

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

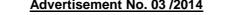
## **CSIR-NATIONAL PHYSICAL LABORATORY**

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

(Council of Scientific & Industrial Research) डा. के.एस. कृष्णन् मार्ग, नई दिल्ली - 110012

Dr. K.S. Krishnan Marg, New Delhi – 110012

Advertisement No. 03/2014



## "FLOATING (WALK-IN) INTERVIEW ON 9th October, 2014 (Post Code(s) 1.0 to 17.0) & 10th October, 2014 (Post Code(s) 18.0 to 20.3)"

NPL, New Delhi (a constituent laboratory of CSIR) desires to have qualified incumbents for purely temporary and contractual positions of "Research Associate, Senior Research Fellow, Junior Research Fellow, Senior Project Fellow, Project Fellow, Project Assistant, Data Entry Operators, Skilled Manpower and Research Interns" under the various ongoing externally funded & time targeted sponsored projects as under:-

Posi		Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend (Fixed )per month	Age as on 09.10.2014 (Upper age limit as per rule with relaxation as per rule for SC/ST/OBC/Wo men Candidates)
1.0	Project Assistant One (01)	MSc. (Physics) Or B.Tech. (Electronics & Communication or Electrical Engg.)	Experience in the field of nano-science and technology	Synthesis, characterization and properties evaluation of nanomaterials	Standardization for Nanoscience and Technology: Spreading its awareness in India and Participation in International Organization for Standards (ISO) Activities on Nano metrology	Rs. 14,000/- (consolidated) (up to 31.12.2015)	28 Years
2.1	Project Fellow One (01)	B.Tech (Mechanical & Automation Engg. / Electrical & Electronics Engg.)	Experience in organic photovoltaics, nano-materials and devices	To carry out R&D in flexible organic solar cell materials and devices, etc.	Novel Approaches for Solar Energy Conversion	Rs. 16, 000/- + 30% HRA (up to 31.03.2017)	28 Years
2.2	Senior Project Fellow One (01)	M.Tech (Material Engg., material science, Nano science and nanotechnology) Or M.Sc. (Physics) with 02 years research experience in the relevant field + 01 publication in SCI Journal	Experience in organic photovoltaics, nano-materials and devices	To carry out R&D in flexible organic solar cell materials and devices, etc.	Novel Approaches for Solar Energy Conversion	Rs. 18, 000/- + 30% HRA (up to 31.03.2017)	32 Years



Age as on

3.0	Project Fellow Two (02)	B.Tech (Electronics & Communication)	R&D in material / devices / metrology and precision measurements	R&D in material / devices / metrology and precision measurements	Measurement Innovation in Science & Technology	Rs. 16,000/- + 30% HRA (up to 31.03.2015)	28 Years
4.0	Research Associate One (01)	Ph.D. (Physics / Materials / Electronics/ Nanoscience / Nanotechnology)  Or  M.Tech with 03 years of research , teaching and design & development experience and at least one research paper in SCI Journal	Experience in fabrication of Nanoparticles and structures, Nanoscale measurements etc.	Nanoscale measurements and nanostructure R&D, Handling of optical profiler, AFM and interferometers	Generic Development of Nanometrology for Nanotechnology at NPLI	Rs. 16,000/- + 30% HRA (up to 31.12.2014)	35 Years
5.0	Senior Research Fellow Two (02)	M.Sc. (Physics / Geophysics / Atmospheric Science) with 02 years research experience in the relevant field and at least 01 SCI journal Or M.Tech (Atmospheric Science)	On atmospheric aerosols and radiation and / or metrology	Measurement and modeling of atmospheric aerosols and solar radiation	Multi-centric Collaborative Study on the impact of Environmental changes and ultra violet radiation (UVR) exposure on ocular health in India.	Rs. 18, 000/- + 20% HRA (up to 31.01.2015)	32 Years
6.0	Senior Research Fellow One(01)	M.Sc. (Biochemistry / Biotechnology) with 02 years research experience in the relevant field + 01 publication in SCI Journal	Experience in the field of infrared spectroscopy	Tissue sample collection, sample handling, data collection and analysis	Infrared spectroscopy study for tumor diagnosis Phase II	Rs. 18,000/- + 30% HRA (up to 07.07.2016)	32 Years
7.0	Junior Research Fellow Two (02)	M.Sc. (Physics) with NET Or B.Tech (Electrical / Electronics & Communication Engg.) and GATE qualified (or equivalent)	Experimental physics	Preparation, characterization and low temperature experimentation on nanoparticles & thin films of magnetic and superconducting materials	Study of magnetic anisotropy in magnetic nanoparticles, thin films and heterostructures	Rs. 16,000/- + 30% HRA (up to 17.04.2015)	28 Years

