**POST : SCIENTIST/ENGINEER-SC [LEVEL 10(₹ 56,000 - ₹ 1,77,500/- )]**

<table>
<thead>
<tr>
<th>Post No</th>
<th>No. of posts</th>
<th>Essential qualifications for the post</th>
<th>Physical Requirements</th>
<th>Nature of job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1320</td>
<td>03</td>
<td>1. M.E/M.Tech or equivalent in Engineering Mechanics/Machine Design/Mechanical Design in First Class with an aggregate minimum of 60% marks (average of all semesters) or CGPA/CPI grading of a minimum of 6.5 on a 10 scale or equivalent and 2. B.E/B.Tech or equivalent in Mechanical Engineering in First Class with an aggregate minimum of 65% marks (average of all semesters) or CGPA/CPI grading of 6.84 on a 10 scale or equivalent.</td>
<td>S, ST, W, BN, MF, PP, RW, SE, C, H, L, KC</td>
<td>Plan, Design, Analyse, Develop &amp; Realize electronics sub-systems for Inertial Navigation system. Study existing systems and develop state of the art system using modern technologies.</td>
</tr>
<tr>
<td>1321</td>
<td>01 Reserved for PWD-OH</td>
<td>M.Sc. degree in Chemistry (General Chemistry/Analytical Chemistry/Applied Chemistry) in First Class with an aggregate minimum of 65% marks (average of all semesters) or CGPA/CPI grading of a minimum of 6.84 on a 10 scale or equivalent.</td>
<td>S, ST, W, BN, CRL, CL, L, KC, RW, MF, PP, SE, C, H</td>
<td>Synthesis, chemical analysis, and R&amp;D in the field of specialty chemicals and materials for development of high performing materials for aerospace applications.</td>
</tr>
</tbody>
</table>

Post No.1321 is a backlog vacancy of PWD(OH- Orthopaedically Handicapped) category. If OH candidate is not be available for this post, HH (Hearing Handicapped with moderate disability) will be considered and therefore, HH candidates (with moderate disability) can also apply. If OH/HH candidates are not available, UR (Un-reserved) candidates will be considered for the post and the reservation for OH will be carried forward. Therefore, OH, HH & UR candidates may apply against this post.
<table>
<thead>
<tr>
<th>Post No</th>
<th>No. of posts</th>
<th>Essential qualifications for the post</th>
<th>Physical Requirements</th>
<th>Nature of job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1322 01</td>
<td>01</td>
<td>M.Sc. degree in Chemistry/Applied Chemistry with specialization in Organic Chemistry/Polymer Chemistry in First Class with an aggregate minimum of 65% marks (average of all semesters) or CGPA/CPI grading of a minimum of 6.84 on a 10 scale or equivalent.</td>
<td>S, ST, W, BN, CL, MF, PP, RW, SE, C, H, L, KC</td>
<td>Development and production of specialty chemicals, polymers and materials for space applications.</td>
</tr>
</tbody>
</table>

| 1323 04 | 04          | B.E/B.Tech or equivalent in Chemical Engineering in First Class with an aggregate minimum of 65% marks (average of all semesters) or CGPA/CPI grading of a minimum of 6.84 on a 10 scale or equivalent. | S, ST, W, BN, CL, MF, PP, RW, SE, C, H, L, KC | Planning and supervision of chemical processes in laboratory level and pilot plants. Design of chemical process equipment, development and scale up of new processes for producing polymers and materials for space applications |

For candidates with AMIE/Grad IETE qualification, there should be an aggregate minimum of 65% marks or CGPA/CPI grading of 6.84 on a 10 scale in Section ‘B’ alone.

POST : FIRE OFFICER-C [LEVEL 10 (₹ 56,000 - ₹ 1,77,500/- )]
ONLINE APPLICATIONS ARE ALSO INVITED FOR THE POSITION OF RESEARCH SCIENTIST PURELY ON CONTRACT BASIS FOR A PERIOD OF 3 YEARS [LEVEL 10(₹ 56,000 - ₹ 1,77,500/- )]

<table>
<thead>
<tr>
<th>Position No</th>
<th>No. of vacancies</th>
<th>Essential qualifications for the post</th>
<th>Physical Requirements</th>
<th>Nature of job</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>02</td>
<td>M.Sc degree in Meteorology in First Class with an aggregate minimum of 65% marks (average of all semesters) or CGPA/CPI grading of a minimum of 6.84 on a 10 scale or equivalent.</td>
<td>S,ST,W,BN,L,K C,MF,RW,SE,H, C,PP</td>
<td>Work in Shift duties on broad spectrum areas under the C-Band Polarimetric Doppler Weather Radar (DWR) facility at Thumba Equatorial Rocket Launching Station. DWR calibration, data validation, inter comparison of data among instruments, long term statistical analyses, atmospheric modeling and meteorological analyses during meso-synoptic weather events in collaborative multi-instrumented experiments.</td>
</tr>
</tbody>
</table>

