



**Council of Scientific and Industrial Research  
CSIR-Fourth Paradigm Institute (CSIR-4PI)  
Behind HAL Airport, NWTC Road,  
Bangalore -560037 (Karnataka)**

CSIR-4PI Advt. No. 1/2022 Dated 19th November 2022

**Last Date for Receipt of the application 25<sup>th</sup> December, 2022**

**A unique opportunity for research careers in Science & Technology**

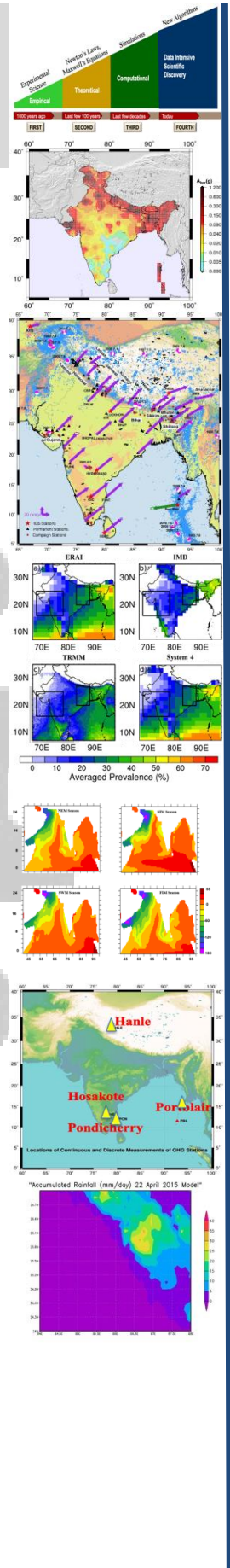
CSIR-Fourth Paradigm Institute (CSIR-4PI), Bangalore is a premier research institute under the Council of Scientific and Industrial Research (CSIR), which is an Autonomous Body under Ministry of Science & Technology, Government of India. *The vision of CSIR-4PI is to pursuit “High End Computational Science Empowering Data Intensive Scientific Discovery” in trans-disciplinary areas through large scale scientific computing. Our facilities include world-class supercomputing environment; Cyber Security Research and Observation (CySeRO) testbed; attractive academic programs; strong network of CSIR Labs with domain expertise, etc.* CSIR-4PI is recognized as a leader at national level and competing at international level for its multi-dimensional high impact studies of the earth system covering all the four geographic spheres for over three decades.

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 as a career in the field of *Data Science, Supercomputing, Cyber Security, Earth & Engineering Sciences*, to fill up the vacancy of following posts of scientists as per the details given below.

The emoluments and age limit for various posts as per norms are summarized as below:

Designation	No. of Posts	Pay Level	Basic Pay	Total Emoluments	*Upper Age Limit not exceeding (as on last date of receipt of application as mentioned in advt.)
Scientist	11 (UR-6, EWS-1, SC-1, ST-1, OBC-1 PwBD-1)	11	Rs.67700	Rs. 1,20,000/- pm approx..	32 years
Senior Scientist	04 (UR)	12	Rs. 78800	Rs.1,38,000/- pm approx..	37 years
Principal Scientist	01 (UR)	13	Rs. 1,23,100	Rs.2,10,000/- pm Approx..	45 years

\*Please see age relaxation under Relaxation column.





