



INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE (IACS)

*A Deemed to be University under de novo category*

Jadavpur, Kolkata-700032

**Admission notice for the PhD program in the Spring Semester 2026**  
**(Session starting from January 2026)**

Advertisement No. Acad/ PhD/Spring Sem-2026

Date: 25.09.2025

Applications are invited for regular full-time PhD students to the PhD Program in Spring Semester of 2026 under different Schools, namely Applied and Interdisciplinary Sciences, Biological Sciences, Chemical Sciences, Material Sciences, Mathematical and Computational Sciences and Physical Sciences, of IACS (A deemed to be University).

**Eligibility:**

1. 55% or equivalent in masters is mandatory for general candidates, while for SC/ST/OBC (non-creamy layer)/Differently-abled and other categories 50% marks is necessary.
2. Minimum eligibility criteria as per UGC rules. Qualification and eligibility requirements for each School are given separately (*vide infra*).
3. Selection of the regular full-time students will be done on the basis of their academic record, their performance in the appropriate national level examination, and finally, their performance in the written test and/or interview as decided by the respective Schools.
4. Relaxation of the selection criteria for the candidates belonging to SC/ST/OBC (non-creamy layer)/Differently-abled and other categories will be levied according to the norms of UGC and Government of India.
5. Merely satisfying the eligibility criteria does not guarantee that a candidate will be shortlisted for interview.

**Fellowship:** As per IACS/CSIR/UGC/INSPIRE rules.

**Age limit:** Should be below 28 years on the closing date of application. Age relaxation is applicable as per Government of India rule.

**Nationality:** The applicant must be an Indian citizen.

**Selection Procedure:**

1. Applicants will be shortlisted on the basis of merit by different Schools. Only shortlisted candidates will be informed via email and called for a written test and/or interview (to be decided by the School) for the final selection. IACS holds full right of choosing a candidate and even not selecting any, in case suitable applications are not received.
2. Vacancies given for each School are based on number of positions available in individual research groups in different research areas. Selection depends on the past academic record, performance in examination/interview by the school and also the availability of posts in particular research areas as opted by the shortlisted candidate.

**Application Procedure:** Applications have to be made online at <http://phdapplicationiacs.iacs.res.in/>. Any queries may be sent to [phdcell\\_iacs@iacs.res.in](mailto:phdcell_iacs@iacs.res.in). The details of the online application and its procedure are given in the IACS website. Exact date and time of Admission Test/or Interview for each School will be announced on the IACS website.

**Last Date of Submission of Applications:** ~~November 10, 2025~~ **November 16, 2025**

**Tentative date of interview:** 02-12 December, 2025 which is subject to change according to the decision of IACS.

For further information in this regard, please contact Academic Office (Phone: 24734971; Extn: 2215, Email: [phdcell\\_iacs@iacs.res.in](mailto:phdcell_iacs@iacs.res.in)).

**Application/Examination Fees:** Rs. 1200/- (Rs. 600/- for SC/ST candidates) will have to be transferred electronically to the account of IACS (Name of the Account: Indian Association for the Cultivation of Science University, A/C no: 37739525415, State Bank of India, Jadavpur University Branch, Branch Code: 0093. IFSC: SBIN0000093). The electronic transfer reference number should be mentioned in the application form.

**Mode of Payment:** Payment can be made through either of the following options:

- 1) Directly by NEFT bank transfer if an applicant can avail Online Banking facility;
- 2) By depositing the amount at any SBI Counter having CBS facility.

**Fees to be paid during admission:** One time admission fee (Rs. 15000/-) and caution deposit (Rs. 10000/-) to be paid during the time of admission. The rest of the annual fees for the first year to be paid within 6-months from the date of joining. The fee structure and timeline for payment of fee for the subsequent years are given at the IACS website.

**Scholarship:** All regular PhD students who join are eligible for scholarship from IACS/CSIR/UGC/INSPIRE as per rules.

**Details of the PhD positions and the qualification and eligibility details for the different Schools are given below.**

### **School of Applied and Interdisciplinary Sciences (SAIS)**

| No. of vacancies | Broad Research Area (Subject Code)                                                                                                                                                               | Essential Qualifications                                           |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 3                | Electro-catalysis on the Surface of Polymer Nanotubes / Solid-State Emissive Luminescent Organic Material and OLED Application / Viscous and Rheological Properties of Hybrid Networks (SAIS 01) | MS / M. Sc. in Chemistry with CSIR-NET (JRF) or other fellowships. |
| 1                | Nanocrystal based optoelectronic device fabrication (SAIS 02)                                                                                                                                    | M.Sc. in Physics with Own fellowship                               |
| 1                | Synthesis and spectroscopy of polar nanocrystals                                                                                                                                                 | M.Sc. in Chemistry with Own fellowship                             |

