y.urao, the centre is engaged in development of communication and navigation applications will be operational shortly. MARS orbiter mission, CHANDRAYAAN-2, Astrosat are some of the scientific and exploration missions which have garnered the attention internationally. The future missions being undertaken by URSC is highly challenging and provide opportunity to undertake development of innovative technologies and establish the advanced infrastructure needed for space exploration and beyond.

NOTE:

The following files/documents in soft copies are mandatory requirements to complete the online application:

1. Colour Passport size Photograph (JPEG file of max. 50 KB).
2. Marks card of each semester for having passed with the required percentage wherever it is applicable in the qualifying exam to be attached as single pdf (Pdf file of 500 KB).
3. NET or equivalent qualification score card for JRF/PDF file of 500 KB.

For RA position: Abstract of Ph.D thesis, award of Ph.D from University, or three years experience certificate and details of research paper in Science Citation Indexed (SCI) journal. (Pdf file of 500 KB).
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<th>पद सं. Position No.</th>
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<th>आवश्यक न्यूनतम अहाता Essential Minimum Qualification</th>
<th>कार्यक्षेत्र/कार्य विनिर्देशन Area of Work/ Job Specification</th>
<th>चयन का तरीका Mode of Selection</th>
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<tr>
<td>JRF01</td>
<td>01</td>
<td>भौतिक विज्ञान/अभियात्रिकी भौतिक विज्ञान/अनुप्रयुक्त प्रकाशिकी में एम.एस.सी.। एवं ई.टी. अथवा एन.ई.टी. के समतुल्य परीक्षाओं में अहाता प्राप्त अभ्यर्थी ही आवेदन देने हेतु पात्र हैं।</td>
<td>बहुखंड दर्पण प्रकाशिकी का विकास Development of segmented mirror optics.</td>
<td>साक्षात्कार Interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Sc. in Physics/ Engineering Physics/ Optics/ Applied Optics. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.</td>
<td>• विभिन्न जांच विधियों का प्रयोग करते हुए दर्पण खंड के अभिलक्षण Characterization of mirror segment using different test methods.</td>
<td></td>
</tr>
<tr>
<td>JRF02</td>
<td>02</td>
<td>भौतिक विज्ञान/अनुप्रयुक्त भौतिक विज्ञान/डायस्लिथ भौतिक विज्ञान में एम.एस.सी.। एवं ई.टी.। अथवा एन.ई.टी. के समतुल्य परीक्षाओं में अहिःप्राप्त अभ्यर्थी ही आवेदन देने हेतु पात्र हैं।</td>
<td>एम.ई.एम.एस. ज्योतिर विकास। Development of MEMS gyroscope.</td>
<td>साक्षात्कार Interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Sc. in Physics / Applied Physics / Solid State Physics. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.</td>
<td>• ग्लास प्रौद्योगिकी पर सिलिकॉन का प्रयोग करते हुए एक क्रिस्टल सिलिकॉन स्क्यूम मशीन साधनों का संरचना Fabrication of single crystal silicon micro machined devices using silicon on Glass Technology.</td>
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<tr>
<td>JRF03</td>
<td>01</td>
<td>भौतिक विज्ञान/सामग्री विज्ञान/अनुप्रयुक्त भौतिक विज्ञान में एम.एस.सी.। एवं ई.टी.। अथवा एन.ई.टी. के समतुल्य परीक्षाओं में अहिःप्राप्त अभ्यर्थी ही आवेदन देने हेतु पात्र हैं।</td>
<td>अवरक्त (आई.आर.) क्षेत्र में छर्र् विकास Filter development in the Infrared (IR) region.</td>
<td>साक्षात्कार Interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Sc. in Physics/Materials Science/Applied Physics or M.E./M.Tech. or equivalent in Material Science. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.</td>
<td>• अंतरराष्ट्रीय सौर पैनल/बैटरी विकास जो फोटोवोल्टाइक सौर पैनल/बैटरीयों का डिजाइन, संरचना, परीक्षण को शामिल करता है।</td>
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<tr>
<td>JRF04</td>
<td>03</td>
<td>भौतिक विज्ञान/खगोल भौतिकी/ग्रहीय विज्ञान में एम.एस.सी.। एवं ई.टी.। अथवा एन.ई.टी. के समतुल्य परीक्षाओं में अहिःप्राप्त अभ्यर्थी ही आवेदन देने हेतु पात्र हैं।</td>
<td>एक्स-रैय विकास X ray instrumentation.</td>
<td>साक्षात्कार Interview</td>
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<tr>
<td></td>
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<td>M.Sc. in Physics/ Astrophysics/Planetary Sciences. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.</td>
<td>• ग्रहीय एक्स-रैय स्पेक्ट्रल विकास Planetary X ray spectroscopy</td>
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<td>• खगोल भौतिकीय आंकड़ा विश्लेषण Astrophysical data analysis.</td>
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<td>पद सं. परिभाषा में उचितता की संख्या/Number of Vacancies</td>
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<tr>
<td><strong>JRF05</strong></td>
<td>04</td>
<td>अंकीय अभिकल्प सहित इलेक्ट्रॉनिक्स में एम.ई./एम.टेक. तथा विषय के रूप में वी.एच.डी.एल।</td>
<td>• अंकीय लॉगिक्स अभिकल्प हेतु एफ.पी.जी.ए.। • अंतर-स्थायित्व प्रणालियों तथा नाविक भू-प्रणालियों के लिए एन.आई.एल.। एन.एस.सी.। अवधारणा के साथ तंत्रज्ञातिकरण व परीक्षण। • FPGA/VHDL design for digital logics design, control applications, integration and testing with System on Chip, validation &amp; testing.</td>
<td>साक्षात्कार Interview</td>
</tr>
<tr>
<td>04 (04 रिक्त पदों में से 02 रिक्त पद इस्तेमाल के लिए निर्धारित है।)</td>
<td>रसायन विज्ञान में एम.एस.सी.।</td>
<td>Out of 04 Vacancies, 02 vacancies are identified for ISTRAC, Bengaluru.)</td>
<td>• 3-D मूल्यित कार्यक्रम के साथ-साथ गैर-धास्त्वक घटकों पर सतह अभ्यास का विकास, जोंच एवं अभिलक्षण। Development, testing and characterization of Surface treatment activities on 3-D printed metallic as well as non-metallic components.</td>
<td>साक्षात्कार Interview</td>
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<tr>
<td><strong>JRF06</strong></td>
<td>02</td>
<td>एन.ई.टी. अथवा एन.ई.टी. के समतुल्य परीक्षाओं में अहाता प्राप्त अभ्यास ही आवेदन देने हेतु पात्र हैं। M.Sc. in Chemistry.</td>
<td>• महत्वपूर्ण अवस्रों पर कार्यान्वयन के प्रयोग के लिए सॉफ्टवेयर एवं प्रोग्रामिंग का विकास। Development of software and programming for Mission operations, ground segment activities. • विभिन्न विभागों के लिए इफेक्टिव एल्गोरिदम विकास। कार्यक्रम के प्रयोग करते हुए विभिन्न आवश्यक सेटिंग्स का रसायन विकसित करना। Chemical Analysis of Lithium ion cells using various analytical tools.</td>
<td>साक्षात्कार Interview</td>
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<td><strong>JRF07</strong></td>
<td>02</td>
<td>कंप्यूटर विज्ञान/कृतिम मेधा/मशीन अध्ययन/अंकविद्या विकल्प में एम.ई./एम.टेक।</td>
<td>• मिश्र माध्यम, भू-खंड गतिविधि हेतु सॉफ्टवेयर एवं प्रोग्राम का विकास। Development of software and programming for Mission operations, ground segment activities. • नीतित्व प्रणाली गतिविधियों के लिए इमोटीकरण एवं दक्ष एल्गोरिदम विकास। Optimisation and efficient algorithm development for payload programming activities.</td>
<td>साक्षात्कार Interview</td>
</tr>
</tbody>
</table>
**JRF08** 01