**Description of Posts advertised:**

Post code /Reservation Status	Pay Level	Names and No. of Posts /Age limit not exceeding	Essential Educational Qualifications & Experience (As per CSRAP, 2001 Rules)	Desirable	Job requirements/ specification
<b>Category-1: 08 Posts for Data Science and Supercomputing</b>					
PC – DSSD-2201 (UR)	11	Scientist No of posts: 4 Age limit: 32 yrs	ME / M.Tech. in Computer Science / Information Science/ Data Science / AI&ML / Mathematics & Computing / Computer Networking / Cyber Security / Electronics and Digital Communication  <b>OR</b>  PhD (submitted) in Computer Science / Data Science / AI&ML / Mathematics & Computing / Mathematics and Information Science/ Computer Networking / Cyber Security / Electronics and Digital Communication.	One year experience in one of the following fields is desirable: ➤ Developing AI & ML techniques using Common data science toolkits, Data visualisation tools, Query languages and NoSQL databases ➤ Computer networking, protocol engineering, Internet architecture, data driven inference in cyber security Securing and operating large-scale supercomputing and networking facility, application benchmarking, performance optimisation and quantification	➤ Advanced data analytics and R&D towards developing decision support system through data mining techniques and building high quality prediction systems ➤ R&D in cyber security, cyber and threat intelligence generation using data science approaches ➤ Development, 24x7 operation and management of supercomputing facility, datacenter, network infrastructure and security solutions at CSIR-4PI. Digital Asset creation, operation and management
PC– DSSD-2202 (SC)	11	Scientist No of posts: 1 Age limit: 37 yrs			
PC – DSSD-2203 (PwBD - Locomotor disability)	11	Scientist No of posts: 1 Age limit: 42 yrs			
PC – DSSD-2204 (UR)	12	Senior Scientist. No of posts: 2 Age limit: 37 yrs	ME / M.Tech. in Computer Science / Data Science / AI&ML / Mathematics & Computing /Computer Networking / Cyber Security / Electronics and Digital Communication with 3 years experience  <b>OR</b>  PhD (Sci.) in Computer Science / Data Science / AI & ML / Mathematics & Computing/ Computer Networking/ Cyber Security/ Electronics and Digital Communication with 2 years of experience	The experience must be in one of the following fields: ➤ Common data science toolkits for developing AI / ML / DL / Statistical algorithms, data visualisation, query languages, NoSQL databases, etc. ➤ Computer networking, protocol engineering, Internet architecture, data	➤ Work closely with domain scientists across CSIR and lead R&D activities in data science and develop advanced decision support system and high quality prediction systems ➤ Carryout R&D in cyber security, cyber and threat intelligence generation, data driven inference and analytics in

			<p style="text-align: center;"><b>OR</b></p> <p>PhD (Engg) in Computer Science / Data Science / AI &amp; ML / Mathematics &amp; Computing / Computer Networking / Cyber Security / Electronics and Digital Communication.</p>	driven inference in cyber security.	cyber security including application of AI/ML techniques on diverse cyber security data
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**Category-2: 08 Posts for Earth and Engineering Science**

PC – EESD-2201 (UR)	11	Scientist No of posts: 1 Age limit: 32yrs	ME / M.Tech. in Oceanography/ Climate/ Atmospheric Science/ Applied mathematics	One year research experience in Modelling & Computer Simulation, Data Analysis, Oceanographic processes, Computational Fluid Dynamics, Weather and Climate modelling, Climate change and climate impact	Work on Mathematical Modelling & Computer simulation, Data Analysis related to Physical Oceanography, Marine biogeochemical processes, Weather & climate studies and Climate Change impacts on various sectors
PC – EESD-2202 (EWS)	11	Scientist No of posts: 1 Age limit: 32yrs	<p style="text-align: center;"><b>OR</b></p> <p>PhD in Sciences (submitted) related to Ocean/ Climate/ Atmospheric Science/ Marine Science/ Physics/Applied Mathematics</p>		
PC – EESD-2203 (UR)	11	Scientist No of posts: 1 Age limit: 32yrs	M.E./M.Tech. in Civil Engineering/Communication Engineering/Earth Sciences/Applied Maths/ Applied Physics	One year research experience in GNSS based Geoscience studies/ Computational Seismology/ Seismic hazard/ Earthquake Engineering	The selected candidate is expected to work in GNSS & Broadband Seismic data processing and analysis, data intensive modelling related to broadband seismic and GNSS research, Management of near real time GNSS and broadband observation network.
PC-EESD 2204 (OBC)	11	Scientist No of posts: 1 Age limit: 35yrs	<p style="text-align: center;"><b>OR</b></p> <p>Ph.D. (Submitted) in Civil Engineering/Communication Engineering/Earth Sciences/ Physical Sciences/ Mathematical and Information sciences related to GNSS based Geoscience studies/Computational Seismology/Earthquake Engineering</p>		
PC – EESD-2205 (ST)	11	Scientist No of posts: 1 Age limit: 37 yrs			
PC - EESD-2206 (UR)	12	Senior Scientist. No of posts: 1 Age limit: 37 yrs	<p>ME/MTech. related to Oceanography/ Climate/ Atmospheric Science with 3 yrs experience</p> <p style="text-align: center;"><b>OR</b></p> <p>PhD (Sc) related to Oceanography/ Climate/ Atmospheric Science with 2 yrs experience</p> <p style="text-align: center;"><b>OR</b></p> <p>PhD (Engg) in related to Oceanography / Climate / Atmospheric Science</p>	Experience must be in the field of Mathematical Modelling & Computer Simulation/ Data Analysis/ Computational Fluid Dynamics/ Physical Oceanography/ Marine Biogeochemical Cycles/ Weather and Climate/ Impact of climate Change	Work on Mathematical Modelling & Computer simulation/ Data Analysis related Marine biogeochemical processes/ Physical Oceanography /Weather and Climate/ Impact of Climate Change

