



Government of India
Department of Space
Indian Space Research Organisation
VIKRAM SARABHAI SPACE CENTRE
Thiruvananthapuram - 695 022

ADVERTISEMENT NO. VSSC-313 DATED 14.12.2019
INVITES ONLINE APPLICATIONS FOR THE FOLLOWING POSTS

POST : SCIENTIST / ENGINEER-SD [LEVEL 11(₹ 67,700 - ₹ 2,08,700)]				
Post Code	No. of posts	Essential qualifications	Physical Requirements	Nature of job
1436	01	1. Ph.D in Physics with specialisation in Atmospheric / Space Science with 2. M.Sc. or equivalent in Physics.	S, ST, W, BN, L, MF, RW, SE, H, C	R&D in Atmospheric and Space Science involving experimental developments including handling of chemicals and delicate instruments.
1437	05	1. Ph.D in Physics/ Atmospheric Science/ Meteorology / Space Science / Planetary Science with 2. Post-Graduation in Physics/Atmospheric Science/Space Science OR Graduation/Post Graduation in Engineering.	S, ST, W, BN, L, MF, RW, SE, H, C	Research and Development in the area of Atmospheric /Space/Planetary Sciences. The work will focus on theoretical studies/ modelling/ experiment development and exploration (including ground-based and space borne systems)/ development of remote sensing inversion techniques. Specific areas of research cover the following topics: aerosols; atmospheric physics and chemistry; meteorology; atmospheric spectroscopy; radiation transfer; numerical atmospheric modelling; boundary layer physics; clouds; atmospheric dynamics; LIDAR and radar based atmospheric probing; development of inversion techniques for satellite remote sensing in visible, IR and microwave domains for retrieval of atmospheric parameters and constituents; ionospheric and magnetospheric physics; space weather and modelling; plasma physics; energetic particles and radiation; planetary and cometary observations and modelling; development of satellite payloads for direct observations and remote sensing; atmospheric measurement techniques. The activities involve strong inter-disciplinary research.
1438	03 (VH-01 Low Vision)	1. Ph.D in Aerospace with 2. M.E / M.Tech or equivalent in Aerospace / Aeronautical / Mechanical Engineering and 3. B.E / B.Tech or equivalent in Aerospace / Aeronautical / Mechanical Engineering.	BLA, C, CL, CRL, HH, LV, MF, RW, S, SE, ST, W	Computational Methods for aeroacoustics with experience in Large Eddy Simulation/ Direct Numerical simulation. Experience in experimental aerodynamics in high enthalpy/hyper velocity testing techniques. Expected to develop/work in stress wave balance/free piston shock tunnel/ hypervelocity impact
1439	01	1. Ph.D in Microelectronics with 2. M.E / M.Tech or equivalent in Microelectronics and 3. B.E / B.Tech or equivalent in Electrical & Electronics / Applied Electronics & Instrumentation / Instrumentation Engineering	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Design & Development of Embedded Systems (Microelectronics)

