



**NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH  
BHUBANESWAR**

**Advt.No:NISER/ACAD/Ph.D/2018-19 (1)**

**Notice for Admission to Ph.D Programme – 2018-19 (Summer Session)**

Applications are invited from Indian citizens for admission to Ph.D Programme scheduled to commence from 27<sup>th</sup> July, 2018 in the following schools of basic sciences at NISER, Bhubaneswar:

- 1. School of Biological Sciences (SBS)**
- 2. School of Chemical Sciences (SCS)**
- 3. School of Physical Sciences (SPS)**
- 4. School of Mathematical Sciences (SMS)**
- 5. School of Humanities and Social Sciences (SHSS)**

**Eligibility**

**1. Stream**

**Minimum Educational Qualifications**

<b>Biological Sciences#</b>	60% or equivalent GPA in Masters or M.Tech in any branches of Biology, Life Sciences, Pharmaceutical Sciences, Agricultural Sciences, Veterinary Sciences, Computer Sciences, Bioinformatics and Biotechnology. Students with Master's degree in Physics, Chemistry or Mathematics having interest in pursuing a career in Biology are also encouraged to apply.
<b>Chemical Sciences</b>	60% or equivalent GPA in Masters in Chemistry or allied fields. Student with Master's degree in any branches of Basic Sciences or M.Tech in Applied Chemistry or Computer Sciences with interest in pursuing career in Chemistry are also encouraged to apply
<b>Physical Sciences</b>	60% or equivalent GPA in Master's degree cumulatively till the last year/semester examination appeared in M.Sc majoring in Physics OR M.E./M.Tech in Applied Physics.
<b>Mathematical Sciences##</b>	60% or equivalent GPA in Masters in Mathematics or Statistics or Computer Science
<b>Humanities and Social Sciences ###</b>	60% or equivalent GPA in Masters in Social Sciences and allied disciplines

### **#Research areas in School of Biological Sciences:**

- Regulation of cell adhesion and signaling in *Helicobacter pylori*-mediated gastric cancer progression.
- Study of membrane biogenesis: Mechanism and regulation of nuclear remodeling and role of dynamins
- Regulation of cell structure and functions by thermosensitive TRP ion channels
- Molecular Genetics and Epigenetics of Ageing Disorders: Neurodegeneration and Cancer
- Antibiotic resistance and virulence: Focus on membrane proteins and persistence phenomenon
- Interaction of light and auxin in shaping development in plants; Role of splice variant of CONSTANS, CO like and GIGANTEA in the regulation of Florigen
- Molecular Genetics of Gallbladder cancer; putative angiogenic regulators and tumorigenesis
- Neuroendocrine regulation, Neural circuitry of energy balance and reproduction
- Translational Control
- Structure-and-function work on two component systems/transporters
- Regulation of cell and tissue morphology
- Organisation of cytoskeleton by molecular motors in extant eukaryotes: dictyostelium and tetrahymena; Mitotic apparatus in Bacterial systems

Student intake in these advertised areas will depend on the availability of seats with individual PIs.

**## For Mathematical Sciences:** Students who have appeared in the NBHM Ph.D. written test (2018) -NISER will directly get the test scores from NBHM and will independently contact the NBHM applicants depending on the cut off marks fixed by the school (however, students who have qualified any other national level examination need to apply). Further, UGC-CSIR NET qualified candidates should have passed the examination conducted on or after 01<sup>st</sup> December 2016. Candidates applying for statistics should have a M.Sc. degree in Statistics.

**### PhD program in School of Humanities and Social Sciences (SHSS), NISER,** includes areas of research under the disciplines of Economics, Psychology, Sociology and English

2. Candidates should have qualified at least one of these national level examinations i.e. CSIR-UGCNET/GATE/GPAT/JEST/INSPIRE (Doctoral fellowship under AORC Scheme)/JGEEBILS/NBHM (with fellowship) or any other equivalent national level examination, valid for the current year in the relevant area of research.
3. The scholarship given by NISER is Rs. 25,000/- for first two years, which will subsequently be enhanced to Rs. 28,000/- for remaining three years, subject to the condition that he/she fulfills all the requirements of the Institute that will be stipulated from time to time.
4. Candidates who are appearing in the final semester/year of qualifying examination in 2018 are also eligible to apply. However, they should have scored minimum 60% or equivalent grade till the end of the third semester/ relevant year as the case may be. If selected, their admission will be subject to submission of final semester / year result

mark sheet wherein they should have obtained the requisite percentage / grade as mentioned @ Para 1.

