

# सीएसआईआर-केन्द्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान

## CSIR-CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE





पिलानी, राजस्थान (भारत)/Pilani, Rajasthan - 333031 (INDIA)

Advertisement No. 03/2017 dated 03.08.2017

Last Date for Receipt of the Application: 11.09.2017

## A Unique Opportunity for Research Careers in Electronics & Allied Technologies

## **Come, Prove your Mettle: Excel in Innovation**

CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani is a premier research Institution in the field of Electronics established under the aegis of Council of Scientific & Industrial Research (CSIR) in 1953. It undertakes multi-disciplinary R&D activities and projects in three broad areas, namely: (1) Cyber Physical Systems [Groups: Cognitive Computing, IoT, Signal Analytics, Control & Automation, Power Electronics, and Integrated Systems]; (2) Smart Sensors [Groups: Process Technologies, Nano Bio-Sensors, Transducers & Actuators, Optoelectronics & MOEMS, Flexible & Non-Silicon Electronics, and Advanced Packaging]; (3) Microwave Devices: [Groups: Beam Dynamics, Beam-Wave Interaction, Device Technology, and Vacuum Microelectronic Devices]. CSIR-CEERI also has a Centre at Chennai and is in the process of establishing out-reach centres at Jaipur and Delhi. The Institute reserves the right to post the Scientist to any of its locations.

Applications are invited from enthusiastic, young Indian researchers having excellent academic record and proven scientific achievements along with requisite experience and a high degree of motivation and desire to take up research in electronics & allied technologies as a career to fill the vacancies for the following scientific positions as per the details given below for locations at Pilani/Chennai/Jaipur/Delhi:

Designation	No. of Posts & Reservation	Pay Level and Pay Matrix	*Total Emoluments	**Upper Age Limit not exceeding (as on 11.09.2017)
Scientist	UR 7 (including 1 PwD-HH/OH backlog)  OBC 4 (including 1 PwD-HH/OH backlog)  SC 3 (including 1 backlog)  ST 2 (backlog)	Pay Level-11 ₹67700-208700 {pre-revised PB-3 ₹15600- 39100 + ₹6600 (GP)}	₹77178/-	32 years
Senior Scientist	UR 2 (Total 16)	Pay Level-12 ₹78800-209200 {pre-revised PB-3 ₹15600- 39100 + ₹7600 (GP)}	₹89832/-	37 years
Principal Scientist	UR 2 (Total 2)	Pay Level-13 ₹118500-214100 {pre-revised PB-4 ₹37400- 67000 + ₹8700 (GP)}	₹135090/-	45 years

<sup>\*</sup> Total Emoluments mean approximate total emoluments on a minimum of scale as on 01.01.2017 including House Rent Allowance (HRA), CSIR-CEERI may provide residential accommodation, if available, as per rules in which case HRA will not be payable.

<sup>\*\*</sup> Please see age relaxation under Relaxation column.

The details of posts are as given below:

1	The details of posts are as given below:				
Sr. No.	Post Code	Name, No. of Posts and Reservation	Essential Educational Qualifications and Experience	Relevant Field(s)	
1.	CPS-1	Scientist 1 post OBC: 1	M.E./M.Tech. (Electronics & Control / Instrumentation & Control / Electronics & Instrumentation / Mechatronics / Advanced Electronic Systems / Power Electronics)  OR		
			Ph. D. (Sc./Engg.) submitted	Smart Grid / Electric Vehicle / Inverter Technologies / Power Electronics	
2.	CPS-2	Scientist 1 post SC: 1	M.E./M.Tech. (ECE / Electronics / Instrumentation / Instrumentation & Control / Electronics & Instrumentation / Electronic Design Technology / Embedded Systems / Advanced Electronic Systems / Signal Processing)		
			OR		
			Ph. D. (Engg.) submitted	IR Signal Processing / Instrumentation / Chemometric Methods	
3.	CPS-3	Scientist 2 posts UR: 1 SC: 1	M.E./M.Tech. (VLSI / IC Design / Microelectronics / Semiconductor Electronics / Advanced Semiconductor Electronics / CS / CSE / Advanced Electronic Systems / Embedded Systems / Communication Systems / Signal Processing)  OR		
			Ph. D. (Sc./Engg.) submitted	High level Synthesis / ASIP Design / Computing Architectures / Embedded System Design with GP-GPU, FPGA / Processor Design / SoC Design	
4.	CPS-4	Scientist 3 posts UR: 1 OBC PwD-HH/OH: 1 SC: 1	M.E./M.Tech. (CS / CSE / Information & Communication Technology / Information Technology / Electronics / Instrumentation / Instrumentation & Control / Communication Systems / Electronics & Instrumentation / Electronic Design Technology / VLSI / IC Design / Embedded Systems / Advanced Electronic Systems / Microelectronics / Semiconductor Electronics / Advanced Semiconductor Electronics / Electronics & Control / Mechatronics / Signal Processing)		
			OR Ph. D. (Sc./Engg.) submitted	Machine Learning / Control Systems / DSP /	

