

# Regulations Governing the Award of the Shanti Swarup Bhatnagar Prize For Science and Technology

#### PREAMBLE

- The award is named after the founder Director of the Council of Scientific & Industrial Research (CSIR), the late Dr (Sir) Shanti Swarup Bhatnagar and is known as the 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
- 2. The Prize is given each year for outstanding contributions to science and technology.

## NATURE

- 3. SSB Prizes, each of the value of Rs 5,00,000 (Rupees five lakh) are awarded annually for notable and outstanding research, fundamental or applied, in the following disciplines:
  - (1) Biological (2) Chemical
  - (3) Earth-Atmosphere-Ocean-Planetary (4) Engineering
  - (5) Mathematical (6) Medical and (7) Physical Sciences.

#### PURPOSE

4. Recognition of outstanding Indian work in science and technology.

## ELIGIBILITY

- 5. Any citizen of India engaged in research in any field of science and technology up to the age of 45 years as reckoned on 31<sup>st</sup> December of the year preceding the year of the Prize. Overseas citizen of India (OCI) and Persons of Indian Origin (PIO) working in India are also eligible.
- 6. The Prize is bestowed on a person who, in the opinion of CSIR, has made conspicuously important and outstanding contributions to human knowledge and progress fundamental or applied in the particular field of endeavour, which is his/her specialization.
- 7. The Prize is awarded on the basis of contributions made through work done primarily in India during the five years preceding the year of the Prize. (For this purpose 'primarily' will mean 'for the most part')

#### AWARD OF THE PRIZE

8 In awarding the Prize, the Governing Body of CSIR is guided by the recommendations of the Advisory Committees constituted under *clause 10*.

#### NOMINATION

9 Names of candidates may be proposed by a member of the Governing Body of CSIR; Presidents of academies of all-India character; Vice Chancellors of Indian Universities; deemed Universities and Institutions of national importance; Deans of Science, Engineering, Medical, Agriculture, and Technology Faculties; Directors of the Indian Institutes of Technology (IIT); Directors General of the major R&D Organizations, such as the Defence Research & Development Organization, the Indian Council of Agricultural Research, the Indian Council of Medical Research, India Meteorological Department; Chairmen of Atomic Energy Commission, Oil & Natural Gas Corporation, etc.; Directors of CSIR Laboratories/ Institutes, Bhabha Atomic Research Centre, Tata Institute of Fundamental Research, Physical Research Laboratory, Indian Association for the Cultivation of Science, etc.; Secretaries of the Government Science Departments like the Department of Atomic Energy, the Department of Biotechnology, the Department of Environment, the Department of Information Technology, the Department of Ocean Development, the Department of Science and Technology, the Department of Sciencial Research, the Department of Science and Technology, the Department of Sciencial Research, the Department of Science and Technology, the Department of Sciencial Research, the Department of Science and Technology, the Department of Sciencial Research, the Department of Sciencial Research, the Department of Sciencial Research, the Department of Science and Technology, the Department of Sciencial Research, the Department of Sciencial Research, the Department of Sciencial Research, the Department of Science and Technology, the Department of Sciencial Research, the Sciencial Research, the Sciencial Research

Department of Space; etc., Member in-charge (Science) in the Planning Commission (now NITI Aayog); and the former Bhatnagar Prize Awardees.

University Faculties should recommend scientists working in their institutions only and route nominations through their respective Vice Chancellors, while the Faculties in IITs are required to send their nominations through their Directors. The Directors General of the R&D Organizations and the Chairmen of Commissions may sponsor names of scientists working in their respective The Directors of CSIR laboratories/ institutes can nominate candidates in organizations. disciplines of their interest irrespective of the fact whether they are working in CSIR laboratories/ institutes or outside. The recipient of a Bhatnagar Prize can send nomination of one person only for each year's award. Names of the candidates for SSB Prize may be proposed by a Fellow of atleast two of the three Academies identified by the CSIR. The identified academies are: i) National Academy of Sciences (NASc) Allahabad ii) Indian Academy of Sciences (IASc) Bengaluru and iii) Indian National Science Academy (INSA) New Delhi. Nominations from other individuals sponsoring their own names or of others are **not** acceptable. Each nomination, as per the prescribed pro-forma, should be accompanied by a detailed statement of work and attainments of the nominee and a critical assessment report (not more than 500 words) bringing out the importance of significant research and development contributions of the nominee made during the five years preceding the year of the Prize. Nominations not made as per prescribed format are unacceptable.

A candidate once nominated would be considered for a total period of three years, if agewise eligible. Once such a nomination has been received, CSIR may correspond directly with the *nominator* for supplementary information, if necessary. In case a nominee has resigned from his present position in India and has gone abroad, his nomination would become invalid immediately.