|   |                                                                                                                |                                                                                        |
|---|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|   | <b>(SAIS 03)</b>                                                                                               |                                                                                        |
| 1 | Synthesis of Nano- and Micro-structured Materials for Light-Harvesting Devices ( <b>SAIS 04</b> )              | M.Sc. in Chemistry/Physics with CSIR-NET (JRF) or equivalent national-level fellowship |
| 1 | Design and Fabrication of Nanoelectronic Devices ( <b>SAIS 05</b> )                                            | M.Sc. in Physics with CSIR-NET (JRF) or equivalent national-level fellowship           |
| 2 | Organic Synthesis and Functional Studies for Advanced Optoelectronic Applications ( <b>SAIS 06</b> )           | Masters in Chemistry with JRF (UGC/CSIR), Inspire Fellowship                           |
| 2 | Organic Optoelectronics: Integrated Optoelectronic Devices for Advanced Sensor Applications ( <b>SAIS 07</b> ) | Master's in Physics/Electronics with JRF (UGC/CSIR), Inspire Fellowship                |

### School of Biological Sciences (SBS)

| No. of vacancies | Broad Research Area (Subject Code)                                                     | Essential Qualifications                                                                         |
|------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 2                | Bio-Organic Chemistry/Biomedicine in Therapeutics ( <b>SBS 01</b> )                    | MSc in Chemistry/Biochemistry/Allied Subject domain with Fellowship (CSIR/ UGC/DBT/others)       |
| 1                | Splicing of mechano-responsive elements under Fluid Shear Stress ( <b>SBS 02</b> )     | M.Sc. in Biochemistry/Biophysics/Chemistry with NET-JRF/equivalent qualification with fellowship |
| 1                | Stress response in pathogenic bacteria and its role in pathogenesis. ( <b>SBS 03</b> ) | M.Sc. in Biology with NET-JRF/equivalent qualification with fellowship                           |
| 1                | Mechanistic insights of cancer biology ( <b>SBS 04</b> )                               | M.Sc. in Biology with NET-JRF/equivalent qualification with fellowship                           |
| 1                | Receptor clustering and signalling. ( <b>SBS 05</b> )                                  | M.Sc. in Biochemistry/Biophysics/Chemistry with NET-JRF/equivalent qualification with fellowship |
| 1                | DNA damage signaling in breast cancer. ( <b>SBS 06</b> )                               | MSc in Life Sciences, Microbiology, Molecular Biology, Genetics, or Zoology with NET/DBT-JRF.    |

### School of Chemical Sciences (SCS)

| Number of vacancies | Broad Research Area (Subject Code)                                                                                                | Essential Qualifications                                                                                                                                     |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2                   | Spectroscopy of $\pi$ -conjugated Heterocycles ( <b>SCS 01</b> )                                                                  | M.Sc in Organic/Inorganic Chemistry with CSIR-JRF or UGC-JRF                                                                                                 |
| 1                   | Computational Materials Science and Soft Condensed Matter Physics ( <b>SCS 02</b> )                                               | M.Sc. or M.Tech in Chemistry/Physics/ Materials Science/Chemical Engineering                                                                                 |
| 1                   | Simulations of biological and supramolecular systems. Crystallization. ( <b>SCS 03</b> )<br>Non-equilibrium Statistical Mechanics | M.Sc. or M.Tech in Chemistry/Materials Science/Chemical Engineering<br>**Student should have own funding.                                                    |
| 2                   | Theoretical and computational physical/ biophysical chemistry integrating AI/ML ( <b>SCS 04</b> )                                 | M.Sc. Or equivalent (minimum 55% marks or equivalent) in Chemistry/ Physics/ biotechnology/biophysics & computational biology with GATE or NET or INSPIRE or |

