

### सी.एस.आई.आर.–राष्ट्रीय भौतिक प्रयोगशाला

## CSIR-NATIONAL PHYSICAL LABORATORY (वैज्ञानिक तथा औद्योगिक अनुसंघान परिषद्)

(Council of Scientific & Industrial Research) डॉ. के.एस. कृष्णन् मार्ग, नई दिल्ली - 110012 Dr. K.S. Krishnan Marg, New Delhi – 110012



#### Advertisement No.Rectt./03/2024 **"WALK-IN-INTERVIEW TO BE HELD ON 09/12/2024 & 10/12/2024**

CSIR-NPL, New Delhi (a constituent laboratory of CSIR) desires to recruit qualified incumbents for purely temporary and contractual positions under the various ongoing externally funded & time targeted sponsored projects, the details of which are given below:-

### Walk in Interview for the post code 1.0 to 13.0 will be held on 09th December, 2024

Post	Post & No. of positions	Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend per month	Age as on 09/12/2024
1.0	Project Associate- II Two (02) (PAT-II)	1) M. Tech. /M.E. in Photonics/ Laser/ Optics/ Electronics/ ECE  Or  2) Master's Degree in Physics/ Applied Physics / electronics with 2 Years experience.  Or  3) M.Sc. Physics / Applied Physics / Electronics/ Instrumentation with 2 Years experience.  Or  4) B.Tech in Electronics with 2 years experience.	Experience of working in terahertz / Ultrafast/ laser/ optics/ photonics	Selected candidates need to do terahertz measurements, taking data analysis, etc.	DEVELOPING EXPERTISE AND LEVERAGING TERAHERTZ TECHNOLOGY ADVANCEMENTS IN CSIR (DELTA)	(a) Rs. 35,000/-+ HRA For those candidates who have qualified CSIR-UGC/ICAR/ICMR NET incl. lectureship/assistant professorship or GATE OR those who have qualified National level examinations conducted by Central Government Departments like DBT/DST or equivalent and/ or their Agencies/ Institutions.  Or  (b) Rs.28,000/-+ HRA For others who do not fall under (a) above.  (up to 31.03.2027)	35 Years

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2.0	Project Associate- I One (01) (PAT-I)	Master's Degree in Physics/ Applied Physics/ Electronics/ Instrumentation	Experience in Design, development data acquisition and Programming	Precision measurements and analysis in Temperature Quantum Metrology	"Quantum Metrology For Realization Of SI Units And Allied Parameters For Boosting International Trade And Industrial Growth Of The Nation Strengthening And Modernization Of Metrology Through Research And Technology Harmony (SAMARTH)"	Rs.25,000/- + HRA (up to 31.03.2028)	35 Years
3.0	Senior Project Associate (S-PAT) One (01)	M.Sc. (Physics) with 03 years of experience in R&D in Industry / academic Institutes/ S&T organizations OR B. Tech in Electrical & Electronics Engineering / Electronics and Instrumentation Engineering with 03 years of experience in R&D in Industry / academic Institutes/ S&T organizations OR M.Tech in Nanotechnology/ Electronics & Electrical Engineering/ Electronics & Instrumentation Engineering/ Electronics Engineering/ Electronics Engineering OR Ph.D. (Physics/ Materials Science	Experience in thin film fabrication/ superconducting characterizations, transport measurements, experience in Photolithography systems	Fabrication of superconducting films and devices, their characterization at low temperatures and high magnetic fields, and in the presence of electromagnetic radiation. Demonstration of superconducting quantum detectors with respect to extremely feeble electronics radiation, operation and maintenance of cryogenic systems, and transport measurements	Development of Superconducting Quantum Detectors Using Amorphous Superconducting Systems	Rs. 42,000/- + HRA (up to 31.03.2026)	40 Years

