovation

2. S&T field of Innovation

3. Innovators and Contributors

- (a) **CSIR:** Name(s) of Group leader(s) with their contact details and names other major S&T personnel **(please restrict the numbers to 6 only)**
- (b) **External to CSIR:** Name(s) and contact details 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) **Benchmarking / 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?
- (f) Elaborate further developments planned on the innovation
- (g) 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. Commercialization details

- (a) Gross revenues generated / Turnover

- (b) Market Potential
- (c) Market value generated
- (d) Revenue Accrued to the Laboratory/ LRF
- (e) Royalty
- (f) Additional Commercialization particulars, if any

7. 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 and link)

8. Envisaged impact of the Innovation (pl enclose / upload supporting documents, if any)

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

9. Formal recognition and awards conferred for the Innovation or on the persons for the Innovation (enclose / upload supporting documents)

10. Any other significant aspect not highlighted above

11. Name, title and contact details of the nominator

Date:

(Signature of Nominator)

**TECHNOLOGY AWARD FOR BUSINESS DEVELOPMENT & TECHNOLOGY
MARKETING
APPLICATION PROFORMA**

1. Contributors

Name(s) of Group leader(s) with their contact details (emailID and mobile number) and other personnel (please restrict the numbers to 6 only)

2. Business generated

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

Rs in lakh

Source	Contract R&D	Consultancy	GIA	Technical Services	Royalty/ Premia	Total
• Industry (Pvt./PSUs)						
• Govt. Deptt.						
• International						
• Others						
Total						

b. Annual net earning/ surpluses accrued/ lab reserve generated during last FY(20-21)

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. Other Details

- (a) New clients added in the last 3 years
- (b) Gross revenues generated / Turnover
- (c) Market Potential
- (d) Market value generated
- (e) Revenue Accrued to the Laboratory/ LRF
- (f) Royalty
- (g) Commercialization particulars, if any

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 (enclose supporting 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 (enclose supporting 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 contact details of the nominator

Date:

(Signature of Nominator)