

उत्तर पूर्वी अंतरिक्ष उपयोग केंद्र/North Eastern Space Applications Centre  
भारत सरकार/Govt. of India, अंतरिक्ष विभाग/Dept. of Space  
उमियम/Uiam – 793103, मेघालय/Meghalaya  
Tel: 0364-2570140

Research Scientist & Junior Research Fellow Recruitment at NESAC

No.NESAC/RMT-TEMP/02/2022

Date: 12.11.2022

North Eastern Space Applications Centre (NESAC), Uiam is an autonomous body functioning under the Department of Space and North Eastern Council (NEC) to assist development process in North Eastern Region using space science and technology. It undertakes specific applications projects using remote sensing, GIS, satellite communication and conducting space science research. The Centre's services are helpful in natural resources management, infrastructure planning, health, education, disaster management and Earth Observation Applications Mission.

Applications are invited from the eligible candidates for the following positions on temporary project basis for the following projects:

1. RESEARCH SCIENTIST [LEVEL10 (₹ 56,100 - ₹ 1,77,500)]			
Post Code No.	No. of Position	Essential Qualification	Desired Qualification/ Experience
<b>Project : Flood Early Warning System for NER (other than Assam and Manipur)</b>			
RS01	2 (two)	<p>[First Class M.E./M.Tech in Civil Engineering (in water resources related specialization) <b>OR</b> First Class M.E./M.Tech in Agricultural Engineering (in water resources related specialization) <b>OR</b> First Class M.E./M.Tech in Water Resources Engineering or equivalent <b>OR</b> First Class M.E./M.Tech in Remote Sensing &amp; GIS or equivalent (in water resources related specialization)]</p> <p><b>AND</b> First Class B.E./B.Tech Degree in Civil/ Agricultural Engineering.</p> <p><b>WITH</b> One year experience in the relevant field.</p>	<ul style="list-style-type: none"><li>• Experience in Hydrological and Hydraulic Modeling using Remote Sensing &amp; GIS inputs.</li></ul>
<b>NOTE :</b> Candidates having M.E./M.Tech degree in Civil/Agricultural Engineering & M.E./M.Tech degree in Remote Sensing GIS or equivalent must mention with supporting proof, the specialization/dissertation in the water resources related specialization for consideration of their application.			

Post Code No.	No. of Position	Essential Qualification	Desired Qualification/ Experience
<b>Project : North Eastern Regional Node for Disaster Risk Reduction</b>			
RS02	<b>1 (one)</b>	First Class M.Sc/M.Tech/M.Sc (Tech) in Geology/ Applied Geology/ Geophysics/ Earth Science or equivalent or Integrated M.Sc in Geology/ Applied Geology <b>AND</b> pre-qualification of B.Sc with Geology as Main/Major/Honors subject (not applicable for integrated course) <b>WITH</b> One year research/ work experience in the field of Disaster Management Support (DMS).	<ul style="list-style-type: none"> <li>• Ph.D in relevant field.</li> <li>• Working experience in Geology/ Applied Geology with research related to Ground water depletion study/ landslide early warning/ susceptibility study/ GPS/ GNSS/ seismic surveying and data processing &amp; analysis/ Use of Remote Sensing and GIS.</li> </ul>
RS03	<b>1 (one)</b>	First Class M.Sc/M.Tech in Botany/ Forestry/ Environmental Science/ Remote Sensing/ Geoinformatics or equivalent <b>AND</b> B.Sc. in any of the natural sciences as pre-qualification <b>WITH</b> One year research/ work experience in the field of Disaster Management Support (DMS).	<ul style="list-style-type: none"> <li>• Ph.D in relevant field.</li> <li>• Working knowledge in Remote Sensing data handling and GIS software, Programming skills preferably Python and Matlab, Ecological/ Environmental modeling/ forest fire studies.</li> </ul>
RS04	<b>1 (one)</b>	First Class M.Sc/M.Tech in Physics/ Meteorology/ Atmospheric Science/ Earth Systems Science or in any other subject that is equivalent to these subjects <b>WITH</b> One year research/ work experience in any field of Atmospheric Science.	<ul style="list-style-type: none"> <li>• Ph.D in relevant field.</li> <li>• Working knowledge in Satellite Meteorology, Thunderstorm, Lightning, Numerical Weather Prediction models with programming knowledge in MATLAB, FORTRAN &amp; conversant with LINUX operating system.</li> </ul>
RS05	<b>1 (one)</b>	First Class M.Sc/M.Tech in Disaster Management/ Geography/ Applied Geography/ Geology/ Geoinformatics/ Geomatics/ Remote Sensing and Geographic Information System or equivalent <b>WITH</b> One year research/ work experience in the field of Disaster Management Support (DMS).	<ul style="list-style-type: none"> <li>• Ph.D in relevant field.</li> <li>• Working Experience in disaster related studies.</li> <li>• Working knowledge in remote sensing data handling and GIS software, Programming skills.</li> <li>• Experience in preparation of Disaster Management Plans.</li> </ul>
RS06	<b>1 (one)</b>	First Class M.E./M.Tech in Remote Sensing/ Geoinformatics/ Computer Science/ Information Technology or equivalent <b>AND</b> First Class B.E/B.Tech in Computer Science and Engineering/ Information Technology or equivalent or Geoinformatics/ Geomatics or equivalent <b>WITH</b> One year research/ work experience in above field.	<ul style="list-style-type: none"> <li>• Working experience in Geoweb services/ Spatial Decision support System/ Spatial Data Infrastructure/ Location based services Photogrammetry/ LIDAR data processing/ Microwave experience/ Big Data Analytics/ Geospatial Dashboard analysis etc. for geospatial data.</li> </ul>

