

# सीएसआईआर-संरचनात्मक अभियांत्रिकी अनुसंधान केन्द्र CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (Council of Scientific and Industrial Research)

सीएसआईआर रोड़ CSIR Road, तरमणी Taramani, चेन्नै Chennai 600 113

### **ADVERTISEMENT NO.SE-1/2017**

Last Date for Receipt of Online Application 03.05.2017

Last Date for Receipt of the hard copy of online application 15-05-2017

Opportunity beckons at CSIR-SERC for an exciting R&D Career in Structural Engineering

The Council of Scientific and Industrial Research (CSIR) is an autonomous organization under the Ministry of Science & Technology, Government of India. It is amongst the foremost scientific and industrial research set-ups in the world. Having state-of-the-art infrastructure, scientific and technical manpower second to none, CSIR covers practically the entire spectrum of scientific and industrial R&D of national and international importance. This ranges from aerospace to ocean exploration, micro-electronics to structural and environmental engineering, smart materials to mechatronics, petrochemicals to synthetic biology and from robotics and micro-machines to drugs & pharmaceuticals and agrochemicals.

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai, is a premier National Laboratory under the Council of Scientific and Industrial Research. The thrust areas of R & D of the Centre are: Structural health monitoring and Life extension, Disaster mitigation, Sustainable materials and structures and Special and Multi – functional Structures. The Centre has built up excellent facilities for testing of structures and structural models, and also for mathematical modeling and simulation.

The Centre invites applications from highly qualified and motivated candidates for taking up R&D activities and also for providing engineering services to solve the problems of the industry and the society besides participating in the development of laboratory facilities. In order to meet the demand in the above areas and to augment and diversify, **applications are invited online**, from enthusiastic result oriented Indian researchers having outstanding academic record and proven scientific and technological achievements with relevant experience and high degree of motivation, to fill up the vacancies as detailed below:

Post Code	Pay Band	Name and Number of posts/ Reservation & Grade Pay (GP) / Age limit not exceeding	Educational Qualifications and Experience	Desirable Experience	Job Specification
SCT-2	₹15600- 39100 (PB-3)	Scientist * 11 Posts SC -1 /ST -1/ OBC-3 /UR-6 GP ₹6600/- 37/ 35/ 32 years  Sr. Scientist * GP ₹7600/- 42/ 40/ 37 years	M.Tech./M.E. or equivalent recognized Post Graduate degree in Structural Engineering / Applied Mechanics / Aerospace Engg./ Design Engineering working in the broad area of Structural Engineering and Structural Mechanics  M.Tech./M.E. in Structural Engineering / Applied Mechanics / Aerospace Engg./ Design Engineering with 2 years experience working in the broad area of Structural Engineering and Structural	Knowledge of one or more of the following areas are desirable: advanced structural analysis and design, characterization and modelling of advanced materials including composite materials, multi - functional structures; special structures; Non-destructive Testing and Evaluation; structural health monitoring; familiarity with computer programming, use of softwares, and experimental techniques for structural engineering applications. Candidates who show flair for Product Development/Technology Innovation/Applied Technology will be preferred.	The candidates selected would be required to work in any of the following R&D areas that would call for any or combination of analytical, computational, field, laboratory investigations;  [a] Structural Concrete Engineering and Technology  [b] Sustainable Materials and Composites  [c] Structural Health Monitoring, Evaluation and Forensic analysis  [d] Retrofitting/ rehabilitation of Structures  [e] Theoretical and Computational Structural Mechanics  [f] Transmission Line Towers — Analysis, design, testing & evaluation  [g] Metal Structure Behaviour  [h] Fatigue & Fracture  [i] Wind Engineering  [j] Earthquake Engineering  [k] Risk & Reliability Engineering  [l] Inter disciplinary Structural Problems and  [m] Special and Multifunctional Structures
			Mechanics.		