#### **ADVISORY COMMITTEES**

- 10 The Advisory Committees for each year's award are constituted with the approval of the Chairman of the Governing body of CSIR. The Committees consist of at least six experts including at least one former Bhatnagar Awardee in the respective discipline. On receipt of nominations for a particular year, CSIR circulates the list of nominees along with the detailed statement of work and attainments of each candidate to all members of the Advisory Committee related to the concerned discipline. CSIR convenes meetings of the various Advisory Committees in consultation with the Chairmen, for selecting the recipients of the SSB Prizes. The composition of various Committees, the information submitted for their scrutiny, the proceedings of the meetings and the procedure for consideration of the nominations, other than as detailed herein, are kept confidential.
- 11 Where the recommendation for the Prize is unanimous or not less than 2/3<sup>rd</sup> of the members of the Advisory Committee have agreed to one name (or maximum of two names in case they are judged to be of equivalent merit), the recommendations are submitted to CSIR for approval.
- 12 The award of the Prize in a specific discipline may be withheld by CSIR in any year, if, in the opinion of the Advisory Committee, no sufficiently meritorious candidate is found suitable in that year.

#### PRESENTATION

- 13 The names of the recipients are made public on 26 September, the CSIR Foundation Day by the Director General, CSIR.
- 14 The Prizes are awarded at a formal presentation ceremony arranged by CSIR. At the ceremony, a suitable citation on work of the recipient of the Prize is read out.
- 15 The SSB Awardee should give a lecture in the area of the award, especially in a small college or a CSIR laboratory preferably away from the Awardee's city for dissemination of science. CSIR-HRDG can help by providing TA/DA for this.
- 16 In all matters of award of SSB Prizes, the decision of CSIR shall be final.



#### COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH HUMAN RESOURCE DEVELOPMENT GROUP CSIR COMPLEX, Library Avenue, Pusa, New Delhi 110012

#### SHANTI SWARUP BHATNAGAR PRIZE FOR SCIENCE & TECHNOLOGY NOMINATION FOR THE YEAR 2022

Nomination must be submitted in the prescribed format

via e-mail to <u>ssb@csirhrdg.res.in</u> on or before 31<sup>st</sup> March 2022. No hardcopy to follow.

1. Name of the nominee in Full: (Both in English and Hindi) Nominee Photograph

- 2. (a) Date and place of birth (Enclose self attested copy of age certificate) :
  (b) Nationality: (c) Gender: M/F
  (d) Are as an 21<sup>st</sup> Data 2021.
  - (d) Age as on 31<sup>st</sup> Dec 2021: \_\_\_\_ Year(s)\_\_ Month(s)\_\_ Day(s)
- 3. Address with Telephone / Mobile / Fax / email:
  (a) Official Address:
  (b) Residential Address:
  (c) Mobile:
  (d) email :
- 4. Discipline under which to be considered (only **ONE** to be marked / encircled):
  - (i) Biological (ii) Chemical (iii) Earth-Atmosphere-Ocean-Planetary (iv) Engineering
  - (v) Mathematical (vi) Medical and (vii) Physical Sciences
- 5. Nominee's field of specialization:
- 6. Academic Qualifications (Bachelor's Degree onwards) [in a tabular form (Please strictly follow specimen-I)] Title of the Ph D thesis and name of the guide
- 7. Date of joining the Institution (Designation & Scale)
- 8. Positions held earlier (in chronological order) [in a tabular form (Please strictly follow specimen-II)]:
- 9. Details of CSIR Fellowship/ Associateship held, if any or from other sources/ agencies. (Indicate dates of joining & leaving):
- 10. (a) Significant foreign assignments (Please strictly follow specimen-III):
  (b) Total time spent abroad during last five years: <u>Year(s)</u> Month(s) Day(s)
- 11. Names, address and area of specialization of 10 Distinguished/ Renowned Scientists including five (5) in India in the area (As possible referees):

| Na | me | Complete Address<br>(with designation & department) | Specialization | Email address |
|----|----|---|----------------|---------------|
|    |    |   |                |               |

- 12. (a) Significant contributions to science and/ or technology development by the nominee based on the work done in India during most part of last 5 years (in about 500 words)
   Specific reference is to be made to research papers published and patents taken in this context.
  - (b) Summarise the most significant work of the nominee on which the recommendation is based (in 50 words)
  - (c) Impact of the contributions in the field concerned, basic or applied:
  - (d) Names of the industries in which the technology(ies) has (have) been used (give the production figures of products)