4.0	Project Associate-I (PAT-I) One (01)	M.Sc. (Physics)  or  B. Tech in Electrical & Electronics Engineering / Electronics and Instrumentation	Experience in thin film fabrication/ superconducting film characterizations, transport measurements, experience in Photolithography systems	Fabrication of superconducting films and devices, their characterization at low temperatures and high magnetic fields, and in the presence of electromagnetic radiation. Demonstration of superconducting quantum detectors with respect to extremely feeble electronics radiation	Development of Superconducting Quantum Detectors Using Amorphous Superconducting Systems	(a) Rs. 31,000/-+ HRA For those candidates who have qualified CSIR-UGC/ICAR/ICMR NET incl. lectureship/assistant professorship or GATE OR those who have qualified National level examinations conducted by Central Government Departments like DBT/DST or equivalent and/ or their Agencies/ Institutions.  OR (b)Rs. 25,000/-+ HRA For others who do not fall under (a) above (up to 31.03.2026)	35 Years
5.0	Project Assistant- II One (01) (PA-II)	B. Sc. / 3 Years Diploma in DMLT	DMLT (Diploma in Medical Laboratory Technology), Qualification for blood sample collection and other laboratory techniques	Project related task	Phenome India: CSIR Health Cohort Knowledge- Base	Rs. 20,000/-+ HRA (Increment 15% after three years experience in the same project) (up to 31.03.2027)	35 Years
6.0	Research Associate-I One (01)	Ph.D in Physics	Experience in magnetic fluid rheology energy devices, synthesis nonmagnetic particles, magnetic fluid and characterization	Synthesis non Newtonian magnetic fluid and its BND. Scaling of Nano- Magnetic fluid based electric power generator for applications.	Production of non Newtonian fluid based Indian reference material for viscosity. The scaling up of nano magnetic fluid based milli watt (mW) electric power generator for societal usages.	Rs. 58,000/- + HRA (upto 31.10.2025)	35 Years
7.0	Project Associate- II (PAT-II) One (01)	M.Sc. in Physics with Two (02) year Experience	Nil	Design and development of 3D Scanning lidar, development of control software and analysis software for the 3D scanning lidar	Design And Feasiblity Study Of 3D Scanning Lidar For Airport Applications	Rs. 35,000/- + HRA For those candidates who have qualified CSIR-UGC/ICAR/ICMR NET incl. lectureship/assistant professorship or GATE OR those who have qualified National level examinations conducted by Central Government Departments like DBT/DST or equivalent and/or their Agencies/ Institutions. (up to 31.03.2026)	35 Years

8.0	Project Associate-I (PAT-I) One (01)	M. Sc. (Chemistry/Physics)	NA	The fellowships will exclusively be awarded to carrying out pitch based carbon fiber project work	Coal tar pitch based and its conversion into carbon fibers	Rs. 25,000/- + HRA (up to 07.01.2026)	35 Years
9.0	Project Associate-I One (01) (PAT-I)	Master's Degree in physics/ Applied Physics/Electronics/ Instrumentation	Experience in Design, Development, precision measurements, data acquisition and programming.	Design and Establishment of required measurement setup, Precision measurements and analysis in various parameters for establishment of temperature standards	Fabrication, and establishment of testing and calibration facility for clinical thermometers (liquid – in - glass, electrical, and IR) with the maximum device for the five RRSLs laboratories.	Rs. 25,000/- + HRA (up to 22.10.2026)	35 Years
10.0	Senior Project Associate One (1) (Senior-PAT)	Master's degree in physical Science/ Materials Science with three (03) years experience in Research and Development in Industrial and Academic Institution or Science and Technology organization and Scientific activities and services.	(i) Growth of epitaxial graphene on SiC  (ii) Exposure to AFM, Raman spectroscopy electron diffraction (LEED) techniques  (iii) Metal contact deposition using Magnetron sputtering/electron beam deposition	Growth and optimization of epitaxial graphene on SiC to realize graphene-based Quantum Hall Resistance Standard. Detailed characterization of epitaxial graphene using AFM, Raman, PES, LEED, and magneto-transport measurement.	"Quantum metrology for realization of SI units and allied parameters for boosting international Trade and industrial growth of the nation strengthening and modernization of metrology through research and technology harmony (SAMARTH)"	Rs.42,000/-+ HRA (up to 31.03.2028)	40 Years
11.0	Project Associate- II One (01) (PAT-II)	M. Tech. Or M.Sc. (Applied Physics, physics, Optics, Electro-optical Physics) or any relevant branch with two (02) year experience	Vapor cell development and SAS measurement, Electromagnetic Induced Transparency based measurements	Involved in study, development and characterization of vapor cell	Development and Characterization of vapor cell of assorted sizes( 25mm,15mm,10mm) and shapes (Cylindrical, Rectangular / square) with and without any buffer gas atomic density between 10 <sup>10</sup> -10 <sup>15</sup> CM <sup>-3</sup>	28,000/- + HRA (upto 16.04.2026)	35Years