				Networking / Real-time Software / IoT / Cyber- physical Security / Robotics / WSN / Cognitive Systems / Computer Vision
5.	CPS-5	Scientist 1 post UR: 1	M.E./M.Tech. (VLSI / IC Design / Microelectronics / Semiconductor Electronics / Advanced Semiconductor Electronics)	
			OR	
			Ph. D. (Engg.) submitted	Mixed Signal Design / ASIC Design / Analog Design
6.	SS-1	Scientist 2 posts UR: 1 ST: 1	M.E./M.Tech. (Nano-electronics / Nano-science and Technology / Microelectronics / Electronics / Semiconductor Technologies / Solid State Devices and Circuits / Advanced Semiconductor Electronics / Material Science & Technology / Semiconductor Electronics)	
			OR	
			Ph. D. (Sc./Engg.) submitted	Graphene-based Device Technologies / Nano-Electronic Devices / Flexible Electronics / Nano- Sensors
7.	SS-2	Scientist 2 posts UR: 1 OBC: 1	M.E./M.Tech. (Nano-electronics / Nano- science and Technology / Microelectronics / Electronics / Semiconductor Technologies / Solid State Devices and Circuits / Advanced Semiconductor Electronics / Material Science & Technology / Semiconductor Electronics / Biotechnology / Mechanical / Bio-electronics / Applied Mechanics)	
			OR	
			Ph. D. (Sc./Engg.) submitted	Micro-Nano Fluidics / Bio-Electronics / Bio- Chemical Sensors / MEMS / NEMS
8.	MWD-1	Scientist 3 posts	M.E./M.Tech. (Microwave / High Power Microwave Devices & System Engineering)	
		UR PwD-HH/OH: 1 OBC: 1	OR	
		ST: 1	Ph. D. (Sc./Engg.) submitted	Vacuum Tubes / THz Devices / Beam-Wave Interaction / Electromagnetics / Microwave Tubes
9.	MWD-2	Scientist 1 post UR: 1	M.E./M.Tech. (Mechanical Engg. / Fluids & Thermal Engineering / Design of Mechanical Equipment / Computational Mechanics / Tools & Product Design)	

			OD	
			OR	
			Ph. D. (Engg.) submitted	Solid Mechanics / Structural Mechanics / Heat Transfer and Thermal Systems / Machining and Manufacturing Processes / Micromachining Techniques
10.	PMBD-1	Senior Scientist 2 posts UR: 2	MBA with B.E./B.Tech. and 03 years experience  OR  MBA with M.Sc. and 03 years experience  OR  Ph.D. (Mgmt.)	Techno-commercial Marketing / HR / Technology Incubation Management
11.	CEERI-1	Principal Scientist 2 posts UR: 2	Ph. D. (Sc./Engg.) with 03 years experience	Smart Grid / Electric Vehicle / Power Electronics / Machine Learning / IoT / WSN / Plasma Physics / Control Systems / MEMS / Computational Electromagnetics / Flexible Electronics / Microfluidics

UR: Unreserved; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backward Class; PwD: Person with Disability; HH: Hearing Handicapped; OH: Orthopedically Handicapped.

Apart from qualifications indicated above, any other recognized qualification, which is equivalent to the prescribed qualification, shall be treated at par with that qualification.

Job description for the above posts: Selected candidates will have to undertake research, development and innovation activities in the areas of works of the Institute. Placement of candidates in different functional groups may also be done as per the requirement of the Institute keeping in mind the knowledge and experience of the selected candidates. In addition to the R&D activities, consultancy/sponsored/grant—in—aid projects are also to be handled either independently or in a team. Selected candidates as per the requirements may be required to take classes in the Institute unit of the Academy of Scientific & Innovative Research (AcSIR) which is offering Masters/Ph.D. Degrees. Selected candidates will also have the opportunity to supervise Research Scholars of the Academy (AcSIR) leading to their Ph.D. Degree as per the norms of the Academy.

The candidates having experience in Product Development / Technology Innovation / Applied Technology/ Translational Research etc. will be given preference.

#### **General information and conditions:**

#### 1. Benefits under Council service:

a. These posts carry usual allowances i.e. Dearness Allowance (DA), House Rent Allowance (HRA), Transport Allowance (TA), etc. as admissible to Central Government employees and as made applicable to CSIR. Council employees are also eligible for the accommodation of their entitled type as per the CSIR Residence Allotment Rules depending on availability in which case HRA will not be admissible.