1440	01	<ol style="list-style-type: none"> 1. Ph.D in Dynamics modelling and control of aerospace vehicles with 2. M.E / M.Tech or equivalent in Flight Mechanics / Systems & Control / Control Systems / Guidance & Control / Aerospace / Control Engineering & Instrumentation / System Science & Automation and 3. B.E / B.Tech or equivalent in Electrical / Electronics / Electronics & Communication / Aerospace / Mechanical With Courses In Control Engg 	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Guidance and control algorithm design and analysis for launch vehicle and reusable/re-entry vehicles, Control of propulsion systems, autonomous robotic vehicles.
1441	01	<ol style="list-style-type: none"> 1. Ph.D in Structural Analysis of Composite Hardware with 2. M.E / M.Tech or equivalent in Aerospace / Aeronautical / Mechanical Engineering and 3. B.E / B.Tech or equivalent in Aerospace / Mechanical Engineering. 	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Structural analysis of filament wound products with and without metallic liners, cryo tankages etc
1442	01	<ol style="list-style-type: none"> 1. Ph.D in Metallurgy / Material Science with 2. M.E / M.Tech or equivalent in Metallurgy / Material Science and 3. B.E / B.Tech or equivalent in Metallurgy / Material Science / Mechanical / Production Engineering. OR M.Sc. or equivalent in Material Science	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Mathematical Modelling, Simulations of Metallurgical and/or Metal Forming processes
1443	01	<ol style="list-style-type: none"> 1. Ph.D in Metallurgy / Material Science (Ceramic Technology) with 2. M.E / M.Tech or equivalent in Metallurgy / Material Science and 3. B.E / B.Tech or equivalent in Metallurgy / Material Science / Mechanical / Production Engineering. OR M.Sc. or equivalent in Material Science / Physics	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of Glasses and Glass Ceramics
1444	02	<ol style="list-style-type: none"> 1. Ph.D in Chemical Engineering with 2. M.E / M.Tech or equivalent in Chemical Engineering and 3. B.E / B.Tech or equivalent in Chemical Engineering. 	BLA, S, ST, W, BN, CL, L, KC, MF, RW, PP, SE, H, C	Modeling of fuel cell stack and optimization of next generation stack components; Design and development of porous separator plates for non-flow through fuel cell stack; development of high power density electrodes. Process modelling & Simulation of Polymer Processes, Development of advanced thermal protection systems; Modelling, Simulation and Development of CNT/Nano materials based composites.
1445	01	<ol style="list-style-type: none"> 1. Ph.D in Polymer Technology with 2. M.E / M.Tech or equivalent in Polymer Technology and / OR 3. M.Sc. or equivalent in Chemistry / Polymer Chemistry. 	S, ST, W, BN, CL, L, KC, MF, RW, SE, H, C, BLA, PP	Processing of advanced polymers such as Ultrahigh Molecular Weight Polyethylene (UHMWPE), polyetherether ketone (PEEK), high density polyethylene (HDPE) etc and their composites & other polymer processing activities of launch vehicles and satellites.
1446	01	<ol style="list-style-type: none"> 1. Ph.D in Chemistry (Molecular Modelling) with 2. M.Sc. or equivalent in Chemistry / Material Science. 	S, ST, W, BN, L, MF, RW, SE, H, C, BLA,	Molecular modelling & Molecular dynamics simulations

1447	01	1. Ph.D with specialisation in Experimental Cold Atoms / Cold Atom Chips / Cold Ion Traps / Bose Einstein Condensate with 2. M.E / M.Tech or equivalent in Opto Electronics / Optical Engg / Solid State Physics / Engg Physics OR M.Sc. or equivalent in Physics	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Design and development of Cold Atom based Navigation systems
POST : SCIENTIST / ENGINEER-SC [LEVEL 10(₹ 56,100 - ₹ 1,77,500)]				
Post Code	No. of posts	Essential qualifications	Physical Requirements	Nature of job
1448	10	1. M.E / M.Tech or equivalent in Industrial Engineering and 2. B.E / B.Tech OR equivalent in any Branch of Engineering	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Programme planning, Production planning and launch vehicle project management.
1449	07	1. M.E / M.Tech or equivalent in Control Systems Engineering / Control & Instrumentation / Control & Guidance / Control & Computing / Control & Automation / Systems & Control Engineering and 2. B.E / B.Tech or equivalent in any Branch of Engineering	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Launch vehicle dynamics modelling and simulations, development of flight software in embedded systems with Real Time Operating System. Optimal & robust control and guidance algorithm development, trajectory analysis and analysis tool development, simulation package development & mathematical modelling of control power plant for launch vehicles
1450	02	1. M.E / M.Tech or equivalent in Industrial Safety Engineering 2. B.E / B.Tech or equivalent in Mechanical Engineering / Industrial Engineering / Chemical Engineering / Electrical Engineering / Electrical & Electronics Engineering	S, ST, W, BN, L, KC, JU, CRL, CL, MF, RW, SE, H, C, PP, BLA	Safety inspection / audit of facilities and construction sites. Surveillance / supervision of hazardous activities. Risk assessment and Safety Studies for operations, process facilities. Analysis / Investigation of near miss incidents and accidents. Design of fire detection and protection systems for new facilities. Conducting safety training and motivational programmes. Preparation of safety guidelines for operations / processes / equipments.
1451	01	1. M.E / M.Tech or equivalent in Material Science & Engineering / Material Engineering / Surface Engineering and 2. B.E / B.Tech or equivalent in Mechanical Engineering.	S, ST, BN, KC, W, MF, SE, PP, L, C, RW, H	Plan, design, analyze, develop and realize Tribological process and thin film coating for sensors and actuators.
1452	02	1. M.E / M.Tech or equivalent in Aerospace Engineering / Aeronautical Engineering and 2. B.E / B.Tech or equivalent in Mechanical / Aerospace / Aeronautical Engineering.	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Computational and experimental fluid dynamics, aero-elastic analysis.