Abbreviations


Note:

1. The post nos.1320, 1322, 1323 & 1324 are not identified for Persons with Disability (PWD). However, they can apply for the posts suitable to them even if the post is not identified for them. However, such candidates will be considered for selection to such posts by general standard of merit. Persons suffering from not less than 40% of relevant disability shall alone be eligible for the benefit of age relaxation as permissible under rules.
2. The above vacancies may vary depending upon the actual requirement.
3. The Centre reserves the right not to fill up any of the posts, if it so decides.

HOW TO APPLY

Applications will be received **on-line only and all further communications will be made to the applicants through e-mail/VSSC website only. Therefore, the applicants are advised to check their e-mail and visit the VSSC website from time to time.** The application format for on-line registration is available in the website [http://www.vssc.gov.in](http://www.vssc.gov.in) from 1000 hours on 10.04.2017 to 1700 hours on 24.04.2017. The candidates registered under National Career Service (NCS) portal and fulfilling the eligibility conditions may visit ISRO website and follow the application procedure as stated.

"Government strives to have a workforce which reflects gender balance and women candidates are encouraged to apply"
GENERAL CONDITIONS/INSTRUCTIONS

01. The posts are temporary, but likely to continue (except the position of Research Scientist).

02. The position of Research Scientist will be purely on contract basis for a period of 3 years.

03. **THOSE WHO POSSESS THE REQUIRED QUALIFICATION AS ON THE LAST DATE OF APPLICATION ONLY NEED TO APPLY.**

04. **AGE LIMIT** (as on 24.04.2016) and **Pay & allowances:**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Post No./Position No.</th>
<th>Post</th>
<th>Age Limit</th>
<th>Approximate Salary per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>1320 to 1323</td>
<td>Scientist/Engineer-SC</td>
<td>35 years</td>
<td>₹ 61,400/-</td>
</tr>
<tr>
<td>02</td>
<td>1324</td>
<td>Fire Officer-C</td>
<td>45 years</td>
<td>₹ 61,400/-</td>
</tr>
<tr>
<td>03</td>
<td>01</td>
<td>Research Scientist</td>
<td>35 years</td>
<td>₹ 61,400/-</td>
</tr>
</tbody>
</table>

Minimum age is 18 years for all posts.
Ex-Servicemen, Meritorious Sportspersons & Persons With Disability (PWD) are eligible for age relaxation as per Government of India orders.

05. The prescribed Physical Fitness/Endurance Test standards for the post of Fire Officer-I (Post No. 1321) is as follows;

(a) **Physical Fitness Standards:**

1. No deformity (inter-alia, bow legs, knock knees or flat foot shall be a disqualification)
2. Height 165 cm (minimum)
3. Weight 50 kg (minimum)
4. Chest 81 cm (minimum)
5. Chest on expansion 86 cm
6. Distant Vision 6/6 without glasses or any other aid
7. Near Vision Normal but for presbyopic correction for persons above 40 years
8. Night blindness is a disqualification
9. Colour blindness is a disqualification
10. Each eye must have full field of vision
11. Squint or any other morbid condition of the eyes, or of the eyelids of either eye liable to the risk of aggravation or recurrence, shall be deemed to be a disqualification
(b) Endurance Test Standards:

Out of the eight events shown below, candidates should select and qualify in at least five.