### **Selection Procedure**

- The selection committee of the respective schools will short-list the candidates among those who meet the minimum educational qualifications and satisfy additional criteria which each school may set as deemed necessary.
- The short-listed candidates will be called for an interview, supplemented by a written test, if necessary, for the admission.
- Based on the academic record and the performance of the candidates in the selection process, the selection committee of the school will recommend candidates to the Chairman, Academic Council for admission to the Ph.D. program.
- All candidates called for the Test / Interview will be paid to and fro single, second-sleeper class railway fare by the shortest route from their place of residence to the Institute / venue of the Test and Interview. They have to produce evidence (railway ticket) in support of their claim.

### **How to Apply**

- The application form has to be filled up online at <http://www.niser.ac.in> and candidates should follow stepwise instructions mentioned to complete the application submission process. At the time of application, along with this online form, the candidate should upload soft copy of the supporting documents as per the eligibility criteria.
- Candidates intending to apply for more than one school should fill up online application forms for each school and submit separate forms with appropriate supporting documents.
- Two sealed letters of reference in the prescribed format with signature of the referee on the envelope should be produced by the student at the time of interview. The copy of the reference letter is available online.
- NISER does not demand any application fee from the candidates who apply for Ph.D program.

### **Important dates:**

- Online application will be activated on – **26/02/2018**
- Last date for filling up online application – **26/03/2018**
- List of short-listed candidates will be uploaded on NISER website latest by
  1. School of Physical Sciences 16.04.2018
  2. School of Biological Sciences 06.04.2018

3. School of Mathematical Sciences	06.04.2018
4. School of Chemical Sciences	10.04.2018
5. School of Humanities & Social Sc	03.04.2018

- Tentative dates for test/interview will be as follows:

1. School of Physical Sciences:	15.05.2018 to 16.05.2018
2. School of Biological Sciences:	16.05.2018 to 17.05.2018
3. School of Chemical Sciences:	21.05.2018 to 22.05.2018
4. School of Mathematical Sciences	23.05.2018 to 24.05.2018
5. School of Humanities and Social Sciences:	28.05.2018 to 29.05.2018

- Each school will send the call letters to the candidates separately.
- Kindly refer to the website for the date of announcement of the selected candidates.
- The registration is scheduled to be held on **24<sup>th</sup> July, 2018** (Tuesday).
- Accommodation in hostels for the days of interview/test can be provided subject to availability. Desirous candidates should send an email request to [chiefwarden@niser.ac.in](mailto:chiefwarden@niser.ac.in) and [vijay@niser.ac.in](mailto:vijay@niser.ac.in).
- For any further query, mail to [cpsbs@niser.ac.in](mailto:cpsbs@niser.ac.in), [cpsps@niser.ac.in](mailto:cpsps@niser.ac.in), [cpsc@niser.ac.in](mailto:cpsc@niser.ac.in), [cpsms@niser.ac.in](mailto:cpsms@niser.ac.in), [cpsshs@niser.ac.in](mailto:cpsshs@niser.ac.in) for Biology, Physics, Chemistry, Mathematics and Humanities & Social Sciences, respectively.
- **Applicants are encouraged to visit school web page for information on research activities.**

#### **Address for communication and more details:**

Faculty-In Charge (Academic Affairs),  
National Institute of Science Education and Research (NISER),  
Po-Bhimpur-Padanpur, Via-Jatni, Dist-Khurda-752050  
Phone- 0674-2494013, Fax-0674-2494004  
Email– dean\_aa@niser.ac.in

#### **Checklist for application submission:**

During online submission, you will need to have the following ready with you for uploading;

- JPEG file of your passport size photo
- JPEG file of your valid signatures
- Birth Certificate/10th pass certificate in support of date of birth.
- Certificate in support of category (SC/ST), only if applicable.
- Certificate and mark sheets in support of passing qualifying examination i.e Master's degree.
- Certificate(s)/document(s) in support of qualifying national level examination(s) viz. CSIR-UGC NET/GATE/GPAT/JEST/NBHM/INSPIRE (Doctoral fellowship under AORC Scheme)/ JGEEBILS or any other.