Post Code No.	No. of Position	Essential Qualification	Desired Qualification/ Experience
RS07	1 (one)	<p>First Class M.Sc/M.E./M.Tech in Remote Sensing/ Geoinformatics/ Computer Science/ Information Technology or equivalent</p> <p style="text-align: center;"><b>AND</b></p> <p>Graduation in Computer Science and Engineering/ Civil Engineering/ Information Technology/ Geo-informatics/ Geomatics or equivalent with dissertation/thesis or working experience in Microwave/ Hyperspectral/ Lidar Remote Sensing data processing/ application</p> <p style="text-align: center;"><b>WITH</b></p> <p>One year research/ work experience in above field.</p>	<ul style="list-style-type: none"> <li>Working knowledge in Programming, preferably Python and Matlab.</li> <li>Working Knowledge in Photogrammetry/ LIDAR data processing/ Location based services.</li> <li>Working experience in image processing of Satellite data (Optical data/ Hyperspectral/ Microwave Remote Sensing data).</li> <li>Research in Geospatial Modelling.</li> </ul>
RS08	1 (one)	<p>First Class M.E./M.Tech in Computer Science &amp; Engineering/ Information Technology or equivalent</p> <p style="text-align: center;"><b>AND</b></p> <p>First Class B.E/B.Tech in Computer Science &amp; Engineering/ Information Technology or equivalent</p> <p style="text-align: center;"><b>WITH</b></p> <p>One year research/ work experience in above field</p>	<ul style="list-style-type: none"> <li>Working experience in development of app, web portal, implementing AI/ M1/DL based applications, development of IoT based applications, development of dashboard applications with data analytics tools, Good grasp of Programming and data analytic tools such as C++, Java, Python, R, Hadoop etc.</li> </ul>

**Project : Doppler Weather Radar at Sohra (Cherrapunjee)**

RS09	1 (one)	<p>First Class M.Tech in Electronics and Communication Engineering/ Mechanical Engineering/ Electrical &amp; Electronics Engineering/ Computer Science or in any other subject that is equivalent to these subjects.</p> <p style="text-align: center;"><b>WITH</b></p> <p>One year experience in the relevant areas.</p>	<ul style="list-style-type: none"> <li>Experience in radar systems, digital signal processing, programming knowledge in MATLAB, FORTRAN and conversant with LINUX operating system.</li> </ul>
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**2. JUNIOR RESEARCH FELLOW [JRF]**