- b. In addition to the emoluments indicated against each category of posts, benefits such as the applicability of New Pension Scheme 2004, reimbursement of Medical Expenses, Leave Travel Concession etc. are also available as per CSIR rules.
- c. 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 CSIR guidelines governing these activities. Opportunities also arise for foreign deputation for training/presentation of papers/specific assignments etc.
- d. CSIR provides excellent opportunities to deserving candidates for career advancement under the Assessment Promotion scheme for Scientists.

#### 2. Other conditions:

- a. The applicant must be a citizen of India.
- b. All applicants must fulfill the essential requirements of the post and other conditions stipulated in the advertisement as on the last date of receipt of applications. They are advised to satisfy themselves, before applying, that they possess at least the essential qualifications and experience laid down for various posts as on the last date of receipt of application. No enquiry asking for advice as to eligibility will be entertained.
- c. The prescribed essential qualifications and experience are the minimum and the mere possession of the same does not entitle candidates to be called for interview. The duly constituted Screening Committee will adopt its own criteria for short-listing candidates. The candidate should, therefore, mention in the application all his qualifications and experiences in the relevant area over and above the minimum prescribed qualification, supported with documents. Completion of Ph.D. degree will be reckoned from the date of issue of provisional certificate/notification.
- d. The application should be accompanied by self-attested copies of the relevant educational qualification and experience if any. The prescribed qualification should have been obtained from recognized Universities/Institutions, etc. Incomplete applications/applications received but not accompanied with the required certificates/documents are liable to be rejected.
- e. In respect of equivalence clause in the Essential Qualifications, if a candidate is claiming a particular qualification as equivalent qualification as per the requirement of advertisement, then the candidate is required to produce order/letter in this regard, indicating the Authority (with number and date) under which it has been so treated otherwise the Application is liable to be rejected.
- f. The period of experience rendered by a candidate on part time basis, daily wages, visiting/guest faculty will not be counted while calculating the valid experience for short listing candidates for interview.
- g. 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 must be submitted.
- h. The date for determining the upper age limit, qualifications and/or experience shall be the closing date prescribed for receipt of applications.

- i. The period of experience in a discipline/area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed educational qualifications for that Post.
- j. Persons with disabilities (PwDs) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.
- k. In case a candidate is staying abroad, his/her candidature may be considered *in absentia* by the Selection Committee on his/her written request.
- 1. Only outstation candidates called and found eligible for interview will be paid to and fro single second class rail fare from the actual place of undertaking the journey or from the normal place of their residence whichever is nearer to the place of interview's Railway Station on production of Rail Tickets/Rail Ticket Numbers or any other proof of journey.
- m. Any discrepancy found between the information given in the application and as evident in original documents will make the candidate ineligible for appearing in the interview. Such candidate will also not be paid any fare.
- n. The decision of the CSIR-CEERI/CSIR in all matters relating to eligibility, acceptance or rejection of applications, mode of selection, the conduct of examination/interview will be final and binding on candidates.
- o. Canvassing in any form and/or bringing any influence, political or otherwise, will be treated as a disqualification for the post.
- p. NO INTERIM ENQUIRY OR CORRESPONDENCE WILL BE ENTERTAINED.

### 3. Relaxations:

- a. The upper age limit is relaxable up to 05 years for SC/ST and 03 years for OBC as per Government of India orders in force only in those cases where the posts are reserved for respective categories, on the production of a relevant certificate in the prescribed format signed by the specified authority.
- b. Upper age limit is also relaxable up to five years for regular employees working in CSIR, Government, Autonomous Bodies and Public Sector in accordance with the instructions and orders issued by the CSIR/GOI from time to time in this regard.
- c. As per GOI provisions, age relaxation for Widows, Divorced Women, and Women Judicially separated from Husbands who are not remarried, the upper age limit is relaxable up to the age of 35 years (up to 40 years for members of Scheduled Castes/Scheduled Tribes and up to 38 years for members belonging to the Other Backward Classes in respect of the posts reserved for them). Persons claiming age relaxation under this sub-para would be required to produce the following documentary evidence:
  - i) In the case of Widow, Death Certificate of her husband together with the Affidavit that she has not remarried since.
  - ii) In the case of divorced Woman and Woman judicially separated from her husband, a certified copy of the judgment/decree of the appropriate Court to prove the fact of divorce or the judicial separation, as the case may be, with an Affidavit that she has not remarried since.
- d. Age relaxation to Persons with Disabilities (PwDs): Age relaxation of 10 years is allowed (total 15 years for SCs/STs and 13 years for OBCs in respect of the posts reserved for them) to

physically handicapped persons for appointment to Group 'A' posts/services. The persons claiming age relaxation under this sub-para would be required to produce a certificate issued by the competent authority in the prescribed proforma in support of their claims clearly indicating that the degree of physical disability is 40% or more. In any case, the appointment of these candidates will be subject to their being found medically fit in accordance with the standards of medical fitness as prescribed by the Government for each individual Group 'A' posts to be filled by Direct Recruitment by Selection.