<sup>\*</sup> Number of posts mentioned for Scientist and Senior Scientist are common i.e. 11 posts

Code Band N	Designation / No. of posts / Reservation	Educational Qualifications and	Desirable Experience	Job Specification
	& Grade Pay (GP) / Age limit not exceeding	Experience		
39100 (L (PB-3) E 00 U	Sr. Scientist (Lateral Entry) 04 Posts JR GP ₹7600/- 87 years	M.Tech./M.E. in Structural Engineering / Applied Mechanics / Aerospace Engg./ Design Engineering with 2 years experience working in the broad area of Structural Engineering and Structural Mechanics OR Ph.D. in the broad area of Structural Engineering and Structural Mechanics.	Knowledge of one or more of the following areas are desirable: advanced structural analysis and design, characterization and modelling of advanced materials including composite materials, multi functional structures; special structures; Nondestructive Testing and Evaluation; structural health monitoring; familiarity with computer programming, use of softwares, and experimental techniques for structural engineering applications. Candidates who show flair for Product Development/Technology Innovation/ Applied Technology will be preferred.	The candidates selected would be required to work in any of the following R&D areas that would call for any or combination of analytical, computational, field, laboratory investigations;  [a] Structural Concrete Engineering and Technology  [b] Sustainable Materials and Composites  [c] Structural Health Monitoring, Evaluation and Forensic analysis  [d] Retrofitting/ rehabilitation of Structures  [e] Theoretical and Computational Structural Mechanics  [f] Transmission Line Towers — Analysis, design, testing & evaluation  [g] Metal Structure Behaviour  [h] Fatigue & Fracture  [i] Wind Engineering  [j] Earthquake Engineering  [k] Risk & Reliability Engineering  [l] Inter disciplinary Structural Problems and  [m] Special and Multifunctional Structures
67000 (PB-4) 00 G 4:	Principal Scientist ** 33 Posts JR GP ₹ 8700/- 45 years  Senior Principal Scientist ** GP ₹ 8900/- 50 years	Ph.D (Engineering) in the broad discipline of Structural Engineering / Structural Mechanics with 3 years experience in the area related to structural health monitoring / special and multi-functional structures / computational mechanics / earthquake engineering / fatigue and fracture  Ph.D (Engineering) in the broad discipline of Structural Engineering / Structural Engineering / Structural Mechanics with 6 years experience in the area related to structural health monitoring/ special and multi-functional structures / computational mechanics / earthquake engineering / fatigue	Knowledge of one or more of the following areas is desirable: advanced structural analysis and design, characterization and modelling of advanced materials including composite materials, multi-functional structures; special structures; Nondestructive Testing and Evaluation; structural health monitoring; earthquake engineering; fatigue and fracture; familiarity with computer programming, use of softwares, and experimental techniques for structural engineering applications. Candidates who show flair for Product Development/ Technology Innovation/ Applied Technology will be preferred.	The candidates selected would be required to work in the following R&D areas that would require knowledge on carrying out analytical, computational, field and laboratory investigations:  [a] structural health monitoring of bridges, buildings and thin walled structures [b] theoretical and computational structural mechanics [c] special and multi-functional structures [d] earthquake engineering [e] fatigue and fracture

<sup>\*\*</sup> Number of post mentioned for Principal Scientist and Senior Principal Scientist are common i.e. 3 post.