Post Code No.	No. of Position	Essential Qualification	Desired Qualification/ Experience
JRF01	1 (one)	<p>First Class M.Sc. in Geological Science from a recognized University or equivalent with valid NET/GATE/N-JET in the relevant discipline.</p>	<ul style="list-style-type: none"> <li>Specialization in Structural Geology/ Geomorphology/ Metamorphic Geology/ Remote Sensing Geology.</li> </ul>

Post Code No.	No. of Position	Essential Qualification	Desired Qualification/ Experience
JRF02	7 (seven)	First Class M.E./M.Tech in Civil Engineering/ Agriculture Engineering/ Water Resources Engineering/ Earth Science Engineering/ Environmental Engineering/ Remote Sensing and GIS/ or equivalent with water resources related specialization/ dissertation with valid NET/GATE/N-JET in the relevant discipline. <b>OR</b> First Class M.Sc. in Remote Sensing & GIS/ Geology/ Environmental Science/ or equivalent with water resources related specialization/ dissertation with valid NET/GATE/N-JET in the relevant discipline.	• Experience in Hydrological Modelling and Mapping using Remote Sensing & GIS inputs etc.
JRF03	1 (one)	First Class M.E./M.Tech in any specialisation of Electronics/ Computer Science Engineering with valid NET/GATE/N-JET or equivalent in the relevant discipline. <b>OR</b> First Class M.Sc. (Physics with Electronics) with valid NET/GATE/N-JET or equivalent in the relevant discipline.	---
<b>Note : Posting for JRF03 will be at ISTRAC Bengaluru</b>			

#### ELIGIBILITY:

- (i) **M.E./M.Tech degree should be in First Class or equivalent grade with an aggregate minimum of 60% (average of all semesters) or CGPA/CPI grading of 6.5 on a 10 point scale or equivalent from recognized university.**
- (ii) **B.E./B.Tech/M.Sc. degree should be in First Class or equivalent grade with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 point scale or equivalent from recognized university.**

#### FOR POST CODE JRF01 to JRF03:

#### I. The applicants for JRF position should qualify one of the following tests and the year of acquiring qualification along with score card have to be furnished in the online applications:

- i. CSIR-UGC National Eligibility Test including NET-Lecturership
- ii. Graduate Aptitude Test in Engineering (GATE) conducted by MHRD
- iii. Joint Admission Test (JAM) conducted by MHRD
- iv. Biotechnology Eligibility Test & Test conducted in Bio-informatics by Bio-informatics National Consortium
- v. Joint Entrance Screening Test (JEST), Joint Graduate Entrance Examination for Biology & Interdisciplinary Life Sciences (JGEEBILS) conducted by Department of Atomic Energy.
- vi. All India Competitive Examination (AICE) conducted by the Indian Council of Agricultural Research.
- vii. State Level Eligibility Test (SLET) conducted on behalf of the UGC by the National Test Agency.

viii. **N-JET (NESAC JRF Eligibility Test):** The N-JET 2021 was conducted at NESAC on **15.03.2022**. Candidates having valid Score Cards may apply directly.

- II. N-JET/NET Equivalent qualifications should be in the discipline/specialization of the essential qualification.
- III. **All Engineering disciplines, GATE qualification is mandatory.**
- IV. Post Graduate Degree in Professional Course or M.E./M.Tech/M.Plan **OR** Post Graduate Degree in Basic Science or M.Sc./B.E/B.Tech/B.Plan in the selection process are described through any one of the following:
  - (a) Scholars who are selected through National Eligibility Test – CSIR-UGC NET including lectureship (Assistant professorship) and GATE.
  - (b) The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc.