- 13. Have the achievements already been recognised by Awards by any learned body. If so, the name of the body, award and the year of award may be given. (A copy of the citation should be enclosed):
- 14. Is the nominee a fellow of the Indian National Science Academy / Indian Academy of Sciences / National Academy of Sciences / others (give details):
- 15. Has the nominee delivered invited lecture(s) in India / abroad and/ or chaired any scientific International Conference Symposium (give details):
- 16 (a) List of nominee's 10 most significant publications. [Attach list as Annexure 16a]
  - (b) List of nominee's 5 most significant publications during the last 5 years. [Attach reprints as Annexure 16b]
  - (c) List of nominee's 5 most significant publications from out of work done in India during the last five years. [Attach list as Annexure 16c]
  - (d) Complete list of publications in standard refereed journals. [Attach list as Annexure 16d]
  - (e) Complete list of publications with foreign collaborators (indicating nominee status as author). [Attach list as annexure 16 (e)].
  - (f) List of papers published in Conferences /Symposia/ Seminars, etc. [Attach list as Annexure 16f]
  - (g) List of the most outstanding Technical Reports/ Review Articles. [Attach list as Annexure 16g]
- 17. Statement regarding collaboration with scientists abroad.
- 18. (a) List of Patents taken, if any:
  - (b) Total number of patents granted in last five years:
- 19. Details of Books published, if any:
- 20. Any additional information of relevance:

Certified that information given in the above proforma is correct.

Place

Nominator Signature

Date

Nominator Name Designation and complete address with email address

#### CHECK LIST

For a nomination to be complete, please verify that the following information is included:

- i) Duly filled nomination proforma. Please strictly follow prescribed format for filling up nomination proforma. Incomplete nomination will not be considered.
- ii) Please mention current correspondence address, email and area of specialization of the ten Distinguished/Renowned Scientists as possible referees under Serial no 11.
- iii) List of nominees five most significant publications during the last 5 years. Attach list as Annexure 16b and copy of reprints in a folder named as Annexure 16b
- iv) Complete list of publications in standard refereed journals. Attach list in as Annexure 16d
- v) Self attested copy of the certificate of age.
- vi) Recent photograph of the nominee.

Nomination must be submitted in the prescribed format via e-mail by sending all materials in a .zip file to <u>ssb@csirhrdg.res.in</u> on or before **31**<sup>st</sup> **March 2022**. No hardcopy to follow. The subject line of email should be written as "SSB Prize 2022 (Discipline)"

For further inquiries, please send e-mail to:

Head

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Tel.: (011) 2584 6777 E-mail: <u>ssb@csirhrdg.res.in</u>

# 6. Specimen-I (Qualifications)

| S No | Degree                       | Subject  | Class<br>CGP marks      | Year    | University    | Additional<br>Particulars       |
|------|------------------------------|--|-------------------------|---------|---------------|---------------------------------|
| 1    | B Sc (Hons)                  | Chemistry<br>(Main)<br>Botany<br>Zoology           | ا <sup>st</sup><br>87 % | 1982    | Madras        | l Rank<br>Gold<br>Medalist      |
| 2    | M Sc                         | Chemistry  | l <sup>st</sup><br>9.2  | 1984    | Madras        | I Rank                          |
| 3    | Ph D                         | Chemistry of<br>Transitional<br>Metal<br>Complexes |                         | 1989    | Bombay        | Thesis<br>adjudged<br>Excellent |
| 4    | Post-Doc<br>Research<br>Work | Chemical<br>Technology                             |                         | 1991-92 | Leeds<br>U.K. |                                 |

# 8. Specimen-II (Positions held from the beginning)

| SI | No | Period           | Place of Employment     | Designation      | Scale of pay                    |
|----|----|------------------|-------------------------|------------------|---------------------------------|
| 1  | I  | May 89-Aug 91    | CLRI Madras             | Scientist B      | Rs 700-1400 (Then)              |
| 2  | 2  | Sep 91-Aug 92    | University of Leeds, UK | Exchange Scholar | Indo-UK Exchange                |
| 3  | 3  | Sep 92 till date | Hyderabad University    | Professor        | Programme<br>Rs 4500-7000(Then) |

# 10. Specimen-III (All Visits Abroad)

| S No | Period of visit |          | Institute/ country visited | Purpose of visit |
|------|-----------------|----------|----------------------------|------------------|
|      | From            | То       | -                          | -                |
| 1    | 01-08-95        | 31-05-96 | Purdue University          | Teaching         |
| 2    | 01-05-00        | 30-06-00 | Singapore University       | Research         |
| 3    | 04-02-02        | 14-02-02 | Texas, USA                 | Intl. Conference |