



### भर्ती सूचना / RECRUITMENT NOTICE

**Advt. No.: IIRS/P&GA/GA/RECTT/JRF-RS/32**

**Date: 10/07/2021**

Indian Institute of Remote Sensing (IIRS), a Unit of Indian Space Research Organisation (ISRO), is a premier institute for capacity building and research in the field of **Remote Sensing (RS) and Geoinformatics**. The Institute has a multi-disciplinary and problem oriented research agenda focusing on developing land-ocean-atmosphere applications and understanding Earth's surface and subsurface processes using primarily the space-based technologies. The research programmes are intricately linked to overall goal of ISRO towards operationalization of space-based services for national development.

2. Young and motivated candidates (Indian citizens only) are invited for **Walk-in Interview** for **three (03)** temporary positions of **Junior Research Fellow (JRF)** and **five (05)** temporary positions of **Research Scientist (RS)** under the following research projects:

<b>S. No. 1</b>	
<b>POST CODE</b>	<b>JRF 63</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: Numerical Modelling of Weather and Solar Parameters using WRF.
<b>Essential Qualifications (Also refer Para 3)</b>	<b>M.Tech.</b> in Atmospheric Science/ Meteorology/ RS & GIS applications in Atmospheric Sciences. Candidate must have studied Physics/ Mathematics as a subject at Graduation level. <b>(OR)</b> <b>M.Sc.</b> in Physics / Mathematics / Atmospheric Science/ Meteorology or equivalent. Candidate must have studied Physics/ Mathematics as a subject at Graduation level.
<b>Desirable Qualification</b>	Knowledge of MATLAB/R with good programming skills in FORTRAN/ C/ C++/ Python, experience of working on LINUX platform, atmospheric/meteorological data analysis and numerical weather prediction models.

<b>S. No. 2</b>	
<b>POST CODE</b>	<b>JRF 64</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: Integrated Water Resources Study for the Assessment of Water Availability, Water-Ice Harvesting and Flood Hazard Mapping.
<b>Essential Qualifications (Also refer Para 3)</b>	<b>B.Tech.</b> in Agriculture Engineering/ Civil Engineering/ Computer Sciences/ Remote Sensing and GIS or equivalent. <b>(OR)</b> <b>M.Sc.</b> in Hydrology/ Geology/ Atmospheric Sciences/ Physics/ Mathematics/ Geology/ Geography/ Geoinformatics or equivalent.
<b>Desirable Qualification</b>	Knowledge of hydrology, glaciology, optical/ microwave remote sensing data processing, field work in high altitude area, geospatial data.



	management, hydrological modelling & computer programming (Python/Matlab) .
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<b>S. No. 3</b>	
<b>POST CODE</b>	<b>JRF 65</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: SDI, Geoportal and DSS Tools Development.
<b>Essential Qualifications</b> (Also refer Para 3)	<b>M.Sc. /M.Sc. (Tech) / M.Tech.</b> in Geoinformatics / Remote Sensing & GIS/ Mathematics/ Applied Mathematics/ Physics/ Applied Physics/ Computer Science/ IT or equivalent subject. <b>(OR)</b> B.E./ B.Tech. in Geoinformatics / Computer Science/ IT or equivalent.
<b>Desirable Qualification</b>	Proficiency in Computer Programming (Python), knowledge in Digital Image Processing, GIS, Spatial Database Handling and Machine Learning.

<b>S. No. 4</b>	
<b>POST CODE</b>	<b>Research Scientist (RS-01)</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: Integrated Water Resources Study for the Assessment of Water Availability, Water-Ice Harvesting and Flood Hazard Mapping.
<b>Essential Qualifications</b> (Also refer Para 4)	<b>M.E./ M.Tech.</b> in Agricultural engineering (in Water Resources or RS-GIS related specialisation)/ Civil engineering (in Water Resources or RS-GIS related specialization)/ Geoinformatics/ Hydrology/ Remote Sensing and GIS/ Water Resources Engineering or equivalent.
<b>Desirable Qualification</b>	Experience in execution of water resource project or Ph.D. with RS based mapping, hydrological modelling (with focus on snow/glacier/flood hydrology), and fieldwork in high altitude area, flood hazard zonation, optical / microwave remote sensing data processing, geospatial data management, and computer programming.