8.0	Junior Research Fellow One (01)	B.Tech. (Mechanical) with NET / GATE Or M.Sc. (Physics) with NET	Ferro fluids & magneto rheology	Synthesis and the design development of energy conversion devices based on ferro fluid	Preparation and Characterization of ferro fluids for energy conversion application	Rs. 16,000/- + 30% HRA (up to 16.04.2015)	28 Years
9.0	Junior Research Fellow One (01)	M.Sc. (Physics) + NET Or M.Tech. (Physics / Applied Optics / Engg. Physics)	Knowledge in optics or vacuum technology or electronics or VHDL	Designing, fabrication and testing subsystems in single trapped ion optical atomic frequency standards experiments	Transfer Cavity Locking of Re- pumping Lasers with FPGA based Advanced Locking Electronics	Rs. 16, 000/- + 30% HRA (up to 24.06.2017)	28 Years
10.0	Project Fellow One (01)	B.Tech (Material Science / Electronics & Communication)	One year research experience in the field of carbon fibers / composites	Development of carbon paper electrode	Development and validation of 3kWe PEMFC System	Rs. 16, 000/- + 30% HRA (up to 29.10.2015)	28 Years
11.0	Project Fellow One (01)	M.Sc. (Physics / Applied Physics / Engineering Physics)	Experience in synthesis and characterization of materials	Synthesis, microstructural characterization and magnetic property evaluation of magnetic materials	D-NEED – "Development of RE – free Permanent Magnet Materials"	Rs. 16,000/- + 30% HRA (up to 31.03.2017)	28 Years
12.1	Project Fellow One (01)	M.Sc. (Chemistry / Environmental Science) with math at graduation level	Experience in monitoring of greenhouse gases and other atmospheric pollutants	To assist in atmospheric monitoring at Delhi and Remote Monitoring Site at Palampur (H.P.)	Probing the changing atmosphere and its impacts in Indo – Gangetic Plains (IGP) and Himalayan Regions (AIM_IGPHim)	Rs. 14, 000/- + 30% HRA (up to 31.03.2017)	28 Years
12.2	Senior Project Fellow One (01)	M.Sc. (Chemistry / Environmental Science) with math at graduation level with 02 years research experience in relevant field and at least 01 publication in SCI Journal	Experience in monitoring of greenhouse gases and other atmospheric pollutants	To assist in atmospheric monitoring at Delhi and Remote Monitoring Site at Palampur (H.P.)	Probing the changing atmosphere and its impacts in Indo – Gangetic Plains (IGP) and Himalayan Regions (AIM_IGPHim)	Rs. 16, 000/- + 30% HRA (up to 31.03.2017)	32 Years
13.0	Junior Research Fellow One (01)	M.Sc. (Physics) + NET	-	Research and Development	Defect Engineered Fluorescence from "Nano-Diamond" for Nano-Photonics and Bio-Imaging	Rs. 16, 000/- + 30% HRA (up to 29.01.2019)	28 Years

14.0	Project Fellow One (01)	M.Sc. (Physics or Material Science, Nanotechnology)	Knowledge of Ultra High Vacuum, thin film deposition	Work on the growth and characterization of nitride based devices	Development of Noval nitride based Solar Cells under the project Development of Advanced Materials for Next Generation Energy Efficient Devices (D-NEED)	Rs. 16, 000/- + 30% HRA (up to 31.03.2017)	28 Years
15.0	Junior Research Fellow One (01)	M.Sc. (Organic Chemistry) + NET	-	Synthesis of fullerene based materials and porphyrin for Organic photovoltaics	New Fullerene based covalent Donor- acceptor dyads for enhanced solar energy conversion	Rs. 16, 000/- + 30% HRA (up to 18.08.2017)	28 Years
16.0	Senior Project Fellow Two (02)	M.Tech. (Material Science / Advanced Material Physics & Engineering / Advanced Materials)	Knowledge of Semiconductor Physics/Synthesis and characterization of Iuminescent materials	R & D work related to TAPSUN Project in Crystalline silicon solar cells	Efficient silicon photovoltaics with smart electronics and lighting systems	Rs. 18, 000/- + 30% HRA (up to 31.03.2017)	32 Years
17.0	Junior Research Fellow Or Project Assistant One (01)	For JRF: M.Sc. (Physics) + NET For PA: M.Sc. (Physics)	Thin film and vacuum technology, filtered cathodic vacuum arc, semiconductor, graphene, graphene based devices	To assist in the day to day work of the project and do the research work as per the requirement in the project under the advice of PI / Co-PI	Synthesis of large area graphene by filtered cathodic vacuum arc technique	Rs. 16, 000/- + 30% HRA (up to 24.08.2017)	28 Years
18.0	Skilled Manpower Two (02)	Graduate (BA/BCom/B.Sc.) with at least 50% marks + One year diploma / certification in computer hardware / network from reputed institute with at least one year experience in maintenance of computer hardware / network in any govt. organization.	-	Maintenance of computer hardware, software and other peripherals with their associated software handling	Computation & Network Facility – Maintenance & Upkeep of Hardware	Rs. 12, 000/- consolidated (For Two Years)	30 Years
19.0	Data Entry Operator Four (04)	Graduate with two (02) years diploma in computer science or equivalent with knowledge of computer applications/ office automation and typing skills (@ 40 w.p.m)	One year experience in working on human resource management automation solutions	Data Entry	ERP Implementation at NPL	Rs. 14, 000/- consolidated (For Six Months)	28 Years