1453	06 (OH-01)	1. M.E / M.Tech or equivalent in Machine Design and 2. B.E / B.Tech or equivalent in Mechanical / Aerospace / Aeronautical Engineering.	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Aerospace hardware design, including composite, finite element analysis, fracture analysis, aero-elastic analysis and structural dynamics.
1454	01	1. M.E / M.Tech or equivalent in Propulsion and 2. B.E / B.Tech or equivalent in Mechanical / Aerospace / Aeronautical Engineering.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Solid rocket motor design and performance analysis
1455	01	1. M.E / M.Tech or equivalent in Manufacturing Engineering and 2. B.E / B.Tech or equivalent in Mechanical / Production Engineering.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Metrology, CAM, facility management
1456	02	1. M.E / M.Tech or equivalent in Non Destructive Testing and 2. B.E / B.Tech or equivalent in Mechanical / Metallurgy / Aerospace / Aeronautical / Material Science / Production Engineering.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Radiographic analysis of aerospace components
1457	02	1. M.E / M.Tech or equivalent in Metallurgy / Material Science and 2. B.E / B.Tech or equivalent in Mechanical / Metallurgy / Material Science / Production Engineering.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of materials for aerospace application including ceramics, composites & optical glasses.
1458	01	1. M.E / M.Tech or equivalent in Computer Science and 2. B.E / B.Tech or equivalent in Electronics & Communication Engineering / Computer Science & Engineering / Information Technology. OR M.Sc. or equivalent in Mathematics / Physics	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of all support software for launch vehicle applications
1459	01	1. M.E / M.Tech or equivalent in Electrical Machines and 2. B.E / B.Tech or equivalent in Electronics & Communication Engineering / Electrical Engineering.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Design and realisation of electric motors and components for aerospace applications
1460	02	1. M.E / M.Tech or equivalent in Digital Signal Processing / Image Processing / Computer Science and 2. B.E / B.Tech or equivalent in Electronics & Communication / Computer Science / Applied Electronics / Electrical & Electronics Engineering or equivalent.	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of image processing functions, digital zoom algorithms, real time display software & image processing software