<b>S. No. 5</b>	
<b>POST CODE</b>	<b>Research Scientist (RS-02)</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: Prioritizing Suitable Sites for Agroforestry Expansion and Conservation/ Restoration of Key Plant Species of Ecological and Livelihood Importance.
<b>Essential Qualifications</b> (Also refer Para 4)	<b>M.Sc.</b> degree in Forestry/ Environmental Sciences/ Wildlife Sciences/ Geo-Informatics / Remote Sensing or equivalent (with specialization or dissertation in RS & GIS applications in vegetation studies). <b>(OR)</b> <b>M.E. / M.Tech.</b> in Remote Sensing & GIS/ Remote Sensing/ Geoinformatics or equivalent (with specialization or dissertation in RS & GIS applications in vegetation studies.



<b>Desirable Qualification</b>	Working experience or Ph.D. related to RS & GIS applications in vegetation studies. Knowledge of programming languages (MATLAB, Python & R)
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<b>S. No. 6</b>	
<b>POST CODE</b>	<b>Research Scientist (RS-03)</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: Solar Energy Potential Estimation using Open Source Tools.
<b>Essential Qualifications (Also refer Para 4)</b>	<b>M.E./ M.Tech./ M.Plan.</b> in Civil Engineering (in Remote Sensing and GIS related specialization) / Planning/ Computer Science/ Geoinformatics or equivalent with [B.E./ B.Tech./ B.Plan/ B.Arch. (Civil/ Planning/ Architecture/ Geoinformatics or equivalents)]  <b>(OR)</b> <b>M.Sc.</b> in Geography with Bachelor's Degree in Science.
<b>Desirable Qualification</b>	Experience in use of Remote Sensing and GIS/ LINUX/ computer programming skills (C++, MATLAB, R, Python, IDL, etc.) for urban environment.

<b>S. No. 7</b>	
<b>POST CODE</b>	<b>Research Scientist (RS-04)</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: SDI, Geoportal and DSS Tools Development.
<b>Essential Qualifications (Also refer Para 4)</b>	<b>M.E./ M.Tech.</b> in Computer Science/ Computer Science & Engineering/ Electronics & Communication Engineering/ Information Technology/ Information Systems/ Remote Sensing & GIS/ Geoinformatics/ Software Engineering or equivalent.  With Pre-eligibility qualification of B.E. / B.Tech. in Electronics and Telecommunication Engineering or equivalent/ Computer Science and Engineering/ Information Technology or equivalent / Geo-informatics/ Geomatics or equivalent in First Class.
<b>Desirable Qualification</b>	Good programming skills and database handling, Knowledge in design and development of web based GIS and geo-web services applications, GIS database creation, management and geo-analytical tools development and expertise in Python.

<b>S. No. 8</b>	
<b>POST CODE</b>	<b>Research Scientist (RS-05)</b>
<b>No. of Position(s)</b>	<b>01</b>
<b>Project Name</b>	Spatial Data Infrastructure (SDI) Geoportal with Allied Database Development for UT-Ladakh. Sub-theme: SDI, Geoportal and DSS Tools Development.
<b>Essential Qualifications (Also refer Para 4)</b>	<b>M.E. / M.Tech.</b> in Computer Science/ Computer Science & Engineering / Information Technology/ Information Systems/ Remote Sensing & GIS/ Geoinformatics / Software Engineering or equivalent.



	With Pre-eligibility qualification of B.E. / B.Tech. in Computer Science and Engineering/ Information Technology or equivalent / Geo-informatics/ Geomatics or equivalent.
<b>Desirable Qualification</b>	Good programming skills and database handling, Knowledge in design and development of web based GIS and geo-web services applications, GIS database creation, management and geo-analytical tools development and expertise in Python.