20.1	Research Intern Eight (08)	M.Sc. (Physics)	-	Research in the relevant field	CSIR "Diamond Jubilee Research Interns Award " Scheme	Rs. 15, 000/- (consolidated) For Two Years	25 Years
20.2	Research Intern Eight (03)	M.Sc. (Chemistry)	-	Research in the relevant field	CSIR "Diamond Jubilee Research Interns Award " Scheme	Rs. 15, 000/- (consolidated) For Two Years	25 Years
20.3	Research Intern Eight (04)	B.Tech. (Electrical / Electronics / Electronics & Communication)	-	Research in the relevant field	CSIR "Diamond Jubilee Research Interns Award " Scheme	Rs. 15, 000/- (consolidated) For Two Years	25 Years

## General Conditions:-

- 1.0 The minimum eligibility in terms of marks obtained (percentage) for registration of the candidates in any of the advertised posts is First Division as prescribed by their respective University / Institute (Except for Post Code 18.0 & 19.0).
- 1.1. The total duration for which Project staff could be engaged will be five years. Where the duration of the Sponsored/Consultancy Project is less than 5 years, the services will be coterminus with the duration of the project. There would be no automatic shifting of Project staff from one project to another. 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 maximum duration, for which Project staff could be engaged in different projects taken together, will be 5 years, i.e. the total period of five years of engagement of Project staff in different projects taken together should be counted only from 09.10.2009 onwards. 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/1 year, which may be extended further based on the recommendations of the Selection Committee.
- 2.1 Leave: Project staff will be entitled for one day leave for each completed month's service.
- 2.2 Reservation: As regards reservation, if all things are equal, SC/ST/OBC candidates may be given preference over General candidates so as to ensure their representation.
- 2.3 Medical Facilities: Project Assistants will not be entitled for any medical facilities either through CSIR Dispensaries or under CS (MA) Rules, however, under emergent circumstances, Labs. / Instt. may give emergency treatment/consultation through CSIR Dispensaries, but they will not be eligible for reimbursement of medical expenses.
- 2.4 Registration for Ph.D.: The facility for Ph.D. registration shall be allowed to those Project Staff who have worked for a minimum period of one year and have at least cleared CSIR-UGC Lecturer ship (NET) or GATE examination or published 02 papers in international peer reviewed journals.
- 2.5 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".
- 3. Candidate should possess the required educational qualification as on date of interview.
- 4. Candidate should consciously choose only one position in the area for which his/her candidature is suitable.
- 5. **Mode of Selection**: In case large number of candidates turn up, the candidates will be shortlisted for interview by a duly constituted Screening Committee. Only the short-listed candidates will be interviewed by Selection Committee. The Select panel so prepared will be utilized for engagement as Project staff as and when requirement arise.
- 6. Relaxation of age for SC/ST/PH/OBC and women will be applicable as per GOI instructions

Eligible candidates may appear together with downloaded application form duly filled-up, for "Floating (Walk-in) Interview" on 9<sup>th</sup> October, 2014 in the areas of Physics, Chemistry & Engineering (Post Code(s) 1.0 to 17.0) and for the positions of Skilled Manpower, Data Entry Operators, Research Intern (post Code(s) 18.0 to 20.3) on 10<sup>th</sup> October, 2014 between 09.00 AM to 10.00 AM (candidate will not be entertained after 10.00 AM under any circumstance) in the Auditorium of the laboratory, with complete application (Bio-data) on plain paper giving the full details inclusive of marks starting from secondary examination onwards along with latest passport size photograph, original and attested copies of all certificates/testimonials. Candidates belonging to SC/ST/OBC/PH, should bring copies of certificates in the proper format issued by the appropriate authority as per the latest instructions issued on the subject.

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

**Note**: Candidate should go through the advertisement carefully for their suitability in the area.