### **1. GENERAL NOTE:**

- (i) Number of positions indicated above are provisional and may vary depending on the actual requirement.
- (ii) M.E./M.Tech degree should be in First Class or equivalent grade with an aggregate minimum of 60% (average of all semesters) or CGPA/CPI grading of 6.5 on a 10 point scale or equivalent from recognized university.
- (iii) B.E/B.Tech/M.Sc. degree should be in First Class or equivalent grade with an aggregate minimum of 65% (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 point scale or equivalent from recognized university.
- (iv) Rounding-off marks/CGPA grading are not allowed.
- (v) Candidates must clearly mention with supporting proof, the specialization/ dissertation/ thesis in the relevant field wherever applicable for consideration of their application.
- (vi) All degrees should be duly recognized by AICTE/UGC, or any other organization authorized by Government of India to do so.
- (vii) Experience letter should contain the details of work done by the applicant under different projects.
- (viii) 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 (AIU) must also be scanned and attached. Failure to produce equivalency certificate at the time of interview shall lead to disqualification.
- (ix) The qualification prescribed and the benchmark are only the MINIMUM requirement and fulfilling the same does not automatically make a candidate eligible for Interview
- (x) Selection will be purely based on performance in the interview.
- (xi) The Centre reserves the right not to fill up all or any of the positions, if it so decides.
- (xii) The percentage of marks obtained by the candidate would be calculated based on the practice as followed by the respective University/Institution. In case of grades/CGPA, the conversion to percentage of marks would be based on the procedure as certified by the respective University/Institution. If any University/Institution confirms that there is no scheme for converting CGPA into equivalent marks, the equivalence would be established by dividing the candidate's CGPA by the maximum possible CGPA and multiplying the result with 100.
- (xiii) In case candidate is claiming equivalent specialization, he/she has to obtain certificate from his/her institute/university stating that the specialization is equivalent to the one asked in the

advertisement for the position applied for. Candidates who do not fulfill eligibility condition will not be considered for the interview.

## **2. AGE LIMIT:**

- **For Research Scientist:** Maximum Age 35 years as on **30.11.2022**
- **For Junior Research Fellow:** Maximum Age 28 years as on **30.11.2022**

Relaxable by 5 years in case of SC/ST and 3 years in case of OBC candidates. Ex-Servicemen, Persons with Disabilities are eligible for age relaxation as per Government of India orders. Candidates claiming age relaxation have to submit valid documentary proof.

## **3. TENURE OF THE POSITIONS:**

- **For Research Scientist:** The Research Scientist positions are purely on temporary basis for a period of ONE YEAR which can be further extended based on the performance of the candidate in the periodical reviews, for a maximum period of THREE YEARS in total or co-terminus with the project, whichever is earlier.
- **For Junior Research Fellow:** The JRF positions are purely on temporary basis and co-terminus with the project without any provision for regularization. Junior Research Fellow will be engaged initially for ONE YEAR or the period of the Project whichever is earlier and is extendable for further periods based on assessment of their work and requirement of project. The maximum period of engagement of Junior Research Fellows shall not exceed FIVE years or project duration whichever is earlier.

The positions of RS/SRF/JRF will not confer any claim or right for regular employment in NESAC and the services are liable to be terminated without any notice and without assigning any reasons thereof.

The Director, NESAC 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 tenure/project for which no appeal thereof shall be made.

## **4. EMOLUMENTS & OTHER BENEFITS:**

- **Pay & Allowances for Research Scientist:**  
Selected candidates will be offered the Pay in the Level 10 of the Pay Matrix (₹ 56100-177500). The pay will be fixed in the minimum of Pay Level i.e. at present be approximately ₹ 56100/-. In addition DA, HRA and medical benefits for self only will be allowed as per rules.
- **Pay & Allowances for Junior Research Fellow:** Fellowship Amount ₹ 31,000/-.  
In addition to the above mentioned fellowship amount, HRA at the prescribed rates in force at the place of posting/HRA sanctioned under the respective project whichever is less will be paid and Medical benefits for self only will be allowed as per extant rules. The fellowship amount shall be taken as Basic pay for this purpose.

Junior Research Fellows are eligible only for casual leave while Research Scientists are eligible for leave as per rules of the Institution. Maternity leave as per Govt. of India instructions would be available to all female RSs/SRFs/JRFs. Apart from this, the candidates selected will not be entitled to any benefits or concessions admissible to regular employees.