### 3. Minimum essential qualifications / conditions common for all JRF posts (S.No. 1 to 3).

#### 3.1 Minimum passing percentage / CGPA/ CPI in qualifying degree.

- A. B.Tech. / B.E. degree should be in First class with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 scale or equivalent.
- B. M.Sc. degree should be in First class with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 scale or equivalent.
- C. M.Tech. degree should be in First class with an aggregate minimum of 60% or CGPA/CPI grading of 6.5 on a 10 scale or equivalent.
- D. The candidate must be **NET/IIRS-JET/GATE or Equivalent**\*<sup>1</sup> qualified in any year in relevant subject.

**Note\*<sup>1</sup>:** *NET/IIRS-JET/GATE Equivalent qualification means Scholars who are selected through National Eligibility Tests (i.e. CSIR-UGC NET including lectureship/Assistant Professorship and GATE conducted by MHRD) or through any national level examination conducted by Central Government Department/ Agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc., IISER etc. for admission to Ph.D. programme. The candidates qualifying the IIRS-JRF Eligibility Test (IIRS-JET) shall be considered as equivalent to NET. The following examinations can also be equated to NET.*

- i. CSIR-UGC National Eligibility Test including NET-Lectureship.
- ii. Graduate Aptitude Test in Engineering (GATE) conducted by MHRD.
- iii. Joint Admission Test (JAM) conducted by MHRD.
- iv. Graduate Pharmacy Aptitude Test (GPAT) conducted by MHRD.
- v. Biotechnology Eligibility Test & Test conducted in Bio-informatics by Bio-informatics National Consortium.
- vi. Joint Entrance Screening Test (JEST), Joint Graduate Entrance Examination for Biology & Interdisciplinary Life Sciences (JGEEBILS) conducted by the Department of Atomic Energy.
- vii. JRF Entrance Examination conducted by the Indian Council of Medical Research.
- viii. All India Competition Examination (AICE) conducted by the Indian Council of Agricultural Research.
- ix. NET or equivalent qualified in any period.
- x. Qualified IIRS JRF Eligibility Test.

**3.2 JRF Age Limit:** JRF: 28 years as on the date of Walk-in interview but relaxable for 5 years in case of SC/ST candidates and 3 years in case of OBC candidates.

**3.3 JRF Fellowship & Duration:** JRFs will be paid an amount of ₹31,000/- (Rupees Thirty One Thousand only) per month as fellowship. Dearness Allowance (DA) is not admissible. However, they will be eligible for House Rent Allowance (HRA) as per the rules of the Government. For this purpose, the fellowship amount will be taken as Basic Pay. JRFs will be allowed to avail the CHSS (medical) facility for self only as per the rules of IIRS. As



per the DOS / ISRO rules, JRFs are eligible for casual leave only. Maternity leave to female JRFs shall be as per the DOS / ISRO guidelines. Annual increment, Bonus, LTC, CCA, retirement benefits, etc. are not admissible.

The project duration is till March 31, 2023. The initial appointment shall be for one year duration and further extendible up to the project duration subject to satisfactory performance and availability of funds in the project. All the positions are co-terminus with the project. The maximum period of engagement of JRF shall not exceed FIVE years. **The fellowship will not confer any claim or right for regular appointment in any DOS/ISRO center.**

#### **4. Minimum Essential Qualifications / conditions common for all Research Scientist posts (S. No. 4 to 8).**

##### **4.1 Minimum passing percentage / CGPA/ CPI in qualifying degree.**

- A. B. Tech. / B.E. degree should be in First class with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 scale or equivalent.
- B. M.Sc. degree should be in First class with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 scale or equivalent.
- C. M.Tech. degree should be in First class with an aggregate minimum of 60% or CGPA/CPI grading of 6.5 on a 10 scale or equivalent.

