

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

A Deemed to be University under de novo category

Jadavpur, Kolkata-700032

Advertisement No. **Acad/ PhD/Autumn Sem-2023-1**

Date: 02.08.2023

Applications are invited for regular full-time PhD students to the PhD Program in Autumn Semester of 2023 under different Schools, namely Applied and Interdisciplinary Sciences, Biological Sciences, Chemical Sciences, Material Sciences and Physical Sciences, of IACS (A deemed to be University). A candidate may apply to maximum two Schools by making appropriate selection in the [Application Form](#).

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 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 the Schools. Only shortlisted candidates will be communicated 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: Applicants may send their application form to the Academic Office, IACS (phdcell_iacs@iacs.res.in) along with the filled up [excel file](#), both of which are available at <http://www.iacs.res.in/splcareerstudent.php> by clicking “Application Form for admission to the PhD program” and “Synopsis of Applicant for admission to PhD program” respectively. Both documents should be sent together by email (phdcell_iacs@iacs.res.in) to the academic office by **August 13, 2023** with the subject line as “**PhD Program, IACS – Autumn Semester 2023-1**”. Exact date and time of Admission Test/or Interview for each School will be announced on the IACS website.

Last Date of Submission of Application: August 13, 2023.

Tentative date of interview: August 17–25, 2023 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).

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:

Courses	Admission Fee (Rs)	Tuition Fee (Rs) Per Annum	Other Academic Fee (Rs)	Caution Deposit (Rs)	Students' Emergency Fund (Rs)	Contributory Medical Scheme (Rs) per Annum	Total fees to be paid at the time of Admission (Rs)
PhD (Direct Admission) (General/OBC Candidate)	15000	13800	5000	10000 (Refundable on completion of curriculum)	1000	3000	47800
PhD (Direct Admission) (SC/ST Candidate)	15000	0	5000	10000 (Refundable on completion of curriculum)	1000	3000	34000

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)

Number of vacancies	Broad Research Area (Subject Code)	Essential Qualifications (MS or M. Sc. in respective subject with extramural research fellowship like CSIR-NET (JRF), or other fellowships.)
1 (one)	Physical Properties of Polymers (SAIS 01)	Chemistry
1 (one)	Polymer/Supramolecular Chemistry and Functional Material (SAIS 02)	Chemistry
1(one)	Experimental Physics (SAIS 03)	Physics
1 (One)	Nanofabrication for energy harvesting devices (SAIS 04)	Physics or Chemistry
1 (one)	Design and fabrication of optoelectronic devices (SAIS 05)	Physics
1 (one)	Light emitting organic field effect transistors: Material preparation, Device fabrication and Advanced characterization (SAIS06).	Physical Chemistry / Physics
1 (one)	Organic synthesis of Conjugated Chromophores for active materials in optoelectronic Devices (SAIS07)	Organic Chemistry

School of Biological Sciences (SBS)

Number of vacancies	Broad Research Area (Sub Area)	Essential qualification
1-2	Bio-Organic Chemistry/Biomedicine in Therapeutics (SBS01)	MSc in Chemistry/Biochemistry/Allied Subject domain Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc
1	Nanoscale biosensors and bioelectronics (SBS02)	MSc in Chemistry Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc
1	Cell Biology (SBS03)	MSc in Biochemistry/Chemistry Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc
2	Cancer Biology / Bio-inspired organic molecule synthesis (SBS04)	MSc in Chemistry/Biology Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc
1	Single Cell biophysics (SBS05)	MSc in Physics/Biology Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc
1	Host-pathogen interactions (SBS06)	MSc in Biology; Fellowship: NET/CSIR/UGC/DST-INSPIRE/DBT/etc

School of Chemical Sciences (SCS)

Number of vacancies	Broad Research Area (Subject Code)	Essential Qualifications
1	Bio-inorganic Chemistry Energy Harvesting (SCS-01)	M.Sc. in Chemistry Qualified CSIR/UGC-NET/INSPIRE Fellowship
1	Inorganic & Bio-inorganic Chemistry(SCS-02)	M.Sc. in Chemistry Qualified CSIR/UGC-NET/INSPIRE Fellowship
2	Inorganic & Bio-inorganic Chemistry(SCS-03)	M.Sc. in Chemistry Qualified CSIR/UGC-NET
1	Theoretical and computation of phase transitions in colloidal self-assembly(SCS-04)	M.Sc. in Physics/Chemistry Qualified CSIR/UGC-NET/INSPIRE Fellowship
1	Theoretical Chemistry (rare events) (SCS-05)	M.Sc. in Chemistry Qualified CSIR/UGC-NET/INSPIRE Fellowship
2	Theoretical/Computational Biophysical Chemistry(SCS-06)	M.Sc. in Physics/Chemistry Qualified CSIR/UGC-NET/INSPIRE Fellowship
2	Theoretical and Computational Chemistry, Quantum /Chemistry, Machine Learning, Quantum Computing (SCS-07)	M.Sc. in Chemistry or Physics or Computer Science Qualified CSIR/UGC-NET/INSPIRE Fellowship
2	Biophysical Spectroscopy (SCS-08)	CSIR with M.Sc. degree in Physical Chemistry/Biology
1	Experimental Physical Chemistry (SCS-09)	MSc in Physics/Chemistry Fellowship available
2	Organic Chemistry/Natural Products Synthesis(SCS-10)	M.Sc. in Chemistry/Organic Chemistry. Qualified CSIR/UGC-NET
1	Organic Chemistry(SCS-11)	M.Sc. in Organic Chemistry Fellowship available
1	Chemical Biology(SCS-12)	M.Sc. in Biotechnology/Microbiology with Qualified CSIR/UGC-NET
1	Inorganic and Supramolecular Chemistry(SCS-13)	M.Sc. in Chemistry Qualified CSIR/UGC-NET
2	Supramolecular and Polymer Chemistry (SCS-14)	M.Sc. in Chemistry Qualified CSIR/UGC-NET
2	Supramolecular Chemistry(SCS-15)	M.Sc. in Chemistry Qualified CSIR/UGC-NET
3	Heterocyclic Macrocycles (SCS-16)	M.Sc. in Organic/Inorganic/Physical Chemistry Qualified CSIR/UGC-NET

School of Material Sciences (SMS)

Number of Vacancies	Broad Research Area (Subject Code)	Essential Qualifications
01	Nanobiotechnology (SMS-01)	M.Sc. in Chemistry with CSIR/UGC JRF
01	Optoelectronic Materials and Devices (SMS-02)	Master in Physics/Chemistry/Materials Science/Electronics/Nano with JRF/NET qualification.
02	Energy Harvesting (SMS-03)	
01	Materials for Li/Na -ion battery (SMS-04)	Master or equivalent in Physics/Chemistry/ Materials science
01	Experimental Materials Physics, Structure-Property relationship, Magnetism, Multiferroics, Quantum materials (SMS-05)	M.Sc. In Physics/Chemistry with CSIR/UGC/INSPIRE

School of Physical Sciences (SPS)

Number of Vacancies	Broad Research Area (Subject Code)	Essential Qualifications
1	Experimental Condensed Matter Physics (SPS-01)	CSIR-NET/UGC-NET fellowship
1	(a)Experimental condensed matter physics: Quasi-2d vdW magnetic and topological materials (SPS-02)	CSIR-NET/UGC-NET fellowship
1	(b)Experimental condensed matter physics: Quasi-1d vdW topological materials (SPS-03)	
1	(c)Experimental condensed matter physics: Polymer composites for sensors and memory applications. (SPS-04)	

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