### General information and conditions:-

### [A] Benefits under Council service:

- 1. These posts carry usual allowances i.e. Dearness Allowance (DA), House Rent Allowance (HRA), Transport Allowance (TA) etc. as admissible to the Council employees and as stationed in Chennai. Council employees are also eligible for accommodation of their entitled type as per CSIR allotment rules depending on availability in which case HRA will not be admissible.
- 2. Scientists in Pay Band-3 and Pay Band-4 are also eligible for 2 additional increments (without DA) and Professional Update Allowance of ₹10000/- and ₹20000/ per annum respectively for PB-3 and PB-4.
- 3. Besides pay, these posts carry usual allowances as admissible under the Council rules. The total emoluments at the minimum of the scale for the posts at present is as follows (including House Rent Allowance as per VI Pay Commission) as applicable for the city of Chennai.
  - a. Scientist ₹18750 + GP of ₹ 6600 in the Pay Band PB-3 ₹15600-39100= ₹ 75,511/-
  - b. Sr. Scientist ₹21900 + GP of ₹ 7600 in the Pay Band PB-3 ₹15600-39100= ₹ 84,714/-
  - c. Principal Scientist ₹37400 + GP of ₹ 8700 in the Pay Band PB-4 ₹37400-67000= ₹1,28,206/-
  - d. Sr. Principal Sct. ₹40200 + GP of ₹ 7600 in the Pay Band PB-4 ₹37400-67000=₹1,36,066/- (The above pay are to be revised on implementation of VII Pay Commission recommendations)
- 4. In addition to the emoluments indicated against each category of posts, benefits such as reimbursement of Medical expenses, Leave Travel Concession, Conveyance advance and House Building Advance are available as applicable to Council employees.
- 5. The selected candidate under CSIR-SERC will be governed by the New Defined Contribution Pension Scheme of Government of India as made applicable with effect from 1<sup>st</sup> January 2004 and amended from time to time.
- 6. Scientists in CSIR are also permitted to undertake consultancy and sponsored R&D Project activity. These activities give them scope to earn consultancy fee and honorarium as per guidelines governing these activities. Opportunities also arise for foreign deputation for training/ presentation of papers/specific assignments etc.
- 7. CSIR provides excellent opportunities to deserving candidates for career advancement under Assessment Promotion Scheme for Scientists. (ref: www.csir.res.in by clicking "RAB" from the Home page)

### [B] Relaxations:

- 1. The date for determining the age limit/experience/qualifications shall be the closing date prescribed for applying online i.e. <u>03-05-2017</u>.
- 2. The upper age limit is however, relaxable as per Government orders in force only in those cases where the posts are reserved for respective categories, on production of relevant certificate in the prescribed format signed by the specified authority at the time of interview.
- 3. Upper age limit is relaxable up to 5 years for the regular employees working in CSIR Laboratories/ Institutes, Government Departments, Autonomous Bodies and Public Sector undertakings for the post of Scientists.
- 4. Relaxation in case of Ex-servicemen will also be applicable as per provisions.
- 5. Relaxation in the upper age limit of 5 years applicable for the persons who had been domiciled in the Kashmir Division of the State of J&K during the period of 01-01-1980 to 31-12-1989 subject to production of a certificate from the District Magistrate in the Kashmir Division within whose jurisdiction he/she had ordinarily resided OR from any other authority designated in this behalf by the Government of J&K State to the effect that he/she had ordinarily been domiciled in the Kashmir Division of State of J&K during the period from 01-01-1980 to 31-12-1989.
- 6. Special Age Relaxation: Up to the age of 35 years (up to 40 years for SC/ST and 38 Years for OBC) in the case of Widows, Divorced Women and women judicially separated from their husbands, who are not re-married.
- 7. Age relaxation to persons with disabilities (PWD) up to 5 years is allowed (10 years for SCs/STs and 8 years for OBCs).
- 8. Relaxation in age, qualification and/or experience may be permitted if sufficient number of candidates possessing the requisite qualification and/or experience are not likely to be available to fill up the posts.

### [C] General conditions/Information:

- 1. The applicant must be a citizen of India.
- 2. Candidate should ensure that he/she possesses educational qualification/experience in the relevant area as required in the category/post, for which he/she is applying, on the last date of receipt of online application.
- 3. The number of vacancies indicated against each category is provisional and may vary at the time of selection.
- 4. The above posts are substantive and will be probation for a period of one year.
- 5. The period of experience in a discipline/area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed educational qualification prescribed for that post.
- 6. The qualifications prescribed should have been obtained through recognized Universities/Institutions.
- 7. Application form should be complete in all respects. Completed application means (i) all information sought duly filled in or provided (ii) application form duly signed with date wherever required /asked (iii) the application should be accompanied by self-attested copies of all relevant documents to be enclosed. Incomplete applications/applications received not accompanied by the required certificates/documents are liable to be rejected.
- 8. IN THE EVENT OF NUMBER OF APPLICATIONS BEING LARGE, CSIR-SERC WILL ADOPT **SHORT LISTING CRITERIA** TO RESTRICT THE NUMBER OF CANDIDATES TO BE CALLED FOR INTERVIEW TO A REASONABLE NUMBER BY ANY OR MORE OF THE FOLLOWING METHODS:
  - On the basis of higher educational qualifications than the minimum prescribed in the advertisement.
  - ii) On the basis of higher experience in the relevant field than the minimum prescribed in the advertisement.
  - iii) On the basis of Marks obtained in the academic qualification.
  - iv) By holding a written test.
  - v) Any other methodology as deemed fit by Screening Committee.
- 9. Higher initial pay can be considered for exceptionally meritorious candidates.
- 10. If any document/certificate furnished is in a language other than Hindi or English, a transcript of the same duly attested by a Gazetted officer or notary is to be submitted.
- 11. Outstation candidates called for interview will be paid to and fro single second class rail fare / ordinary bus fare from the normal place of their residence or that declared in the application or from the actual place of undertaking the journey, in India, whichever is nearer to the place of the interview, as per rules.
- 12. Canvassing in any form and/or bringing in any influence, political or otherwise, will be treated as a disqualification for the post. Interim enquiries will not be attended to.
- 13. The decision of the Director, CSIR-SERC in all matters relating to eligibility, acceptance or rejection of applications, mode of selection, conduct of test/interview as per 'CSIR Scientists Recruitment & Assessment Promotion Rules 2001' and not to fill up all or any of the posts will be final and binding on the candidates and no interim enquiry or correspondence will be entertained in this connection from any individual or his/her agency.

