

Advertisement for Admission to Ph.D. Program for spring semester of AY 2017-18

IIT Indore invites applications from highly motivated and research oriented students for admission for its **PhD Program** in the Discipline of Chemistry as per the below mentioned categories of admission and time schedule. Candidates can join at any time of the year in the PhD program at IIT Indore. The PhD course work will start at the beginning of the semester.

Categories of Admission: Admission to Full-Time PhD program are offered under the following categories

- **FA (Fellowship Awardee):** Fellowship Awardees from the agencies such as CSIR, UGC etc. OR JRF/SRF OR with other position as a project staff working in a Sponsored Research Project (under a faculty member PI of the project) of IIT Indore. The scholarship will be as per the rules/guidelines of the concerned funding agency.
- **TA:** Teaching Assistantship with scholarship as per MHRD guidelines.

Time Schedule of PhD admission:

Last date of Online Application through http://academic.iiti.ac.in:8080/nregistration.jsp	Jan 15, 2018
Date of Written Test and/or Interview	Will be emailed to short-listed candidates

Eligibility Criterion (Qualifying Degree and Exam)

1. Minimum first class* Master degree in the relevant Chemistry/Physics or relevant discipline, with **valid GATE** qualification or **UGC/CSIR-JRF** qualification **OR** equivalent fellowship
2. Minimum first class* Bachelor degree in the relevant discipline from a reputed Institute with a **valid GATE score**.

*The first class is defined as

- (i) 60 % marks for GEN/OBC (55% for SC/ST) category in aggregate or as specified by the university/institute **OR**
- (ii) CPI/CGPA of 6.0 for GEN/OBC (5.5 for SC/ST) category on the scale of 10 with corresponding proportional requirements when the scales are other than on 10 (for example 4.8 for GEN/OBC category (4.4 for SC/ST) on a scale of 8) , **OR**
- (iii) A first class as specified by the University/Institute awarding the degree.

Instructions:

1. After the deadline, only the shortlisted candidates would be emailed regarding the interview date.
2. **No emails or communication in any form regarding shortlisted candidates, accommodation, change of interview date, syllabus of written test and/or interview etc will be entertained.**
3. The candidates must apply online through our website (<http://academic.iiti.ac.in:8080/nregistration.jsp>).
4. Application Fee: Rs. 100/- (INR) to be paid through State Bank Collect (<https://www.onlinesbi.com/prelogin/collecthome.htm>) Kindly note that documents should NOT be sent by post to IIT Indore. The date of written test and interview will be communicated to shortlisted applicants via email only.
5. Candidates who wish to appear for the PhD selection process and fulfill the eligibility criteria may also send their resume/CVs to the faculty member.
6. Mere fulfilling the eligibility will not entitle any candidate for shortlisting

Satya S. Bulusu	<p>We mainly focus on following:</p> <ol style="list-style-type: none">1. Developing machine learning methods to study nanoparticles2. Modeling of atomic environments.3. Developing sampling algorithms.4. Using hardware technologies to parallelize our programs that will help to extend the above methods to experimentally relevant sizes. <p>Machine learning (ML) is being increasingly used in the past decades to save the computational cost and overcome the bottleneck of evaluating atomic forces required for minimizations and molecular dynamics. Development of algorithms and softwares, involving ML techniques, will help us in extending quantum mechanics and molecular dynamics to nanoscale.</p> <p>We are trying to develop ML methods, such as artificial neural networks (ANN) to construct inter-atomic potentials which are many orders of magnitude faster and accurate in evaluating atomic forces. The input of any ML method is to describe atomic environment precisely and therefore our main goal is to work on developing methods to model chemical environments.</p> <p>We are looking motivated students who are interested in development of new algorithms and programming. Students with background in physical chemistry, physics, material science or any other relevant field may directly contact me at sbulusu[at]iiti.ac.in</p> <p>For more information please visit my webpage http://iiti.ac.in/people/~sbulusu/</p>
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NOTE: Please do not post the application form, bank draft and any other documents. Please refer to point number 4 of Instructions.