PC-EESD-2207 (UR)	12	Senior Scientist. No of posts: 1 Age limit: 37 yrs	M.E./M.Tech. in Civil Engineering/ /Earth Sciences/Applied Maths/ Applied Physics with 3 years experience in the area of Computational Seismology / GNSS based Geoscience studies / Earthquake Engineering  <b>OR</b>  Ph.D. in Earth Sciences/ Physical Sciences/ Mathematical and Information Sciences with 2 years of experience in the area of Computational Seismology/GNSS based Geoscience studies/seismic hazard  <b>OR</b>  Ph.D. in Civil Engineering related to GNSS based Geoscience studies/Computational Seismology/Earthquake Engineering	Research experience must be in the field of Crustal structure and deformation/ ground motion modelling/ seismic hazard/ data intensive modelling in the related fields	The selected candidate is expected to work in the areas of crustal and mantle structure, Seismic Tomography, crustal deformation, earthquake source modelling, Management of near real time GNSS and broadband observation network.
PC - EESD-2208 (UR)	13	Principal Scientist. No of posts: 1 Age limit: 45 yrs	Ph.D. in Earth Sciences/ Physical Sciences/ Mathematical and Information Sciences with 3 years of experience in the area of Computational Seismology/GNSS based Geoscience studies/seismic hazard  <b>OR</b>  Ph.D. in Civil Engineering with 3 yrs experience in GNSS based Geoscience studies/Computational Seismology/Earthquake Engineering	Significant research contributions in GNSS based Geoscience studies/ Earthquake Engineering/computational seismology/ Seismic hazard	The selected candidate is expected to lead the research activities in areas of crustal and mantle structure, Seismic Tomography, crustal deformation, earthquake source modelling, data intensive modelling for related geoscience applications. The candidate is expected to initiate multidisciplinary and multi-institutional research program in the areas of Big data analysis and integration of AI and ML in Earth Science Applications.

**UR: Unreserved; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backward Class; PwD: Persons with Disability; EWS: Economically Weaker Section**

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

**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 the central government employees and as made applicable to CSIR. 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.
- b. In addition to the emoluments indicated against each category of posts, benefits such as applicability of New Pension Scheme 2004, reimbursements of Medical Expenses, Leave Travel Concession and House Building Advance are available as per CSIR Rules.
- c. CSIR provides opportunities for career advancement under Assessment Promotion scheme for Scientists on the basis of fixable complementary Scheme of CSIR.
- d. Scientists in CSIR-4PI 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 are also available for foreign deputations for training/presentations of papers/specific assignments etc.