## [D] Mode of Selection:

- 1. Mere fulfillment of educational qualifications and experience does not entitle a candidate to be called for interview. The duly constituted Screening Committee will adopt its own criteria for short-listing the candidates and only those candidates who, in the opinion of the Institute, suit the institutional requirements, will be called for interview. The candidate should therefore, mention in the application all the qualifications and experiences in the relevant area over and above the minimum prescribed qualifications, supported with documents. Completion of Ph.D. degree will be reckoned from the date of issue of provisional certificate/notification.
- 2. Candidates of Indian origin settled abroad who are of proven merit as evidenced by their qualification; research work and experience may be considered by the Selection Committee in Absentia on his/her written request.
- 3. The Selection Committee depending upon the performance of the candidate may choose to place the candidate in any of the Grade Pay within the Pay Band subject to meeting the minimum eligibility criterion specified.

### [E] How to apply:

- Applications from employees working in Government Departments, Public Sector Organizations and Government funded research agencies will be considered only if forwarded through proper channel with a clear certificate that the applicant will be relieved within one month of receipt of the appointment order. However advance copy of the application may be submitted before the closing date.
- 2. (a) Eligible candidates are required to apply on-line through CSIR-SERC website http://www.serc.res.in. No other mode of application will be accepted.
  - (b) Online application will be available on CSIR-SERC website up to 03-05-2017, 5.30 pm.
  - (c) The candidate has to remit application fee of ₹500/- (wherever applicable) through Net Banking to the following account and fill up the transaction details in the prescribed columns of on-line application:

Name of Account Holder : Director, CSIR-SERC, Chennai

Account Number : 30225927924

Bank Name : State Bank of India, Taramani

IFSC Code : SBIN0010673 MICR No. : 600002130

- (d) SC/ST/PWD/Women/CSIR Employees/Abroad Candidates are exempted from submission of application fee.
- 3. Candidate should keep a copy of the application print out for their record.
- 4. Application once made will not be allowed to be withdrawn and fees once paid will not be refunded on any count nor can it be held in reserve for any other recruitment or selection process.
- 5. Candidates should specifically note that the applications received after the closing date for any reason whatsoever will not be entertained by CSIR-SERC.
- 6. Hard copy of the online application duly signed along with recent passport size photograph, self-attested copies of matriculation/SSLC as proof of age/degree/provisional degree certificate, copies of mark sheets for all the semesters/years, SC/ST/OBC certificate(s), work experience certificates, testimonials etc. should reach us in a sealed cover superscribed "Application for the post of <u>Scientist / Senior Scientist / Principal Scientist/Senior Principal Scientist"</u> to "THE ADMINISTRATIVE OFFICER, CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE, CSIR CAMPUS, POST BAG NO.8287, CSIR Road, TARAMANI, CHENNAI 600 113' on or before 15-05-2017, 5.30 pm.

ADMINISTRATIVE OFFICER

This advertisement may also be seen in CSIR-SERC website: "www.serc.res.in" by clicking "Recruitment" from the Home Page