

AGHOREKAMINI PRAKASHCHANDRA MAHAVIDYALAYA



(ESTD - 1959)
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SUBHASNAGAR ♦ P.O. - BENGAI ♦ P.S. - GOGHAT
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Advertisement for Junior Research Fellow Position under DST-SERB funded SRG scheme at A.K.P.C. Mahavidyalaya, Bengai, Hooghly

Date: 03.08.2021

Post for junior research fellow in a DST-SERB funded project entitled “**Examining quantum transport and quantum entanglement in topological Weyl semimetals and their junctions with superconductors in the presence/absence of high frequency light irradiation.**” is now available at Aghorekamini Prakashchandra Mahavidyalaya, Department of Physics.

Minimum qualification: 55% (or CGPA 6.5 in a 10-point scale) in M.Sc. or equivalent in Physics/Material Science, final year M.Sc. candidate may be considered if the academic records are very good.

Desirable qualification:

- (A) The applicant has to qualify either of the National Eligibility Test (JRF/LS), Joint Entrance Screening Test (JEST), Graduate Aptitude Test for Engineering (GATE) or any equivalent test that qualifies as the “National Eligibility Test” as per SERB regulations; result awaiting M.Sc. candidate with good academic record may also apply.
- (B) The candidate has descent knowledge of Quantum Mechanics, Statistical Mechanics and Solid State Physics.
- (C) Good oral and written communication skills in English is desired.

Job description: The fellow will need to study Dirac physics in 2D or 3D materials like graphene, topological insulators, Weyl semimetals or Nodal line semimetals and analyze the quantum transport and quantum entanglement under various scenario. Numerical analysis using Fortran/Mathematica as well as simulation using Quantum Monte Carlo method will be pursued as per the progress of the project. The fellow will have to publish his / her scientific findings in peer-reviewed journals.

Fellowship Tenure: 1 year (subject to performance to be evaluated regularly).

Interested candidates are requested to apply for the same by sending their work-resume to the principal investigator Dr. Satyaki Kar at satyaki_phys@akpcmahavidyalaya.org ASAP. One can also call Dr. Kar at 7548097562 for any related queries. The shortlisted candidates will be notified to appear for an online interview later on.

Dr. Satyaki Kar

Principal Investigator
Assistant Professor,
Department of Physics
A.K.P.C. Mahavidyalaya.

**Principal
Aghorekamini Prakashchandra Mahavidyalaya
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Dr. Paramartha Ghosh

Principal & Secretary
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