**2. Other conditions:**

- a. The applicant must be a citizen of India.
- b. The appointment will be in the CSIR Fourth Paradigm Institute (CSIR-4PI), Bengaluru, under the Council of Scientific & Industrial Research (CSIR) which is an Autonomous Body under Ministry of Science & Technology. However, the appointees are liable to be posted in any of the Labs/Institutes of CSIR situated anywhere in India as and when required.
- c. 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 the online/off line applications. They are advised to satisfy themselves before applying that they possess the essential qualifications laid down for various posts as on the last date of receipt of the applications. No enquiry asking for advice as to eligibility will be entertained.
- d. The prescribed essential qualifications 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 the candidates. The candidate should therefore, mention in the application all the 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.
- e. Candidates applying for more than one post should submit separate online application form for each post indicating the category and post code along with the prescribed application fee and copies of all marks cards, certificates and testimonials separately for each post.
- f. The application should be accompanied by self-attested copies of the relevant educational qualification, experience. The prescribed qualifications should have been obtained through recognized Universities / Institutions. etc. Incomplete applications/applications received or not accompanied with the required certificates / documents are liable to be rejected.
- g. In respect of equivalent clause in 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.
- h. The period of experience rendered by a candidate on part time basis, daily wages, visiting/ guest faculty etc. will not be counted while calculating the valid experience for short listing the candidates for interview.
- i. If any document/ certificate furnished is in a language other than Hindi or English, a self-attested transcript of the same is to be submitted.
- j. The date for determining the upper age limit, qualifications and /or experience shall be the closing date prescribed for receipt of applications.
- k. 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.
- l. Persons with Benchmark Disabilities (PwBD) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.

- m. In case a candidate is staying abroad, his/her candidature may be considered *in absentia* by the Selection Committee on his/her written request.
- n. Application from the candidates working in CSIR, Govt. Departments and Public Sector Undertaking will be considered only if forwarded through proper channel within 15 days from the closing date prescribed for receipt of online applications and with a clear certificate that the applicant will be relieved within one month of receipt of appointment order, if selected.
- o. Only outstation candidates called and found eligible for interview will be paid to and from 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 Bangalore City Railway Station on production of Rail Tickets/Rail Ticket Numbers or any other proof of journey.
- p. Any discrepancy found between the information given in application and as evident in original documents will make the candidate ineligible for appearing in interview. Such candidate will not be paid any fare.
- q. The 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.
- r. In the event of the applications received in large numbers, the Screening Committee of CSIR-4PI will adopt its own shortlisting criteria to restrict the number of candidates to be called for interview/written test to a reasonable number by any or more of the following methods:
  - a. On the basis of higher educational qualifications and percentage than the minimum prescribed in the advertisement.
  - b. On the basis of higher experience in the relevant field than the minimum prescribed in the advertisement.
  - c. By holding a written test.
  - d. Any other methodology as deemed fit by the Screening Committee.
- s. CSIR-4PI reserves the right not to fill up a particular post or all the posts, if it so desires. The number of vacancies indicated above may vary at the time of actual selection
- t. The selected candidates will be on probation for a period of one year from the date of taking over charge of the post. The probationary period may be extended or curtailed at the discretion of the Competent Authority. After successful completion of probationary period, they will be considered for confirmation in accordance with the extant rules
- u. The selected candidates will not be permitted to apply for appointment elsewhere or in CSIR-4PI during the probationary period and if they have already applied for any posts in any other organization, they have to intimate the details of such applications, immediately after joining the Laboratory.
- v. The decision of the competent authority **CSIR-4PI/CSIR** in all matters relating to eligibility, acceptance or rejection of applications, mode of selection, conduct of examination/interview will be final and binding on the candidates.
- w. Canvassing in any form and / or bringing any influence political or otherwise will be treated as a disqualification for the post
- x. NO INTERIM ENQUIRY OR CORRESPONDANCE WILL BE ENTERTAINED.

**3. Relaxations:**

- a. The upper age limit is relaxable upto 05 years for SC/ST and 03 years for OBC as per Government orders in force only in those cases where the post is reserved for respective categories.
- b. Upper age limit is also relaxable up to five years for the regular employees working in CSIR laboratories / institutes, Government Departments, autonomous bodies and public sector undertakings.
- c. As per GOI provisions, age relaxation for Widows, Divorced Women and Women Judicially separated from Spouse, 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) for Widows, divorced Women and Women Judicially separated from their Husbands who are not remarried. The persons claiming age relaxation under this sub-para would be required to produce following documentary evidence:
  - i) In case of Widow, Death Certificate of her husband together with the Affidavit that she has not remarried since.



ii) In case of divorced Women and Women judicially separated from their husbands, a certified copy of the judgment/decreed of the appropriate Court to prove the fact of divorce or the judicial separation, as the case may be, with an Affidavit in respect of divorced Women and they have not remarried since.