<table>
<thead>
<tr>
<th>SI No</th>
<th>Events</th>
<th>For candidates of age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Below 40 years</td>
<td>40 years &amp; above</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Three Star Standard</td>
<td>Two Star Standard</td>
<td>One Star Standard</td>
</tr>
<tr>
<td>1</td>
<td>100 metres run</td>
<td>12 seconds</td>
<td>13 seconds</td>
<td>14 seconds</td>
</tr>
<tr>
<td>2</td>
<td>High Jump</td>
<td>5 feet 3 inch (160.02 cm)</td>
<td>5 feet (152.40 cm)</td>
<td>4 feet 6 in (137.16 cm)</td>
</tr>
<tr>
<td>3</td>
<td>Long Jump</td>
<td>19 feet (5.80 metres)</td>
<td>17 feet (5.19 metres)</td>
<td>15 feet (4.57 metres)</td>
</tr>
<tr>
<td>4</td>
<td>Putting the shot of 7.27 kg (16 lbs)</td>
<td>28 feet (8.53 metres)</td>
<td>24 feet (7.32 metres)</td>
<td>20 feet (6.10 metres)</td>
</tr>
<tr>
<td>5</td>
<td>Throwing the Cricket ball</td>
<td>275 feet (83.82 metres)</td>
<td>225 feet (68.58 metres)</td>
<td>200 feet (60.96 metres)</td>
</tr>
<tr>
<td>6</td>
<td>Rope climbing (only hands)</td>
<td>16 feet (4.88 metres)</td>
<td>14 feet (4.27 metres)</td>
<td>12 feet (3.66 metres)</td>
</tr>
<tr>
<td>7</td>
<td>Pull-ups</td>
<td>15 Nos.</td>
<td>10 Nos.</td>
<td>08 Nos.</td>
</tr>
<tr>
<td>8</td>
<td>1500 metres run</td>
<td>5 minutes</td>
<td>5 minutes 15 seconds</td>
<td>5 minutes 45 seconds</td>
</tr>
</tbody>
</table>

(c) Syllabus of written test:

- Building Construction: Building classification, materials and their behavior under fire condition, types of occupancy, fire escape, building regulations.
- Fixed Fire Fighting Installation: Sprinkler systems, dranchers, automatic fire alarm systems, CO2 foam including different types of foam systems, Halon systems.
- Aircraft fire and rescue: Fire hazard in aircraft and action required for rescue and fire fighting.
- Foam and Foam making equipment: Different types of foam, their properties, use and operation of foam making equipment storage of foam compound.
- Hose and Hose fittings.
- Small and special gears and ladders, portable fire extinguishers.
- Water Tender and Pump: Classification, operation and maintenance.
- First Aid: First aid measures.
- Salvage: Before, during and after fire; Equipment used for salvage operations.
- Special Service: Rescue of trapped persons in lift, sewers, debris of collapsed buildings and well.
- Basic physics and chemistry: Heat and combustion, flammable liquids and their physical properties, liquids and gas fires. BLEVE dust explosion, propellant and explosives. Special hazards such as oxygen enriched/deficient atmospheres and cryogenics.
- Electricity: Fundamentals of generation and distribution, electrical hazard and protective measures, fire fighting in electrical installations, static electricity hazards.
- Hydraulics: Concepts of pressure and flow related to fire fighting, nozzle discharge, calculations of water requirements of specific fire condition, water relay system.
- Personal protection: Personal protection gear such as gas masks, SCBA, chemical protective suit, thermal protection suit, lead gear etc.
- Fire protection systems for high rise structures and buildings – knowledge of BIS (ISI) and NBC (National Building Code) with reference to building construction.
- Working out fire protection schemes for different types of buildings and installation including propellant processing, raw material storage and other light hazard occupancies.
- Forest fire management.
- Practical firemanship.
- Watch room procedure and mobilization – management of control, knowledge of topography of area, communication equipment in fire service, use of VHF sets.
- Breathing apparatus: Physiology of respiration, types of breathing apparatus, construction, working principles and maintenance.
- Fire service administration.
- UN classification of explosives and propellants.
- Fire protection requirements for liquid propellants and cryogenics.
- Advanced chemistry of combustion.
Modern fire fighting techniques and management.
Disaster management and control techniques.
Indian and International standards relating to fire appliances and buildings codes.
Environmental degradation vis-à-vis fire fighting.
Fire service administration – personnel management and material management.
Fire protection requirements for computer stations, static test pad for rocket motors, magazines and warehouses.
Personal Management, motivation and training.
Maintenance management.
Inventory Control.
Use of computers in fire service

06. For the Scientist/Engineer posts, the Organisation has a progressive HRD policy which provides an excellent growth potential for the right individual through its periodical merit based performance review system (called Merit Promotion Scheme) de-linked from availability of vacancies at higher post by which the staff are being evaluated for the advancement of their career in the Organisation.

07. The Organisation provides medical facilities (Contributory Health Service Scheme) for self and dependants, free transport facilities/transport allowance, subsidised canteen facilities, housing accommodation subject to availability, in addition to the facilities available to the other Central Government Staff. The Centre has a well-maintained Central School and a well-stocked Library that provides an excellent opportunity for professional development.

08. At present the place of posting is VSSC, Thiruvananthapuram, but the selected candidates are liable to be posted in any of the Units of the Indian Space Research Organisation/Department of Space situated anywhere in India as and when required.

