



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. 01/2013**

**“FLOATING (WALK-IN) INTERVIEW ON 14th & 15th January, 2013**

**Day 1 (14.01.2013)**

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 Associate and Project Assistant ” under the various ongoing externally funded & time targeted sponsored projects and Research Interns under “CSIR Diamond Jubilee Research Intern Award Scheme”, as under :-

Post code	Name & No.of positions	Essential Educational Qualification	Desirable	Job description	Project /Scheme Title	Tenure of project & Emoluments/ stipend (Fixed )per month	Age as on 14.01.2013
1.1	Research Associate One (01)	Ph.D in Physics/ Material Science	Experience in semiconductor device	Experience in experimental work	One year research experience after Ph.d	14.06.2015  Rs.26,000/-pm (including HRA) (1st & 2nd Years)  Rs.28600/-pm including HRA after two years	35 years
1.2	Jr.Research Fellow Three (03)	M.Sc.Physics)/Electronics/Materials Science with 55% marks + NET	Dissertation carried out in the area of thin films	Deposition and characterization of amorphous & micro/ nano crystalline silicon and CIGS films and its analysis for the fabrication of efficient solar cells	R&D on thin film solar cells	14.06.2015  Rs.20,800/-pm (including HRA) (1st & 2nd Years)  Rs.23400/-pm including HRA after two years	28 years

## Day 1 (14.01.2013)

2.0	Sr Project Fellow Two (02)	M.Tech. with 60% marks or M.Sc (Physics/Electronics) with 55% marks with 2 years R&D experience after M.Sc.+ one publication in SCI journal	Knowledge of semiconductor physics/technology and preferably in silicon device fabrication and characterization	Development of silicon solar cells	Efficient Silicon photovoltaics with smart electronics and lighting systems	31.03.2017 Rs.18000/-HRA	28 years
3.0	Sr.Research Fellow Two (02)	M.Sc (Phys./Maths)with 55% marks + Net qualified for lecturership with 2 years experience <b>OR</b> M.Tech.(Environment Science with phys./Maths background	Knowledge of computer programming	Modeling analysis of atmospheric data to find oxidizing capacity of the atmosphere	Determination of the impact of oxidizing capacity of the troposphere on the abundance of CO and CH4 with special reference to India	30.01.2015 Rs.18000/-	28 years
4.0	Sr. Project Fellow One (01)	M.Sc.(Phys) with 55% marks + Net qualified with 2 years experience	To have knowledge of conducting polymers	To do project work in the area of Innovative solutions for solar energy storage	Innovative solutions for solar Energy storage	31.03.2017 Rs.18000/-+ HRA	28 years
5.1	Jr. Research Fellow One (01)	M.Sc.(Physcs/Maths/Atmospheric sci./Geophysics) with 55% marks <b>OR</b> M.Tech (Atmospheric Sci.)	On atmospheric aerosols and radiation and / or meteorology	Measurement and modeling of atmospheric aerosols and solar radiation	Seasonal variation of column aerosol properties, aerosol radiation forcing and the assessment of the impact of absorbing (BC) and desert dust aerosols in the megacity of Delhi	28.06.2014 Rs.16000/-HRA	28 years
5.2	Research Assistant (One) 01	M.Sc.(Physics/Atmospheric Sc./ Geophysics) with 55% marks <b>OR</b> M.Tech (Atmospheric Sci.)	On atmospheric aerosols and radiation and / or meteorology	Measurement and modeling of atmospheric aerosols and solar radiation	Multicentric Collaborative study on the impact of Environmental changes and Ultra violet radiation (UVR) exposure on ocular health in India	11.3.2014 Rs.22,120/- Fixed	30 years
6.0	Project Fellow One (01)	M.Sc with 55% marks with CSIR -NET	Experience in organic semiconductors and thin film deposition	Synthesis of organic semiconductor and fabrication and characterizations of OLED/OLET	Efficient Silicon (OLET) photovoltaics with smart electronics and light systems	31.03.2017 Rs.16000/-HRA	28 years