- d. Age relaxation to Persons with Benchmark Disabilities (PwD) is permissible as per GOI orders i.e. Upper age limit is relaxable up to 10 years (15 years for SCs, STs, and 13 years for OBCs) issued from time to time. The persons claiming age relaxation under this sub-para would be required to produce a certificate in 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 post to be filled by Direct Recruitment by Selection.
- e. Any other Age relaxation shall be applicable as per extant GOI/ CSIR Recruitment Rules.
- f. Relaxation in age, over and above the stipulated limit, educational qualification and / or experience may be considered if sufficient number of candidates possessing the requisite qualification and/ or experience are not available to fill up the posts.
- g. SC/ST/OBC/PwD/EWSs Candidates are required to produce original certificate in the prescribed format signed by the specified authority at the time of interview. The OBC candidate should produce the certificate valid for appointment to post under the Central Government as per latest instructions issued by the DoPT (GOI).

#### 4. **How to apply:**

- a. Eligible candidates are required to apply ONLINE through our website [www.csir4pi.in](http://www.csir4pi.in)
- b. If the candidate does not have a valid email id, he/she should create a new valid email id before applying online.
- c. **Online Application window will be opened on 19.11.2022 up to 18.12.2022 on CSIR-4PI website i.e. [www.csir4pi.in](http://www.csir4pi.in).**
- d. Candidates are required to pay non refundable application fee of Rs.500/- for each application (Rupees Five hundred only) payable separately for each post. The candidates belonging to SC/ST/PwBD/Women/CSIR Employees/Abroad Candidates category are exempted from submission of application fee.
- e. In case of universities/institute awarding CGPA/SGPA/OGPA grades etc., candidates are requested to convert the same into percentage based on the formula as per their university/institute. In case of no clarity about converting into percentage, Screening Committee will adopt its own criteria to convert CGPA/SGPA/OGPA to percentage for shortlisting of candidates.
- f. Successful online application is indicated by the page displayed after clicking **Submit Button** indicating the generated **"APPLICATION NUMBER"**. Please note down the same carefully and preserve it. If you do not preserve it, you will not be able to Re-print the Application.
- g. In case candidate wants to modify/withdraw the application there is a 'CANCEL' option to cancel the online application. Please note that application once cancelled will not be retrieved at any stage. If you have cancelled the application, please reapply before the closure of Application Date as per advertisement. Please remember to take fresh print out after modifying any details.
- h. . Candidates applying for more than one post must submit separate application form for each post indicating the Post Code.
- i. 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.
- j. Applications from employees of Government Departments 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 orders. Also, vigilance clearance should also be recorded. However, advance copy of the application may be submitted before the closing date. Applications routed through proper channel should reach Controller of Administration, CSIR-Fourth Paradigm Institute, (CSIR-4PI), NWTC Road, NAL Belur Campus, Bengaluru-560037 at the earliest.
- k. Candidates should specifically note that the online applications received after the closing date for any reason whatsoever will not be entertained by CSIR-4PI.

- I. Incomplete online applications (i.e., without photograph, unsigned and application fee, applicable testimonials etc.) will not be entertained and will be summarily rejected.
  
5. **Candidates should ensure that the Following documents must be attached along with online application form:**
  - a. Proof of submission of application fee, where applicable.
  - b. Coloured photograph pasted on the form and signed across in full.
  - c. Self-Attested photocopy of Date of Birth Certificate.
  - d. Self-Attested photocopies of education qualifications certificates.
  - e. Self-Attested photocopy of caste certificate/ EWS/ PwBD/ Women seeking relaxation/ Ex-Serviceman/ others, if applicable.
  - f. Self-Attested photocopies of experience certificates, if any.
  - g. Any other applicable Certificate.