- Optical-Optoelectronic\n- Instrumentation\n
M.E / M.Tech in Opto-electronics or Instrumentation. The candidates who are qualified in NET or equivalent examinations are only eligible to apply.

**RA01** 01

- Development and testing of Laser based
design and evaluation of Laser based
techniques.

- Interview

**RA02** 01

- Development, testing and
characterization of solar cells: To
understand the effect of radiation on
multijunction solar cells and studies
on solar array and power sources for
interplanetary missions.

- Interview

**Anusandhan Aneoshirante (आर.ए.) RESEARCH ASSOCIATE (RA)**

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<th>Essential Minimum Qualification</th>
<th>Area of Work / Job Specification</th>
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</thead>
</table>
| RA01         | 01                   | Ph.D. in Physics / Optics / Applied Optics /Opto-electronics. | Development of precision atomic optical \n
systems (atomic clock) with focus on following activities: | Interview |
| RA02         | 01                   | Ph.D. in Physics / Solid State Physics | Investigation of sensitive optical detection \n
techniques such as laser frequency \n
modulation to enhance the signal \n
(qquantum coherence - atomic resonance) contrast. | Interview |
Educational Qualification:

For Position No. JRF01, JRF02, JRF04, JRF06:

M.Sc or equivalent Degree in First Class with an aggregate minimum of 65% average of all Semesters or 6.84 CGPA/CPI on a 10 point scale. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.