### Day 1 (14.01.2013)

7.0	Project Associate One (01)	M.Sc. Physics with 60% marks + 1 year experience	Knowledge of liquid crystals, nano-materials, optics	Research work	To explore the electro-optical properties of nano-materials doped ferroelectric liquid crystals and their application in the fabrication of optical devices.	14.05.2017 Rs.16000/-Fixed	30 years
8.0	Project Fellow One (01)	M.sc. (Physics/ Environmental Science) with 55% marks	Nil	To collect and analysis of VOC using Gas Chromatograph and operation of Analyzers (O3, CO, NOx etc.)	Study of seasonal variation of ozone precursors in relation with surface ozone over Delhi, a mega city	11-03-2015 Rs.12,000/-+HRA	28 years
9.1	Project Fellow (One) 01	M.Sc.(Physics or Materials science or Optics/ Applied Optics, Photonics with 55% marks OR M.Sc Tech (Photonics) or equivalent	Knowledge of ultra high vacuum or growth techniques like MBE, solar cell fabrication or characterization technique	Growth of III-nitride multi-quantum well structure & their characterization for Nitride based solar cell	Development of advanced materials for next-generation energy-efficient devices (D-NEED)	31.03.2017 Rs.16,000/-+HRA	28 years
9.2	Research Associate One (01)	Ph.D. Degree (Physics or Materials Science, or Optics / Applied optics or Photonics or equivalent OR ME/M.Tech having 3 years of research, teaching and design and development experience with atleast one research paper in Science Citation indexed (SCI) journal	Knowledge of ultra high vacuum or growth techniques like MBE, solar cell fabrication or characterization technique	Growth of III-nitride multi-quantum well structure & their characterization for Nitride based solar cell	Development of advanced materials for next-generation energy-efficient devices (D-NEED)	31.03.2017 Rs.22,000/-+HRA	35 years
10.1	Jr. Resh.Fellow Two (02)	M.Sc. (Physics) with 55% marks	NET / GATE qualified	R & D	Synthesis and Characterization of Ferrofluids for Energy Conversion Applications	30.04.2014 Rs.20,800/-PM fixed	28 years
10.2	Project Assistant One (01)	M.Sc. (Physics) with 55% marks	NIL	R & D	Synthesis and Characterization of Ferrofluids for Energy Conversion Applications	30.04.2014 Rs.8000/-PM fixed	28 years

### Day 1 (14.01.2013)

11.0	Project Assistant Two (02)	M.Sc.(Physics or B.Tech.Electronic with 3 months project experience on atomic clocks/ atomic physics (compulsory/ Mandatory experience certificate required	Experience of working on vacuum system and / or glass blowing	Running Vacuum system, doing glass blowing, obtaining high temperatures and handling Rubidium	Development of Rubidium Atomic Clock	13.11.2013  Rs.15000+HRA	28 years
12.1	Senior Project Fellow One (01)	M.Sc (Physics/ Electronics)with 55% marks	Knowledge of lasers, optics, vacuum and electronics with six months experience	To work on cooling and trapping of ions and study of atomic transitions	Single Trapped ion Optical frequency standards (STIOS)	31.03.2017  Rs.18,000/-+HRA	28 years
12.2	Project Assistant Level-III  Two (02)  PSC--0207 Dr. A. Sengupta, 8343	M.Sc. Physics/Chemistry/ Applied Physics/Electronics/ Electronic Science with 60% and above marks with 6 months R&D project work in any area of Physics/ Electronics/Electronic Science	GATE/ JRF qualified will be given preference	Vacuum/Electronics/Opti cs/Design work related to YB ion trap based optical frequency standard	Single Trapped ion Optical frequency standards (STIOS)	31.03.2017  Rs.18,000/-+HRA	28 years
13.0	Research Intern Three (03)	M.Sc. Physics with 1st Div .	Specialization in Solid State Physics/ Knowledge of Material Science, Solar cells, Ultrasonic, low temperature physics, semiconductor physics	--	Under CSIR Diamond Jubilee Award Scheme	Rs.15000/- for 2 years	25 years  (25 years for male and 30 years in case of SC/ST/OBC and female candidate