09. Candidates will have to produce the proof of the details furnished in their applications submitted on-line as and when required.

10. **SELECTION PROCESS**:

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Test</th>
<th>Maximum Marks</th>
<th>Individual minimum required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Endurance test</td>
<td>30 (Three Star Standard)</td>
<td>20 (Two Star Standard)</td>
</tr>
<tr>
<td>2</td>
<td>Written Test</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Interview</td>
<td>40</td>
<td>20</td>
</tr>
</tbody>
</table>

In the recruitment, the candidates obtaining highest marks will be selected.
Please note that the qualification prescribed above for the posts advertised is the minimum requirement and the same does not automatically make the candidates eligible for selection.

11. The Centre reserves the right not to fill up any of the posts, if it so decides.

12. Only Indian Nationals need apply.

13. No interim correspondence will be entertained.

14. Canvassing in any form will be a disqualification.

15. Candidates working under Central/State Government, Public Sector Undertakings, Autonomous bodies etc. should submit their application through proper channel or submit ‘No objection certificate’ at the time of written test/interview.

16. Candidates possessing Degrees awarded by foreign universities should produce the equivalency certificate issued by Association of Indian Universities (AIU), New Delhi, at the time of interview.

16. Applications submitted without complete information, photo, signature etc. will summarily be rejected.

**PAYMENT OF APPLICATION FEE:**

There will be a **non-refundable** application fee of Rs.250/- (Rupees Two Hundred and Fifty only) for each application. Fee may be paid online through Credit Card / Debit Card / Internet Banking or can be deposited in any State Bank of India branch through SBI Collect facility. No other mode of payment will be acceptable and the fee will not be refundable under any circumstances.

Female/Scheduled Castes (SC)/ Scheduled Tribes (ST)/Ex-serviceman [EX] and Persons with Disabilities (PWD) candidates are exempted from payment of Application Fee. Please note that the applications of non-exempted categories without Application Fee will not be considered.

**SUBMISSION OF APPLICATION:**

Upon on-line registration, applicants will be provided with an on-line Registration Number, which should be carefully preserved for future reference. The candidates are also advised to take a printout of the online application for future reference.

The applicant need not send any documents such as print out of online application, receipt of cash payment, copies of certificates/mark lists in proof of educational qualification, work experience, age etc.

*Note: In case of submission of duplicate/multiple applications by Female/Scheduled Castes (SC)/ Scheduled Tribes (ST)/Ex-serviceman [EX] and Persons with Disabilities (PWD) candidates, the last application submitted before the last date of submission of application shall be considered for further processing. In case of submission of duplicate/multiple applications by other candidates including OBC, the application against which the ‘application fee’ has been received within the last date of payment of application fee only will be considered.*
APPLICATION FORMAT

01. Post applied for
02. Post No.
03. Advertisement Number & Date
04. Name in full (in BLOCK LETTERS)
05. Date and Place of birth
06. Nationality
07. Parent’s/Spouse’s name
08. Address for correspondence (in BLOCK LETTERS)
09. Nearest Railway Station
10. Permanent Address
11. Do you opt for Written Test/Interview in Hindi: YES / NO
12. Whether Scheduled Caste/Scheduled Tribe/OBC/Persons With Disability/Ex-Serviceman/Widow/divorced/Judicially separated (Strike out which are not applicable. Copy of the relevant certificate should be attached.)
13. Educational/Professional qualifications [indicating clearly the Examinations passed/ Courses undergone/University/Board/Institution/Year of passing/Class and Percentage of marks (corrected upto two decimals)/Subjects taken, etc.]
14. Details of previous/present employment/training, if any, in chronological order starting from the present position backwards (indicating the name of the employer with full address, post held, salary drawn, period of service, nature of duties, etc.).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name and Address of Employer</th>
<th>Period</th>
<th>Total Period of Service</th>
<th>Post held</th>
<th>Salary drawn</th>
<th>Nature of duties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>From</td>
<td>To</td>
<td>Years</td>
<td>Months</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL EXPERIENCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. If your answers to Serial number 13 and 14 above do not cover all the period from School leaving to till date, briefly state how you spent the uncovered period.
16. If selected, the minimum time required to join the post.
17. Any other relevant information you wish to add including references.

DECLARATION

I affirm that the information given in this application is true and correct. I also fully understand that if at any stage it is discovered that any attempt has been made by me to wilfully conceal or misrepresent the facts, my candidature may be summarily rejected or my employment terminated.

Date: Signature of the candidate