

# Indian Institute of Technology Indore

## Khandwa Road, Simrol, Indore 453352

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### **Advertisement for JRF position under Start-up Research Grant (SRG), SERB project**

IIT Indore invites applications from highly motivated, sincere, hardworking and research oriented candidates for the position of JRF in a Start-up Research Grant, SERB funded research project entitle “An investigation on asymptotic expansion of Lambert series and Ramanujan’s formula for odd zeta values”. Candidates are strongly advised to visit the website of Dr. Bibekananda Maji (<https://sites.google.com/site/bibekiithri87/>), before applying against this advisement. The research staff will be working under Dr. Bibekananda Maji at IIT Indore.

**Project Details:** Ramanujan’s tau function plays an important role in Number Theory. Around four decades ago, Don Zagier conjectured that a Lambert series associated to the Ramanujan’s tau function has an asymptotic expansion and it can be expressed in terms of the non-trivial zeros of the Riemann zeta function. This observation has led to many researchers to analyze asymptotic behavior for various Lambert series. Ramanujan made many beautiful discoveries, and one of the famous formulas is about odd zeta values. Over the years, this formula has attracted attention of many mathematicians. One of the main objectives of this project is to understand recent developments of Ramanujan’s formula for odd zeta values and their applications in transcendental number theory.

**Stipend and Duration and Educational qualifications:** The amount of fellowship will be as per SERB norm. Initial appointment is for six months and will be extended further depending on the performance of the candidate. Candidates must have M.Sc. degree in Mathematics with first division.

**How to Apply:** Interested candidates are requested to send a detailed CV to Dr. Bibekananda Maji ([bibekanandamaji@iiti.ac.in](mailto:bibekanandamaji@iiti.ac.in)) with subject line “Application for JRF position” latest by 7<sup>th</sup> January, 2021. Complete information with respect to such as year of passing, experience, marks etc. should be mentioned in the CV. Incomplete applications will be rejected.

Only shortlisted candidates will be called for online interview. Selected candidates will be intimated by email.

**Note:** The Institute reserves the right to fill or not to fill the post advertised.