5. **HOW TO APPLY:** The application form will be hosted in the NESAC web-site [www.nesac.gov.in](http://www.nesac.gov.in) from **14.11.2022**. Last date for submission of On-line Application Forms is **30.11.2022** and closing time will be **16.00 Hr. Candidates need to apply through online mode only.**

**After registration take a print out of the application summary** and the print-out is to be brought along with passport size photograph and documents supporting the data furnished in application at the time of Interview. Registration Number should be recorded by the Candidate for all future correspondences with NESAC with regard to this advertisement.

6. **SELECTION PROCESS:**

- i. The qualification prescribed is the minimum requirement and possession of the same does not automatically make the candidates eligible to be called for interview. A duly constituted Screening Committee shall screen the applications received for the positions based on the following:
- ii. The percentage of marks obtained by the candidate would be calculated based on the practice as followed by the respective University/Institution. In case of grades/CGPA, the conversion to percentage of marks would be based on the procedure as certified by the respective University/Institution. If any University/Institution confirms that there is no scheme for converting CGPA into equivalent marks, the equivalence would be established by dividing the candidate's CGPA by the maximum possible CGPA and multiplying the result with 100.
- iii. In case candidate is claiming equivalent specialization, he/she has to obtain certificate from his/her institute/university stating that the specialization is equivalent to the one asked in the advertisement for the post applied for. Final decision on this will be taken by the Screening Committee. The screened-in/shortlisted candidates will be called for interview before the Selection Committee. Communication shall be sent only to the screened-in/shortlisted candidates. NESAC will not entertain any correspondence on the issue of short-listing of candidates. **The call letters for the interview to the short-listed candidates will be sent only by e-mail.** No communication shall be made to the candidates who are not short-listed/Screened in. Candidates who do not fulfill eligibility condition will not be considered for the interview.

7. **GENERAL CONDITIONS:**

- The Centre provides canteen facilities, library facilities, etc.
- Those who possess the required qualification as on **30.11.2022** only need to apply. Only passed candidates are eligible to apply. Students awaiting for final result need not to apply.
- Applications will be through online mode only and all further communications will be made to the applicants through e-mail/NESAC website only. Therefore, the applicants are advised to check their e-mail and visit the NESAC website from time to time. NESAC will not take responsibility for non-receipt of intimation regarding call letter/any communication due to technical reasons or whatsoever to the candidates.
- The selected candidates shall be posted at NESAC, Umiam but are also liable to be posted in any place in India at the discretion of Director, NESAC as and when required.

- The selected candidate for **Post code No. JRF03** shall be posted at ISTRAC Bengaluru.
- The selected JRFs are encouraged to register for Ph.D from recognized universities and take up relevant research topic benefitting the individual and NESAC. However they have to work extra time to complete the Ph.D research. No leave is admissible for Ph.D work.
- Candidates called for interview will have to produce all relevant original documents in proof of details furnished in the application along with a set of self-attested photocopies. Candidates who are already employed under Central/State Government, Public Sector Undertakings or Autonomous Bodies will have to produce the “**No Objection Certificate**” in original including print out of the application summary, at the time of interview. In case the candidate fails to produce any of the above documents or if any information furnished in the application is found to be wrong or false, the candidate will not be interviewed.
- Candidates request for change of date or place for the interview will not be entertained.
- Candidates are required to provide their valid email-id & contact number while submitting the application. If email-id & contact number is changed /updated, it should be intimated to the email-id [applications@nesac.gov.in](mailto:applications@nesac.gov.in) . In case of invalid email-id & contact number provided by any candidate, NESAC will not be responsible for the non-communication of any information which will be sent through bulk email.
- Only Indian Nationals should apply.
- Canvassing in any form will result in disqualification.
- No interim correspondence will be entertained. In case of any issues pertaining to online application, candidates may send mail to [applications@nesac.gov.in](mailto:applications@nesac.gov.in) with clearly mentioning the name of the position in the subject of the e-mail otherwise the query may not be responded and NESAC will not be responsible for not responding.
- **30.11.2022** will be cut-off date for all purposes like age, qualification, etc.
- The prescribed experience should be after acquiring the essential qualification.
- No TA/DA will be paid for attending the interview.