12.0	Research Associate One (01)	Ph.D. in Electronic and Communication / electrical and electronics, instrumentation, Physics or any relevant branch.	RF and Microwave, measurement, computational electromagnetics,	Involved in microwave measurements especially in antenna design, material measurements and other microwave characterization and computation	ISO17025:2017 Accreditation of Antenna, Radome And RCS Measurement Facilities At RCI Hyderabad	Rs. 58,000/- + HRA (upto15.10.2025)	35 Years
13.0	Project Assistant- II One (01) (PA-II)	B.Sc. / Three Year Diploma in Instrumentation/ Electronics & Communication/ Electronics	NA	Technical Support in development and testing of instrument	Development and Testing of Light Weight Scattering Coefficient Counter for Airborne Observations Over Varied Environment	(Increment 15% after three	35 Years

# Walk in Interview for the post code 14.0 to 20.0 will be held on 10<sup>th</sup> December, 2024

Post code	Post & No. of positions	Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend per month	Age as on 10/12/2024
14.0	Project Assistant -II One (01) (PAT-II)	Three year Diploma in Electronics and Communication Engineering (ECE)/ Electronics/ instrumentation	Experience in Design. Development of basic electronics circuits, handling of sophisticated instruments		Realization Of SI Units And Allied Parameters For Boosting International Trade And Industrial Growth Of The Nation	three years experience in the same project)	35 Years

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15.0	Project Associate- I One (01) (PAT-I)	B.E./ B. Tech. (Mechanical)	Experience in Design/ M. Tech (Design) Development, precision measurements, data acquisition and programming	Design and Establishment of required measurement setup, precision measurement and analysis in various parameters for establishment of quantum standards	"Quantum Metrology For Realization of SI Units And Allied Parameters for Boosting International Trade and Industrial Growth of The Nation Strengthening and Modernization of Metrology Through Research and Technology Harmony (SAMARTH)"	Rs.25,000/- + HRA (up to 31.03.2028)	35 Years
16.0	Project Associate- II One (01) (PAT-II)	M.Tech. / ME in Electronics/ Electronics & & Communication / Electronics Electrical/ Instrumentation Control  OR  M.Sc. / B.Tech. in Electronics & Communication / Electronics Electronics & Communication / Electronics Electrical/Instrumentation Control With Two (02) year Experience in Desired fields.	Experience in opto- electronics	Technical Support in development and testing of instrument	Development and Testing of Light Weight Scattering Coefficient Counter for Airborne Observations Over Varied Environment	Rs. 35,000/- + HRA For those candidates who have qualified CSIR-UGC/ICAR/ICMR NET incl. lectureship/assistant professorship or GATE OR those who have qualified National level examinations conducted by Central Government Departments like DBT/DST or equivalent and/ or their Agencies/Institutions.  (up to 31.03.2026)	35 Years
17.0	Project Associate- I One (01) (PAT-I)	B.E. / B. Tech (Mechanical)	Experience of working with laser, Laser interferometer, optics & optical alignment etc.	Selected candidates need to do help in develop a laser interferometer.	Establishment of Reference Standard For Length at Five Regional Reference Standards Laboratories (Ahmedabad, Bhubaneswar, Faridabad, Guwahati & Varanasi) Using Laser Interferometers.	Rs. 25,000/- + HRA (up to 22.10.2027)	35 Years

18.0	Project Associate- I One (01) (PAT-I)	B. Tech. / B.E. in EE / ECE/ CSE or related areas	-	Carry out work as directed and for project. The successful candidate can also be considered for admission to the Ph. D. program as a regular full-time scholar based on the eligibility criteria at NPL.	Metrological Characterization Of Multi- Vendor Phasor Measurement Units As Per IEC/IEEE 60255- 118-1:2018 Standard For Their Interoperability And Effective Implementation In The Indian Power Grid.	Rs. 25,000/-+ HRA (up to 06.11.2025)	35 Years
19.0	Project Associate- I One (01) (PAT-I)	M.Sc. in Physics/Applied Physics/Electronics/ Instrumentation with CSIR- UGC NET including Lectureship or valid GATE  OR  B.E./B.Tech. in Electronics/Instrumentation from a recognized University	RF and Microwave, measurement, computational electromagnetic,	Involved in microwave measurements especially in antenna design, material measurements and other microwave characterization and computation	ISO17025: 2017 Accreditation Of Antenna, Radome And RCS Measurement Facilities At Rci Hyderabad	(a) Rs. 31,000/-+ HRA For those candidates who have qualified CSIR-UGC/ICAR/ICMR NET incl. lectureship/assistant professorship or GATE OR those who have qualified National level examinations conducted by Central Government Departments like DBT/DST or equivalent and/ or their Agencies/Institutions.  OR  (b) Rs. 25,000/-+ HRA For others who do not fall under (a) above (upto 15.10.2025)	35 Years
20.0	Project Associate-II One (01) (PAT-II)	Master's Degree in Physics / Applied Physics, with Two (02) Years experience.	Microwave measurements specially antenna design characterization and materials measurements.	Involved in microwave measurements especially in antenna design, material measurements and other microwave characterization	Developing Expertise And Leveraging Terahertz Technology Advancements In CSIR (DELTA)	Rs.28,000/- + HRA (upto 31.03.2027)	35 Years