**4.2 Physical Requirement:** Candidates should fulfil the following physical Requirement for the RS Posts- S=Sitting, ST=Standing, W=Walking, BN=Bending, L=Lifting, KC=Kneeling & Crouching, JU=Jumping, CRL=Crawling, CL=Climbing, MF= Manipulation by Fingers, RW= Reading & Writing, SE=Seeing, H=Hearing, C=Communication, BLA=both legs & Arms, PP=Pulling & Pushing.

##### **4.3. Age limit**

**Research Scientist:** 35 years as on the **date of Walk-in interview**. Relaxable for 5 years in case of SC/ST candidates and 3 years in case of OBC candidates. Ex- Servicemen, Meritorious Sportspersons & Persons with Benchmark Disability (PWBD) are eligible for age relaxation as per Government of India orders. Candidates claiming age relaxation have to submit valid documentary proof.

##### **4.4 Fellowship & Duration**

**Research Scientist:** The project duration is till March 31, 2023. The initial appointment shall be for one year duration and further extendible up to the project duration subject to satisfactory performance and availability of funds in the project. All the positions are co-terminus with the project. The Research Scientist(s) will be engaged purely on CONTRACT BASIS for a period not exceeding THREE YEARS. There will be a review of the progress of the work before the renewal every year. Selected candidates will be offered the fellowship as Research Scientist in the Level 10 of the Pay Matrix (₹ 56100-177500). The fellowship will be fixed in the minimum of Pay Band (i.e. at present ₹56100/-). In addition DA, HRA and medical benefits for self only will be allowed as per rules. They will be allowed to avail the CHSS (medical) facility for self only. Leave and other service benefits shall be as per the IIRS/ISRO/Department of Space guidelines. Annual increment, CCA, Bonus, LTC, retirement benefits, etc. are not admissible. **The fellowship will not confer any claim or right for regular appointment in any DOS/ISRO centre.**



5. The Director, IIRS reserves the right to cancel/postpone the interview without any reason thereof. He also reserves the right to terminate the contract, even before completion of the project for which no appeal thereof shall be made.

6. **Selection process:** On the date of walk-in interview, the qualification of the candidates will have to submit the application form along with self-attested copies of their mark sheet /degrees, caste certificates, NOC, declaration etc. The walk-in interview of eligible candidates will be conducted by the selection committee. On the basis of candidate's qualification and performance in the interview, selection panel will be declared based on merit. The qualification prescribed is the minimum requirement and possessing the same does not automatically make candidate eligible for the interview. In case of large number of candidates appear for walk-in interview then they may be interviewed on the next day, therefore, candidates are advised to accordingly make their necessary arrangement. In case of selection, at the time of joining the selected candidates qualifying degrees/ mark sheets/ NOC / certificates etc. will be verified with the original. In case, the candidates is found ineligible his/her candidature shall be summarily rejected. Therefore, candidates are advised to carefully satisfy themselves regarding their meeting of minimum eligibility qualification / conditions before appearing for interview.

7. **Schedule for walk-in interview:**

S. No.	Post Code	Date of interview	Reporting Venue / Time
01.	RS-01 & JRF-64	02 <sup>nd</sup> August 2021	IIRS Security Reception IIRS, ISRO/DOS 4 Kalidas Road, Dehradun-248001 Reporting time : 08:30AM
02.	RS-02	03 <sup>rd</sup> August 2021	
03	RS-03	04 <sup>th</sup> August 2021	
04.	RS-04, RS-05 & JRF-65	05 <sup>th</sup> August 2021	
05.	JRF-63	06 <sup>th</sup> August 2021	

8. **How to apply:**

Candidates will have to FILL the Interview application form and bring the PRINT OUT on the date of walk-in interview along with their self-attested copies of all their educational qualification mark sheets / degree certificates etc. The application form is available as Annexure. All applicants have to provide (mandatory) e-mail ID for future correspondence/reference and all further communications will be made to the applicants through email / IIRS website only. Therefore, the applicants are advised to check their email and visit the IIRS website from time to time. IIRS will not take responsibility for non-receipt of intimation regarding call letter / any communication due to technical reasons or whatsoever to the candidates. **There is NO need to send the duly-filled application form to IIRS by mail/post. Applicants applying for multiple positions are required to submit separate application forms.**

**Government strives to have a workforce which reflects gender balance and women candidates are encouraged to apply.**

9. **Other conditions/instructions:**

- Candidates who already have the minimum essential qualification including NET/ GATE / IIRS-JET or equivalent and meet other eligibility conditions are only eligible to appear



in walk-in interview for the JRF positions. Candidates/ students awaiting for final result are not eligible and need not apply.