1461	01	1. M.E / M.Tech or equivalent in VLSI and 2. B.E / B.Tech or equivalent in Electronics & Communication Engineering.	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Design & Verification of ASICs and FPGAs
1462	01	1. M.E / M.Tech or equivalent in RF Engineering / Microwave Engineering / Radar Engineering and 2. B.E / B.Tech or equivalent in Electronics & Communication Engineering.	BLOA, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of RF Systems
1463	01	1. M.E / M.Tech or equivalent in Polymer Technology / Engineering and 2. B.E / B.Tech or equivalent in Chemical Engineering / Polymer Technology. OR M.Sc. or equivalent in Chemistry / Polymer Chemistry.	BA, BL, BN, C, CL, CRL, H, JU, KC, L, MF, PP, RW, S, SE, ST, W	Development of Cryogenic insulation systems, smart polymer & shape memory polymers.
1464	01	1. M.E / M.Tech or equivalent in Chemical Engineering and 2. B.E / B.Tech or equivalent in Chemical Engineering.	BLA, S, ST, W, BN, CL, L, KC, MF, RW, PP, SE, H, C,	Chemical reaction engineering with expertise in modelling & simulation. Development of rocket propellant materials involving experiments, testing and analysis
1465	04 (VH-01- (Low Vision)	M.Sc. or equivalent in Mathematics / Applied Mathematics.	S, ST, BN, KC, W, MF, SE, PP, L, C, RW, H	Plan, design, analyze, develop and realize mathematical models, algorithm and software for Navigation Systems.
		ONE out of the 04 vacancies is a backlog vacancy of PWBD (VH- Visually Handicapped) category. If VH candidate is not available, UR (Un-reserved) candidates will be considered for the post and the reservation for VH will be carried forward.		
1466	01	M.Sc. or equivalent in Chemistry with specialisation in Polymer Chemistry OR M.Sc. or equivalent in Polymer Chemistry	S, ST, W, BN, CL, L, KC, RW, MF, PP, SE, C, H	Development and production of polymers and ceramic matrix composites.
1467	06 (HH-01)	B.E / B.Tech or equivalent in Chemical Engineering.	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
		ONE out of the 06 vacancies is a backlog vacancy of PWBD (HH- Hearing Handicapped) category. If HH candidate is not available, UR (Un-reserved) candidates will be considered for the post and the reservation for HH will be carried forward.		
1468	02	B.E / B.Tech or equivalent in Automobile Engineering.	S, ST, W, BN, L, KC, CRL, CL, MF, RW, SE, H, C	Responsible for supervision, maintenance and operation of a large fleet of heavy and light vehicles. Responsibility includes spare parts management, procurement and inspection.

1469	04	B.E / B.Tech or equivalent in Metallurgy / Material Science or equivalent.	BA, BL, S, ST,W, BN, L, KC, JU, CRL, CL, MF, RW, SE, H, C, PP	Material processing, development and testing, quality control, characterisation, metallic working and indigenous realisation of metallic materials for launch vehicle programme.
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For Post Nos. 1448 to 1469, the qualifications of M.E / M.Tech or equivalent should be 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 B.E / B.Tech / M.Sc or equivalent should be 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. 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 : MEDICAL OFFICER-SD [LEVEL 11 (₹ 67,700 - ₹ 2,08,700)]

Post Code	No. of posts	Essential qualifications	Physical Requirements	Nature of job
1470	01	1. MD in General Medicine from a recognized university / Equivalent Post Graduate Degree in General Medicine. 2. Registration of additional qualification (MD or Equivalent) with Medical Council of India / State Medical Council.	S, ST, W, BN, L, KC,MF, RW, SE, H, C, BA,BL.	(a) Attending to patients reporting to Department Clinics. (b) Pre employment and Periodic medical check ups (c) Handling medical emergencies (d) General administration of Medical unit. (e) Health education.

POST : MEDICAL OFFICER-SC [LEVEL 10 (₹ 56,100 - ₹ 1,77,500)]

Post Code	No. of posts	Essential qualifications	Physical Requirements	Nature of job
1471	01 (OH-01)	1. MBBS / equivalent from a recognized University 2. Permanent Registration with Medical Council of India 3. Minimum 2 years' clinical experience in a reputed hospital. Preferably with Diploma in Industrial Health OR Associate Fellow of Industrial Health (AFIH)	S, ST, W, BN, MF, RW, SE, H,C	Attending to patients in Department Clinics & Occupational Health Unit. Handling medical and surgical emergencies. Pre-employment medical checkup. Periodic/ Mandatory Medical checkup of employees. Providing medical cover during launch activities. Providing health education to employees and Staff family members. Administrative work of Medical Units. Epidemiological study with regard to vector borne diseases in the campus and ISRO Staff Colonies. Have to move in ambulances during evacuation of patients. Will have to do standby duties at launch sites which involve standing in areas where there is a potential risk or exposure to hazardous chemicals. Job involves extended working hours and extensive travelling to various ISRO centers and work centers.
This vacancy is a backlog vacancy of PWBD (OH - Orthopedically Handicapped) category. If OH candidate is not available, UR (Un-reserved) candidates will be considered for the post and the reservation for OH will be carried forward.				