**“GOVERNMENT STRIVES TO HAVE A WORKFORCE WHICH REFLECTS GENDER BALANCE, HENCE WOMEN CANDIDATES ARE ENCOURAGED TO APPLY”**

**It is for the candidate to ensure that he/ she fulfills the eligibility criteria and complies with the requirements and adhere to the instructions contained in this advertisement. So, Candidates in their own interest are advised to carefully read the advertisement.**

***Hindi version will follow.***



**IMPORTANT**

**OPENING DATE FOR SUBMISSION OF ONLINE RECRUITMENT APPLICATION THROUGH NESAC WEBSITE [www.nesac.gov.in](http://www.nesac.gov.in) IS ON 14.11.2022**

**CLOSING DATE FOR SUBMISSION OF ONLINE RECRUITMENT APPLICATION THROUGH NESAC WEBSITE IS 16.00 HRS ON 30.11.2022**

**DATE FOR DETERMINING THE ELIGIBILITY IN ALL RESPECT SHALL BE THE PRESCRIBED CLOSING DATE FOR SUBMISISON OF ONLINE RECRUITMENT APPLICATION. THE APPLICANTS ARE ADVISED TO FILL IN THEIR PARTICULARS IN THE ONLINE RECRUITMENT APPLICATION CAREFULLY.**

**DATE FOR THE INTERVIEW SHALL BE INTIMATED SEPARATELY.**

**CANDIDATE SHOULD UPLOAD THE DEGREE AND MARKSHEETS IN ONE PDF FILE FOR ONE PARTICULAR QUALIFICATION e.g. FOR B.TECH, DEGREE & MARKSHEETS OF ALL THE SEMESTERS SHOULD BE MERGED IN ONE PDF FILE AND UPLOADED AND SIMILARLY FOR OTHERS ALSO.**

**SIZE OF THE DOCUMENTS TO BE UPLOADED IN PDF ONLY:-**

- |  |   |  |
|--|---|--|
| • PWD (Person with Disability) Certificate         | : | 1.5 MB (Max size)                        |
| • OBC/SC/ST Certificate                            | : | 1.5 MB (Max size)                        |
| • Ex-serviceman Certificate                        | : | 1.5 MB (Max size)                        |
| • Date of Birth Certificate                        | : | 1.5 MB (Max size)                        |
| • High School Marksheet & Certificate              | : | 1.5 MB (Max size)                        |
| • Intermediate Marksheet & Certificate             | : | 1.5 MB (Max size)                        |
| • B.E./B.Tech/B.Sc Degree Certificate              | : | 2.5 MB (Max size)                        |
| • B.E/B.Tech/B.Sc Merge Marksheet                  | : | 2.5 MB (Max size)                        |
| • B.E/B.Tech/B.Sc - CGPA to % Conversion Document  | : | 2.5 MB (Max size)                        |
| • M.E/M.Tech/M.Sc Post Graduate Degree Certificate | : | 2.5 MB (Max size)                        |
| • M.E/M.Tech/M.Sc Post Graduate Merge Marksheet    | : | 2.5 MB (Max size)                        |
| • M.E/M.Tech/M.Sc - CGPA to % Conversion Document  | : | 2.5 MB (Max size)                        |
| • NET/GATE/N-JET equivalent (Score Card)           | : | 2.5 MB (Max size)                        |
| • PhD award Certificate                            | : | 2.5 MB (Max size)                        |
| • Other Supporting Documents                       | : | 2.5 MB (Max size)                        |
| • Merge Work Experience Document                   | : | 1.5 MB (Max size)                        |
| • Photograph (only JPG File)                       | : | 20KB minimum and should not exceed 50 KB |
| • Signature (only JPG File)                        | : | 20KB minimum and should not exceed 50 KB |