|   |                                                                                                                                                               |                                                                                                                                            |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                                                                                                                               | equivalent qualified                                                                                                                       |
| 2 | Biomolecular spectroscopy/Gene regulation by noncanonical DNA (SCS 05)                                                                                        | CSIR/UGC/Inspire in chemistry/biology                                                                                                      |
| 1 | Cold Molecules, mass spectrometry and related areas (SCS 06)                                                                                                  | MSc in Physics or Chemistry with Gate/CSIR/Inspire                                                                                         |
| 1 | (i) Beyond Born-Oppenheimer theories<br>(ii) Reaction dynamics<br>(iii) Photo-electron Spectroscopy<br>(iv) Molecule-surface scattering (SCS 07)              | Candidates must possess a M.Sc. degree in Chemistry/Physics. They must also have one of the following fellowships: CSIR-JRF/UGCJRF/Inspire |
| 1 | Natural Product synthesis (SCS 08)                                                                                                                            | M.Sc. Chemistry/organic chemistry having JRF (CSIR/UGC)                                                                                    |
| 1 | Synthesis of Biologically active compounds (1) (SCS 09)                                                                                                       | MSc Chemistry/Organic Chemistry with CSIR/UGC/Inspire fellowships                                                                          |
| 1 | RNA biology (SCS 10)                                                                                                                                          | MSc Bio-chemistry/Life Science with CSIR/UGC/Inspire fellowship                                                                            |
| 1 | Organic synthesis via catalysis (SCS 11)                                                                                                                      | M.Sc. Chemistry/organic chemistry having JRF (CSIR/UGC)                                                                                    |
| 2 | Inorganic & Bioinorganic Chemistry (SCS 12)                                                                                                                   | Masters in Chemistry with JRF (UGC/CSIR) / LS NET & GATE / DST-Inspire                                                                     |
| 2 | Inorganic Chemistry (SCS 13)                                                                                                                                  | M.Sc. in Organic/Inorganic Chemistry with CSIR-JRF or UGC-JRF                                                                              |
| 1 | Biomimetic Inorganic Chemistry and Bioinspired Catalysis (SCS 14)                                                                                             | MSc in Chemistry (minimum 55% marks or equivalent) and NET qualified with CSIR or UGC fellowship                                           |
| 2 | Theoretical Investigations on Reaction Mechanisms of Photochemical and Bioinorganic processes and Machine Learning Applications to Chemical Problems (SCS 15) | Masters in Chemistry with JRF (UGC/CSIR) / DST-Inspire                                                                                     |

### School of Material Sciences (SMS)

| Number of vacancies | Broad Research Area (Subject Code)                                    | Essential Qualifications                                      |
|---------------------|-----------------------------------------------------------------------|---------------------------------------------------------------|
| 3                   | Porous Materials and Catalysis (SMS 01)                               | M.Sc./MS in Chemistry with NET-CSIR/UGC, INSPIRE or GATE.     |
| 2                   | Battery materials (SMS 02)                                            | M.Sc./MS in Chemistry/Physics/Materials with NET-JRF/ INSPIRE |
| 02                  | Energy Materials: Synthesis Chemistry and Optical Properties (SMS 03) | MSc in Chemistry and NET                                      |

### School of Mathematical and Computational Sciences (SMCS)

| Number of vacancies | Broad Research Area (Subject Code)                                           | Essential qualification                                                                                                                                                                                                       |
|---------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2                   | Applications of Generative AI Models/Large Language Models. <b>(SMCS 01)</b> | M.S./M.Tech. in Computer Science or a relevant area. National eligibility test (e.g. GATE/NET) qualified. Candidates should have UGC NET JRF fellowship or should have external PhD funding (internal funding not available). |

### School of Physical Sciences (SPS)

| Number of vacancies. | Broad Research Area (Subject Code)                                                                                                                                      | Essential Qualifications                                                                                                                                                                      |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                    | Optoelectronics of 2D van der Waal materials (SPS 01)                                                                                                                   | M. Sc (Physics) with 55% mark min<br>CSIR-NET/UGC- NET/ provisional Inspire fellowship                                                                                                        |
| 1                    | Magnetism, Strongly Correlated Electron System (Experimental) (SPS 02)                                                                                                  | M.Sc. in Physics along with NET-JRF (UGC or CSIR), INSPIRE ( Provisionally Selected), or any other individual fellowship                                                                      |
| 1                    | Experimental Condensed Matter Physics - Semiconductor physics, High frequency physics of 2D transistors, nanoelectronics <b>(SPS 03)</b>                                | MSc in Physics/ Materials Science/ Electronic Science with CSIR-NET-JRF / UGC NET-JRF, INSPIRE – Provisionally Selected, or any other individual fellowship.                                  |
| 2                    | Particle and Astro-particle physics. <b>(SPS 04)</b>                                                                                                                    | CSIR /UGC JRF (WITH FELLOWSHIP).                                                                                                                                                              |
| 3                    | Experimental Condensed Matter Physics – Exploring Quantum Phases in Topological Materials. <b>(SPS 05)</b>                                                              | MSc in Physics with CSIR-NET-JRF / UGC-NET-JRF, INSPIRE – Provisionally Selected, GATE, JEST, UGC-NFSC (National Fellowship for Scheduled Caste students) or any other individual fellowship. |
| 2                    | Exploration of quantum materials using 1/f noise and thermal transport measurements – topology of electronic structures and charge density wave physics <b>(SPS 06)</b> | UGC-CSIR NET fellowship                                                                                                                                                                       |
| 1                    | Condensed matter theory and statistical mechanics <b>(SPS 07)</b>                                                                                                       | M.Sc. in Physics along with UGC-CSIR NET fellowship                                                                                                                                           |
| 1                    | Experimental Condensed Matter Physics: resistive switches <b>(SPS 08)</b>                                                                                               | M.Sc. in Physics along with UGC-CSIR NET fellowship                                                                                                                                           |