- ii. All applicants must fulfil the minimum essential qualification requirements of the post and other conditions stipulated in the advertisement. Mere fulfillment of the qualitative requirements of the posts will not entail a candidate to be selected. They are advised to satisfy themselves before appearing in the walk-in interview that they possess at least the essential qualifications laid down for various posts. No enquiry asking for advice on the eligibility will be entertained.
- iii. Original education, experience, Caste/Tribe, identity certificate shall be produced at the time of joining, otherwise the candidature of the candidate will be cancelled.
- iv. Date of Walk-in interview will be the cut-off date for all purposes like age, qualification, etc. Any request for change of address/email-id for communication will NOT be entertained.
- v. The selected JRFs / RSs will work on specific research theme (project). JRFs can register for Ph.D. degree in any university. Selected candidates should be willing to work anywhere in India (including remote places) and partake in field experiments as per requirements.
- vi. Canvassing in any form will result in disqualification.
- vii. If any information furnished in the application is found to be false or wrong at any stage, the candidature shall be cancelled.
- viii. CGPA/CPI shall be converted into percentage of marks as per the candidate's university norms.
- ix. Those who are already in employment under the Central Government/ State Government/Public Sector Undertaking/ Autonomous Body or any other Organisation which is aided by the Government, shall produce **"No Objection Certificate"** from the employer at the time of Walk-in interview and also at the time of joining, otherwise the candidature of the candidate shall be cancelled.
- x. Only Indian Nationals are eligible to apply.
- xi. In case of foreign degree holders where the documents/degree/certificates are not in English then translation and authorized transcription must be attached and equivalency certificate from Association of Indian University (A.I.U.) must also be submitted. Failure to produce equivalency certificate at the time of interview shall be a disqualification. Further, equivalency of subject(s) mentioned in essential qualification will be decided by IIRS, which shall be final.
- xii. **On the date of walk-in interview, the candidates must bring and produce their COVID negative test report (not older than 2 days) failing which they will not be allowed to appear for the interview. Further, they must strictly follow all the COVID prevention protocols such as mask and social distancing.**



- xiii. All interviews will be conducted at IIRS, Dehradun. However, in view of the prevailing pandemic, the interview will be conducted in compliance to COVID prevention protocol and maintaining social distancing norms at IIRS, Dehradun.
- xiv. IIRS, Dehradun is located about 05 km from Dehradun railway station and 10 km from ISBT, Dehradun. In order to reach the venue, you may board Vikram (blue color passenger tempo) up to Clock Tower and then from Astley Hall to Hathibarkala Post Office in order to reach the venue.
- xv. Outstation candidates who are found eligible for the interview will be reimbursed to and fro second class train fare by shortest route from the place mentioned in the application to Dehradun on production of proof of travel. In case of travel by bus, the actual fare paid by candidate or second class train fare, whichever is less will be reimbursed. If candidate travels by bus, then s/he have to produce bus tickets and if s/he travels by train, s/he have to furnish either the train ticket(s) or PNR number(s) without which the TA claim will not be admitted. Sleeper class fare will be paid subject to production of railway ticket only.
- xvi. Candidates will be asked to their your identity by showing any govt. issued identification card such as DL/AADHAAR/passport/registered mobile no etc. for identification before appearing in interview.
- xvii. Candidates must bring with attested copies of their marks/grade cards/ certificates/ degrees including experience certificate, if applicable, in support of the declaration they have made in the Application.

**10. Important dates to Remember:**

**Date of Walk-in Interview / Schedule: August 02 – 06, 2021 (Refer para 7 for detailed schedule).**



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