- e. Relaxation in age, educational qualification and/or experience may be considered in the case of exceptionally meritorious candidates or if a sufficient number of candidates possessing the requisite qualification and/or experience are not available to fill up the posts.
- f. Relaxation of 5 years will also be permissible to those who had ordinarily been domiciled in the State of Jammu and Kashmir during the period from 1-1-1980 to 31-12-1989 subject to production of a relevant certificate from concerned authority in accordance with the instructions and orders issued by the CSIR/GOI from time to time in this regard.

## 4. How to apply:

- a. Candidates are required to apply in the prescribed format (application and synopsis) downloaded from CSIR-CEERI website or neatly typed on A4 size paper on one side only as per the format available on the website <a href="https://www.ceeri.res.in">www.ceeri.res.in</a>.
- b. Applications complete in all respects enclosing attested copies of all certificates, marks sheet of all semesters/years/aggregate, testimonials in support of age, educational qualifications, experience, caste/community/PwD, recent passport size colour photograph signed along with non—refundable application fee of ₹100/- (SC/ST/PwD/Women/CSIR employees/Abroad Candidates are exempt from payment of application fee) in the form of crossed Demand Draft drawn on any nationalized bank valid for a period of three months in favour of "Director, CSIR-Central Electronics Engineering Research Institute" payable at the State Bank of India, Pilani Branch should be sent in an envelope superscribed "APPLICATION FOR THE POST OF\_\_\_\_\_\_ (Post Code\_\_\_\_\_\_\_)" by post to Controller of Administration, CSIR- Central Electronics Engineering Research Institute, Pilani-333031 (Rajasthan) so as to reach on or before the last date. The last date given above will be the same for the candidates belonging to far-flung areas as well.
- c. The following details must be filled up on the back side of Demand Draft (i) Candidate's Name, (ii) Candidate's Category, (iii) Post Code Applied for.
- d. In the case of Universities/Institutes awarding CGPA/SGPA/OGPA grades etc., candidates are requested to convert the same into percentage based on the formula as per their University/Institute.
- e. Candidates applying for more than one post must submit a **separate application form along** with all required documents for each post indicating the Code Number of the post(s) with separate Demand Draft(s) for each application.
- f. Application once made will not be allowed to be withdrawn and fee once paid will not be refunded on any count nor shall it be held in reserve for any other recruitment or selection process.
- g. Applications from employees of CSIR/Government/Autonomous Bodies/Public Sector will be considered only if forwarded through proper channel, certified by the employer that the applicant if selected, will be relieved within one month of the receipt of the appointment

offer. Also, vigilance clearance should be recorded. However, an advance copy of the application must be received before the closing date. Applications routed through proper channel should reach CSIR-CEERI at the earliest. 'No Objection Certificate' must be submitted at the time of interview.

- h. Candidates should specifically note that applications received after the closing date for any reason whatsoever (such as envelopes wrongly addressed, delivered elsewhere, postal delay, not supported by copies of certificates, without application fee, etc.) will be summarily rejected. Any enclosure received separately subsequent to the receipt of the application cannot be connected therewith. No representation in this regard will be entertained. Furnishing of false, incorrect and wrong information will be a disqualification.
- i. Incomplete applications (i.e. without a photograph, applicable testimonials and application fee, unsigned etc.) will not be entertained and will be summarily rejected.
- j. The details of short-listed candidates to be called for an interview, date of interview, change of date, selection result, cancellation of one or all posts, corrigendum/addendum to the advertisement, an extension of the last date for receipt of applications etc. will be notified on CSIR-CEERI website. Therefore, candidates are advised to visit the website <a href="www.ceeri.res.in">www.ceeri.res.in</a> for latest updates.

#### 5. Following documents MUST be attached along with application form sent by post:

- a. Demand Draft of ₹100/- as application fee, where applicable.
- b. Colour photograph pasted on the form and signed across in full.
- c. Self-attested photocopy of certificates relating to Date of Birth, educational qualifications, experience and Caste/Community/PwD/Widow/Divorced Woman/Woman judicially separated from husband/Residents of the State of Jammu and Kashmir, if applicable.

Note: In the case of discrepancies between the English version of this Advertisement and its Hindi translation, the English version shall prevail.

Controller of Administration