#### **Instructions and Information for Candidates**

- 1. Eligibility Criteria: The applicant must be a citizen of India.
- 2. Only those Candidates who have completed the essential qualification for whom the result has been declared are eligible to apply. Result awaited/Final semester appeared or appearing/Ph.D submitted etc. are not eligible to apply for any post. Experience if required in any post should only be post-qualification experience.
- 3. The candidates who have already been engaged in CSIR NPL or any other Lab./Instt. of CSIR as Project Staff for a period of 6 years or more are not eligible for the above engagements. The candidates who have been engaged for a period lesser than 6 years, upon selection, their tenure will automatically end on completion of (06) six years. Selected Candidate(s) will be engaged initially for a certain period against the respective project. which may be curtailed or extended at the discretion of the competent authority, CSIR NPL. On completion of the tenure in one project, in case, one wants to apply for engagement in another project, he/she will have to go through the process of selection by submitting a fresh application under the new project. Appointment under the new project would be made only after submission of 'No Demand Certificate' and 'No Dues Certificate' in the previous project and submission of resignation from the previous project. The performance of the Project staff would be reviewed periodically so that any one not found up to the mark, could be replaced. As such, the offer of appointment will be given for short duration i.e. 6- months/l year, which may be extended further based on the recommendations of the concerned Principal Investigator (PI).
- 4. There would be no component of increment etc. for Project staff and the consolidated remuneration to be paid to Project staff may be called "Stipend".
- 5. A Candidate may apply for maximum of 02 (Two) posts. Separate application may be submitted for each post code if a candidate is desirous of applying for more than 01 (One) Post.
- 6. Women project personnel shall be eligible for maternity leave of 180 days and the male project personnel shall be eligible for paternity leave of 15 days only in case of two surviving children as per CSIR norms. Further, the Project Staff shall be paid the stipend for the period of aforesaid leave only after rejoining the office after availing such leave and submission of relevant medical reports/documents.
- 7. The project personnel may be allowed to register for higher degree (i.e., Ph.D) as per the policy of the Institute, if they fulfill all the requirements laid down for such purposes, provided that the project duration is at least 3 years or more, apart from any other conditions laid down by the concerned Institute/Laboratory. The permission to register for Ph. D. is subject to the condition that the work of the project is not affected and it will be without any financial obligation to CSIR/Project. The tenure of the project personnel shall not be extended merely on the ground that he/she has not completed the Ph.D.

#### **Mode of Selection:**

- 8. If a large number of applications are received then the Candidates will be shortlisted by a screening committee based on academic qualification and /or experience. In case of short listing done by screening committee, the committee will adopt its own criteria for bringing down the number of candidate to be called for interview.
- 9. In case the final certificates reflect CGPA, GPA, etc, in that case, the candidate should convert the same in to equivalent percentage as per the approved formula of the university in the application and a copy of such conversion formula must be attached alongwith the application.

- 10. CSIR-NPL reserves the right to cancel or withdraw the Offer of engagement in case of any discrepancy found, in the candidature of any empanelled candidate at any stage.
- 11. Other terms & conditions will be governed as per guidelines issued by the funding agency/CSIR Hqrs., for the engagement of above Project Staff as amended from time to time.
- 12. The candidates will be free to answer in Hindi during interview.
- 13. Relaxation of age for SC/ST/ OBC /PwBD / Women: Age limit for Project staff shall be as per GOI rules.