For Position No. JRF05, JRF07, JRF08:

M.E / M.Tech or equivalent post graduate degree in First Class with an aggregate minimum of 60% or CGPA/CPI grading of 6.5 on a 10 point scale. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.

For Position No. JRF03:

For, M.Sc or equivalent Degree in First Class with an aggregate minimum of 65% average of all Semesters or 6.84 CGPA/CPI on a 10 point scale. For, M.E /M.Tech or equivalent post graduate degree in First Class with an aggregate minimum of 60% or CGPA/CPI grading of 6.5 on a 10 point scale. The candidates who are qualified in NET or NET equivalent examinations are only eligible to apply.

For Position No. RA01, RA02:

Ph. D in the relevant field or having three years of research, teaching and design and development experience after M.Tech/M.E or equivalent post graduate degree in First Class with an aggregate minimum of 60% or CGPA/CPI grading of 6.5 on a 10 point scale.

Candidates possessing Ph.D awarded by foreign Universities/Institutions have to submit its Equivalency Certificate issued by Association of Indian Universities, New Delhi.

NET/NET Equivalent qualifications:

Any national level examinations conducted by the Central Government departments / agencies for admission to Ph.D. programme are considered equivalent to NET. The following are the list of examinations, which can be equated to NET for the above positions:

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. Joint Entrance Screening Test (JEST).

4. **Age Limit:**

(A) **For the position of JRFs:**

- The maximum age limit is 35 years, and you must be 28 as of 01.10.2021.
- The maximum age limit is 5 years, and this can be relaxed by 5 years in case of SC/ST and 3 years in case of OBC candidates.
- Age relaxations as per Government of India orders are applicable to Ex-Servicemen, Persons with Benchmark Disabilities (PwBD), Widows, Divorced Women and Women judicially separated from their husbands and who are not remarried.

(B) **For the position of RAs:**

- The maximum age limit is 35 years, and you must be 28 as of 01.10.2021.
- The maximum age limit is 5 years, and this can be relaxed by 5 years in case of SC/ST and 3 years in case of OBC candidates.
- Age relaxations as per Government of India orders are applicable to Ex-Servicemen, Persons with Benchmark Disabilities (PwBD), Widows, Divorced Women and Women judicially separated from their husbands and who are not remarried.

5. **Fellowship & Stipend:**

(A) **For the position of JRFs:**

- The stipend is Rs. 47,000 per month, with a possibility to be increased to Rs. 35,000 per month, as SRF and HRA at the prescribed rates in force at the place of the candidate's work.
- Fellowships are admissible to regular employees.
- In addition, JRFs are eligible to get subsidised canteen facilities.
- There is a possibility to be increased to Rs. 35,000 per month, as SRF and HRA at the prescribed rates in force at the place of the candidate's work.
- JRFs are eligible only for casual leave. Maternity leave as per Government orders is applicable to JRFs.
- They are encouraged to pursue Ph.D with an external university registration.

(B) **For the position of RAs:**

- The stipend is Rs. 31,000 per month, with a possibility to be increased to Rs. 35,000 per month, as SRF and HRA at the prescribed rates in force at the place of the candidate's work.
- JRFs are eligible for this.
- They are encouraged to pursue Ph.D with an external university registration.

The Fellowship will be initially for a duration of TWO YEARS and is extendable for further periods based on the assessment of their work and requirement of project. The maximum period of engagement as Junior Research Fellow and Senior Research Fellow put together shall not exceed FIVE YEARS. JRFs with aptitude to pursue research in the respective areas will be encouraged to pursue Ph.D. with an external university registration. Fellowship Stipend as JRF will be Rs. 31,000 per month, with a possibility to be increased to Rs. 35,000 per month, as SRF and HRA at the prescribed rates in force at the place of the candidate's work.