Abbreviations	UR=Un-reserved, PWBD=Persons with Benchmark Disabilities, OH=Orthopaedically Handicapped, HH=Hearing Handicapped, S=Sitting, ST=Standing, W=Walking, BN=Bending, L=Lifting, RW=Reading & Writing, MF=Manipulation by Fingers, SE=Seeing, C=Communication, CRL=Crawling, CL=Climbing, PP=Pulling & Pushing, KC=Kneeling & Crouching, H=Hearing, BA=Both Arms, BLA=Both Legs Arms, BLOA – Both Leg and Arms
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General Note:

1. Persons with Benchmark Disability (PWBD) 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.

Special Note:

1. For Post Nos. 1436 to 1447, those who have already registered in ISRO Live Register as on Advertisement Date can also apply afresh against suitable post(s) in this advertisement. They shall mention the registration details appropriately while applying online.
2. For Post No. 1470 (Medical Officer-SD), the approximate minimum salary is ₹ 1,03,000 /- & for Post No. 1471 (Medical Officer-SC), the approximate minimum salary is ₹ 85,800 /- [including Non-Practising Allowance (NPA)].

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. For submission of online applications, please visit VSSC website [http:// www.vssc.gov.in](http://www.vssc.gov.in) from 1000 hours on 20.12.2019 to 1700 hours on 03.01.2020. The candidates registered under National Career Service (NCS) portal and fulfilling the eligibility conditions may visit VSSC website and follow the application procedure as stated above.

"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.

02. THOSE WHO POSSESS THE REQUIRED QUALIFICATION AS ON THE LAST DATE OF APPLICATION (AS ON 03.01.2020) ONLY NEED TO APPLY.

03. AGE LIMIT (AS ON 03.01.2020) AND PAY & ALLOWANCES :

SI No	Post Code	Post	Age limit (years)	Approximate Salary per month (₹)
01	1436 to 1447	Scientist / Engineer-SD	No upper age limit	90,000 / -
02	1448 to 1469	Scientist / Engineer-SC	35	74,600 / -
03	1470	Medical Officer-SD	No upper age limit	1,03,000 / -
04	1471	Medical Officer-SC	35	85,800 / -

[Ex-Servicemen, Meritorious Sportspersons & Persons With Benchmark Disability (PWBD) are eligible for age relaxation as per Government of India orders]

04. 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.
05. 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.

06. 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.

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

08. **SELECTION PROCESS :**

Based on the online bio-data, initial screening / written test will be conducted for shortlisting the candidates for interview. The Centre may adopt the method of conducting written test for initial screening or may directly shortlist the candidates for interview by fixing a higher cut-off percentage of marks scored in the essential qualification advertised. Candidates called for Written Test / interview will have the option to answer the questions in Hindi also. Please note that the qualification prescribed is the minimum requirement and the same does not automatically make candidates eligible for written test / interview / selection. If written test is opted for preliminary screening, the written test score will not reflect in the final selection process. The final selection will be based on performance of candidates in the interview only.

09. Only Indian Nationals need apply.

10. No interim correspondence will be entertained.

11. Canvassing in any form will be a disqualification.

12. 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.

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

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

15. **PAYMENT OF APPLICATION FEE :**

There will be a **non-refundable** application fee of Rs.250 / - (Rupees Two Hundred & Fifty Only) for each application. Fee may be paid online through Credit Card / Debit Card / Internet Banking only through Integrated SBI ePay facility. No other mode of payment will be acceptable and the fee will not be refunded under any circumstances.

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

16. **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.

17. The applicants need not send any documents such as printout of online application, 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-SM] and Persons with Benchmark Disabilities (PWBD) candidates, the latest application submitted before the closing date of submission of application shall be considered for further processing. In case of candidates paying application fee and submitting multiple applications, the application against which the 'application fee' has been received within the closing date of application only will be considered.