#### **Engagement**

14. The engagement shall be initially for a short duration based on availability of funds which may be extended or curtailed based on the conduct and the performance of the incumbent as well as requirement of the institute. However, the engagement will not be beyond the tenure of the project and shall expire automatically on the expiry of project tenure, in which candidate has been selected. The engagement under projects does not confer any right/claim whatsoever, either explicitly or implicitly on the appointee for regular appointment in CSIR/NPL, against any post or otherwise under any legal conditions or precedent. The engagement of project staff in different projects either in same Lab/Instt. or different Lab.Instt. of CSIR taken together shall not exceed 6 years in any case.

#### Confidentiality of data and documents

15. The Intellectual Property Rights (IPR) of the data collected as well as the deliverables produced for the office shall remain with this office. No one shall utilize or publish or disclose or part with, to a third party, any part of the data or statistics or proceedings or information collected for the purpose of this assignment or during the course of assignment for the office, without the express written consent of the office. The incumbent shall be bound to hand over the entire set of records of assignment to the Office before the expiry of the contract, and before the final payment is released by the office.

#### **Termination of Service**

- 16. The performance of project personnel would be reviewed periodically so that candidates not found up to the mark, could be terminated. The engagement may be terminated at any time by the office without assigning any reasons by giving a one month notice. In case, the person desires to leave the assignment, he/she may also do so by giving one month notice or payment of one month stipend in lieu of, which can be condoned/ curtailed/ extended depending upon the discretion of the Competent Authority.
- 17. Eligible candidates may appear together with downloaded application form duly filled-up, for "Floating (Walk-in) Interview" on <u>09 December, 2024 for Post Code(s) 1.0 to 13.0</u> and <u>10 December, 2024 for Post Code(s) 14.0 to 20.0</u> between <u>08.00 AM to 10.00 AM</u> (candidate will not be entertained after 10.00 AM under any circumstance) in the Auditorium of the laboratory, with complete application giving the full details inclusive of marks starting from secondary examination onwards along with latest passport size photograph, original and self attested Photo copies of all certificates/testimonials. Candidates belonging to SC/ST/OBC/PwBD should bring copies of certificates in the proper format issued by the appropriate authority as per the latest instructions issued on the subject.

#### 18. No TA will be paid to the candidates for appearing in the interview.

- 19. Incomplete/wrong information, detected at any stage, would render the candidate liable to rejection.
- 20. No interim communication will be allowed.
- 21. Director CSIR-NPL reserves all the rights to cancel recruitment of any or all of the positions advertised above at any stage and reject any application without assigning any reason whatsoever.
- 22. All those candidates who are continuing as Project Staff in CSIR-NPL labs in any project will only be considered for interview on submission of the "No objection certificate" from current concerned PI of the project.
- 23. Canvassing in any form and/or bringing any influence political otherwise will be treated as a disqualification for the post.
- 24. In case of false information received application, the competent authority will cancel the candidature of the applicant and debarred for attending the interview in future.
- 25. Position Code will be cancelled if funds are not available in the advertised concerned project.
- 26. For availing reservation under the OBC category candidate is required to bring OBC certificate from competent authority clearly indicating that he/she belongs to the Non Creamy Layer Statement of Family Income for the previous year from all sources should also be mentioned in the certificate. The OBC (Non-Creamy Layer) certificate should be issued before date of interview from the competent authority.
- 27. <u>DISCLAIMER</u> Candidates who are applying for any of the above post shall ensure that they fulfill the essential qualifications. If they apply without fulfilling the essential qualifications then it will be considered that they are giving wrong/misleading information. The ONUS OF THIS ACTION WILL BE ON THE CANDIDATE and not on the Institute. In case they are found not fulfilling the essential criteria or that they have provided misleading information, then their candidature for the post may be rejected at any stage of selection or after selection.

#### **NOTE:**

- 1. Candidate should go through the advertisement carefully to check their suitability in the area.
- 2. In case a candidate fails to produce any of the above mentioned documents/testimonials in original at the time of registration, he/she shall not be allowed to register for the further process.
- 3. The posts for various projects that are advertised are purely contractual. The positions advertised are provisional and subject to ascertaining the availability of funds under the respective projects before the declaration of results and issue of engagement letter.
- 4. A relieving letter or relieving will be required at the time of joining, if the candidate is employed / working in any Company / CSIR/ Organization at the time of the interview.