The fellowship amount shall be taken as Basic pay for this purpose. JRFs are eligible only for casual leave. Maternity leave as per Government of India instructions would be available to all female JRFs. Apart from this, the candidates selected will not be entitled to any other benefits or concessions admissible to regular employees. In addition, JRFs are eligible to get subsidised canteen facilities.
The RAs will be engaged initially for ONE YEAR with a Fellowship of ₹ 47,000 per month and extendable for further period based on assessment of their work and requirement of Project. The maximum period of engagement of RA shall not exceed beyond THREE YEARS. RAs will also be eligible for HRA at the prescribed rates in force at the place of posting will be paid if they are not provided with Hostel accommodation and Medical benefits for self and members of his/her families residing with them will be allowed as per extant rules. No DA will be paid. The fellowship amount shall be taken as Basic pay for this purpose. RAs are eligible for leave as per extant rules of this organisation. Maternity leave as per Govt. Of India instructions would be available to all female RAs. Apart from this, the candidates selected will not be entitled to any other benefits or concessions admissible to regular employees. In addition, RAs are eligible to get subsidised canteen facilities.

6. चयन प्रक्रिया Selection Process:
जे.आर.एफ. तथा आर.ए. से संबंधित प्रत्येक पद के सामने प्रस्तावित योगदान का मूल्यांकन है तथा सभी होने के बावजूद अभ्यर्थी साक्षात्कार हेतु बुलाने के लिए अपने आप ही से हकदार नहीं बनता। आर-टीआई आवेदन में दिए गए शैक्षिक प्रमाणपत्र एवं अन्य प्राप्तियों पर प्रतिक्रियाएं नहीं होगी और अभ्यर्थियों को ही साक्षात्कार के लिए बुलाया जाएगा। चयनित अभ्यर्थियों को साक्षात्कार हेतु काल लेते मात्र ई-मेल द्वारा ही भेजा जाएगा। तदनतः साक्षात्कार का परिणाम इससे वेबसाइट में घोषित किया जाएगा।

The qualification prescribed against each of the respective positions of JRFs and RAs is the minimum requirement and possession of the same does not automatically make the candidates eligible to be called for Interview. There will be an initial screening based on the academic performance and other parameters given in the on-line applications and only those who screened-in, will be called for Interview. The call letters for the interview to the short-listed candidates will be sent only by e-mail.

The result of the interview will be announced in the ISRO website subsequently.

नोट Note:

जो केंद्र/राज्य सरकार, सार्वजनिक उपक्रम या स्वायत्त निकाय में कार्यरत हैं, उन्हें आन-टाइन आवेदन के उपरांत संबंधित नियोक्ता से ‘अनापत्ति प्रमाण-पत्र (एन.ओ.सी.)’ भेजना आवश्यक है। ये अपना नाम, पद जिसके लिए उन्होंने आवेदन दिया है/पद सं. और पजीकरण संबंधी आदेश अपार्जित प्रमाण-पत्र के पीछे अपेक्षा दें।

The online application has to be invariably followed-up with a ‘No Objection Certificate (NOC)’ from the Employer concerned by those who are already in employment under Central/State Government, Public Sector Undertaking or Autonomous Body, duly indicating the Name, the post for which applied/Position No. and Registration position on the reverse of the NOC.

7. आवेदन कैसे करें How to apply:

ऑन-टाइम प्रजीकरण के लिए आवेदन इससे वेबसाइट में 11.09.2021 से 01.10.2021 तक की अवधि के दौरान www.isro.gov.in “CAREERS” के अन्दर उल्लिखित करते हैं हो सकता है। अभ्यर्थी अपने आन-टाइन आवेदन प्रजीकरण करने हेतु 11.09.2021 एवं 01.10.2021 के बीच हमारे वेबसाइट पर जाएंगे। आवेदन-पत्र औषधियाँ पर ही प्राप्त किए जाएंगे। आन-टाइन प्रजीकरण करने पर, आवेदकों को आन-टाइन प्रजीकरण संबंधी उपलब्ध कार्य किया जाएगा, जिसे भविष्य में संदर्भ हेतु सुरक्षित रखें। अभ्यर्थी को ई-मेल आईडी के आवेदन में ऐसे एवं अनिवार्य रूप से उपलब्ध कराना होगा (मात्र ई-मेल द्वारा ही लाइट भेजा जाएगा)

The application for on-line registration will be hosted in the ISRO web-site i.e. www.isro.gov.in under the caption “CAREERS” during the period from 11.09.2021 to 01.10.2021. Candidates may visit our website to register their applications on-line between 11.09.2021 and 01.10.2021. Applications will be received through on-line only. Upon on-line registration, applicants will be provided with an on-line Registration Number, which should be carefully preserved for future reference. Email ID of the applicant will have to be provided in the online application correctly and compulsorily (Hall tickets will be sent by email only).

