Advertisement for Junior Research Fellow (JRF) Position under DST-SERB project in Physics

Applications are invited from highly motivated and eligible Indian citizens for the position of Junior Research Fellow (JRF) in a sponsored research project under DST-SERB, Govt. of India at the School of Physics and Materials Science, Thapar Institute of Engineering & Technology, Patiala with the details mentioned below.

Project Details:

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Topological States in the Iron-based Superconductors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsored Agency</td>
<td>SERB (Govt. of India)</td>
</tr>
<tr>
<td>Name of the Post</td>
<td>Junior Research Fellowship</td>
</tr>
<tr>
<td>Vacancy</td>
<td>01 Post</td>
</tr>
<tr>
<td>Duration</td>
<td>02 Years or completion of the project, whichever is earlier</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Dr. Dheeraj Kumar Singh, Assistant Professor, School of Physics and Materials Science, Thapar Institute of Engineering and Technology, Patiala-147004, India. Email id: <a href="mailto:dheeraj.kumar@thapar.edu">dheeraj.kumar@thapar.edu</a></td>
</tr>
</tbody>
</table>

Other Details:

1. Essential Qualifications
   1. M.Sc. in Physics/ Applied Physics / Mathematics/ Pure Mathematics and scientific computation or equivalent degrees with at least 60% marks (or a CGPA of 6.5 in 10 point scale) or M.E./M.Tech degrees with at least 60% marks (or a CGPA of 6.5 in 10 point scale) in Physics/Mathematics or its related disciplines.

2. NET or GATE qualified
   Not more than 28 Years. SC/ST/OBC/Women/PD candidates will get age relaxation as per SERB, Govt. of India norms.

Fellowship
   Rs. 31,000/- per month plus HRA as per norms if accommodation is not provided by institute.

4. Important
   • The assignment is purely temporary in nature and it is co-terminus with the project.
   • No TA/DA will be paid for appearing in the interview and/or joining of the position.
   • All the terms & conditions for this recruitment will be as per the guidelines of SERB, Govt. of India and TIET, Patiala. Institute reserves the right to cancel the recruitment without assigning any reason.
   • Candidate selected for this position may apply for the regular PhD program provided they satisfy the eligibility criterion for PhD program in School of Physics, TIET, Patiala.

5. Job description
   The task will mainly involve:
   (i) Search for and construction of effective multi-orbital Hamiltonians for different phases.
   (ii) Writing of numerical codes based on the developed or already existing Hamiltonians,
   (iii) These numerical codes then will be used in examining the topological states in superconducting or magnetic phases of iron-based superconductors.

6. How to Apply
   Eligible and interested candidates should send their detailed resume (CV) in the given Format through e-mail to Dr. Dheeraj Kumar Singh (dheeraj.kumar@thapar.edu) mentioning the subject as “Application for JRF under SRG of SERB”. Last date to receive the applications is 20 January, 2021. The shortlisted candidate will be intimated about the interview date via e-mail.

Principal Investigator
Dr. Dheeraj Kumar Singh
Assistant Professor, School of Physics and Materials Science
Application Form for Junior Research Fellow (JRF) in DST-SERB Sponsored Project
Project Title: Topological States in the Iron-based Superconductors (SRG/2020/002144)

1. Name:

2. Male/Female:

3. Father/Spouse’s Name:

4. Mother’s Name:

5. Address:
   (i) Communication address
   (ii) Permanent address:

6. Email id:

7. Phone No:

8. Date of birth:

9. Marital status:

10. Nationality:


12. Details of Universities/Institutions attended (from 10th Standard onwards)
    (Self-attested copies of certificates and mark sheets/grade cards must be presented at the time of interview)

<table>
<thead>
<tr>
<th>Degree</th>
<th>University/College/Board</th>
<th>Year</th>
<th>Subject/s</th>
<th>% Marks/CGPA/CPI</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. Professional Qualifying Examination Passed:
GATE/NET/Equivalent: (Attested copy of certificate must be attached with the application)

<table>
<thead>
<tr>
<th>Name of Examination</th>
<th>Subject</th>
<th>Rank /Marks /Score/Percentile</th>
<th>Qualifying date/year</th>
<th>Valid upto</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. Professional Experience (Teaching/Research/Industrial), if any

<table>
<thead>
<tr>
<th>Name of organization</th>
<th>Position</th>
<th>Type of work</th>
<th>Period</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Any other relevant information:

16. Declaration

I hereby declare that the entries made in this application are correct to the best of my knowledge and belief.

Place: .......................................................... Signature of the applicant

Date: ..........................................................