8. सामान्य शर्तें / General Conditions:

- यू.एच.ए.सी., अथवा इसमें अथवा/अंतरराष्ट्रीय विभाग के किसी भी केंद्र में निययम नियुक्ति के लिए जे.आर.एफ. तथा आर.ए. की ध्येयता में किसी भी दावा या अधिकार प्रस्तुत नहीं करेगा।

The position of JRF or RA will not confer any claim or right for regular appointment whatsoever in URSC or in any of ISRO/DOS Centres.

- साक्षात्कार के समय पर, शैक्षिक आ हता के प्रमाण में सभी डिग्री एवं सात्तकोटर डिग्री के मूल प्रमाण-पत्र, अंक सूचियाँ, एन.ई.ए.सी. एवं इ.सी. समस्त आ हता अंक सूची (विद्याभविष्य विवरण संपूर्ण गाइडलाइनों के साथ) से समस्त प्रमाण-पत्र कायम अनुपालन, अथवा हयाद दावा प्रमाण प्रस्तुत करना होगा। अभ्यर्थियों को साक्षात्कार के समय ऐसे सभी प्रमाण-पत्र के साथ प्रमाणित प्रत्यां भी लानी होगी।

Originals of all certificates, mark sheets of all degrees and post graduate degree, Ph.D in proof of educational qualification, NET/NET equivalent qualification score card (Equivalency Certificate from Association of Indian Universities, New Delhi in case of foreign Degree) Proof of work experience, age etc. should be produced at the time of interview. Candidates should also bring self-attested photocopies of all such certificates to the interview.
Those Candidates who have pursued Professional course through Open and Distance Learning (ODL) are not eligible to apply for both the positions.

Applications will be received through on-line only and all further communications will be made to the applicants through e-mail/ ISRO website only. Therefore, the applicants are advised to check their e-mail time to time. URSC will not be responsible for non-receipt of intimation regarding e-mail or / any communication due to technical or whatsoever reasons to the candidates.

Only passed candidates are eligible to apply. Students awaiting for final result are not eligible and hence need not apply.

The interviews will be conducted for the screened in candidates in Bengaluru only on a given date. However, URSC / ISRO reserves the right to conduct the interviews at any of the identified ISRO’s Center/s or Unit/s situated across India.

Any request for change in place and venue of interview or e-mail id for communication of the candidates will NOT be entertained.

The Research Associates will be engaged initially for ONE Year and is extendable for further period based on the assessment of their work and requirements of project. The maximum period of engagement of Junior Research Fellow and Senior Research Fellow shall not exceed FIVE YEARS. Awarding of SRF will be at the sole discretion of ISRO/DOS/URSC after the completion of two years as JRF. The fellowship will not confer any claim or right whatsoever for regular appointment in URSC or in any of ISRO/DOS Centres.
**Candidates**, who have not been finally selected, will not necessarily be rejected.

In case of any ambiguity/dispute arising on account of interpretation of the Hindi version, contents enumerated in English version only shall finally prevail.
कृपया आपके आवेदन से संबंधित नवीनतम अद्यतन स्थिति हेतु हमारे वेबसाइट www.isro.gov.in को देखें।

PLEASE VISIT OUR WEBSITE AT www.isro.gov.in FOR LATEST UPDATES ON THE STATUS OF YOUR APPLICATION.

ऑनलाइन आवेदन प्राप्त करने की अंतिम तारीख 01.10.2021 होगी।
LAST DATE FOR RECEIPT OF ON-LINE APPLICATION IS 01.10.2021.

इसरो में सेवा आरंभ करें एवं जीवन वृत्ति को सैंसारिक, प्रतिभाशाली वैज्ञानिक एवं तकनीकी समुदाय के साथ अपना ज्ञान बाँटें और राष्ट्र के विकास में सहयोग करें।
JOIN ISRO AND SHAPE-UP YOUR CAREER
SHARE YOUR KNOWLEDGE WITH TALENTED SCIENTIFIC AND TECHNICAL COMMUNITY AND SUPPORT NATIONAL DEVELOPMENT.

“सरकार ऐसे कार्यदल के लिए प्रयासरत है जो लिंग की समानता को अभिव्यक्त करता है अत: महिला अभ्यर्थी को आवेदन देने के लिए प्रेरित करता है।
“GOVERNMENT STRIVES TO HAVE A WORKFORCE WHICH REFLECTS GENDER BALANCE AND HENCE WOMEN CANDIDATES ARE ENCOURAGED TO APPLY”. 