## Day 2 (15.01.2013)

14.0	Project Assistant One (01)	1st class M.Sc. (Chemistry)	To have some knowledge of conducting polymers & flyash composites	To do project work in the area of Project conducting Polymers & flyash composites	Modification & Designing of Fly-ash composites in Building materials for energy conservation & shielding applications.	19.12.2013 Rs.12000/-	28 years
15.1	Project Fellow One (01)	M.Tech (Nanotechnology/ Polymer Technology) with 60% marks	nil	To prepare carbon nanotube composites	Development of advanced materials for next-generation energy-efficient devices (D-NEED)	31.03.2017 Rs.16,000/-+HRA	28 years
15.2	Project Fellow One (01)	B.Tech (Chemical engg./ Mechanical Engg./Polymer engg.) with 60% marks+ 1 year experience	nil	To prepare carbon fibre/CNT paper and plates for fuel cell	Development of advanced materials for next-generation energy-efficient devices (D-NEED)	31.03.2017 Rs.16,000/-+HRA	28 years
16.0	Sr. Project Fellow One( 01)	M.E/M.Tech(Material Science, Photonics, nanotechnology OR equivalent degree in engg./ technology with at least 60% marks  OR M.Sc.(Physics or Materials Science, or Optics/ Applied optics, photonics or M.Sc. Tech. (Photonics) or equivalent & one publication in SCI Journal and should have completed at least 2 years of Post M.Sc. Research experience	Knowledge of ultra high vacuum or growth techniques like MBE, solar cell fabrication or characterization technique	Growth of III-nitride multi-quantum well structure & their characterization for Nitride based solar cell	Development of advanced materials for next-generation energy-efficient devices (D-NEED)	31.03.2017 Rs.18,000/-+HRA	32 years
17.0	Project Asstt. One (01)	M.Tech (Nanotechnology) with 60% marks	Experience in solar cell material synthesis and characterization	Growth of ZnO, CdTe Thin films	Enhancement of solar cell efficiencies using tapered ZnO nanorods- CdTe polycrystalline thin film structure	29.08.2015 Rs.16,000/-	28 years

## Day 2 (15.01.2013)

18.1	Jr. Res. Fellow One (01)	First Class B.Tech/B.E (Electronics/ Electronics and Communication/ Electronics and Instrumentation/ Electronics & Telecommunication) OR Equivalent + GATE	Knowledge and project experience in analog and digital circuit design, assembly and testing, microcontroller programming, programming in C, Linux	Design, assembly and testing of electronic circuits for medical instrumentation, interfacing with microcontrollers and PC, firmware development	Innovative product development centre	07.02.2014  Rs.16000/ +HRA	28 years
18.2	Project Asstt. One (01)	First class M.Sc/B.E/B.Tech (Electronics/ Electronics & Communication/ Electronics and Instrumentation/ Electronics & Telecommunication) or equivalent	Soldering, assembly of electronic circuits and testing	Soldering assembly and testing of electronic circuits for medical instrumentation involving small surface mounted components	Innovating product development centre	07.02.2014  Rs.8000/pm consolidated	28 years
19.0	Project Assistant One (01)	M.Sc Electronic Science/ Electronics Electronic with 3 months project experience on atomic clocks/ atomic physics (compulsory/ Mandatory experience certificate required	Experience of working on vacuum system and / or glass blowing	Running Vacuum system, doing glass blowing, obtaining high temperatures and handling Rubidium	Development of Rubidium Atomic Clock	13.11.2013  Rs.15000+HRA	28 years
20.1	Senior Project Fellow One (01)	M.Tech (Applied Optics/ Engg. Physics/ ECE/ Instrumentation with six months experience	Knowledge of lasers, optics, vacuum and electronics	To work on cooling and trapping of ions and study of atomic transitions	Single Trapped ion Optical frequency standards (STIOS)	31.03.2017  Rs.18,000/- +HRA	28 years
20.2	Project Assistant Level-II One (01)	BE/ B.Tech.Electronics and communication with 55% and above marks with 3 years experience	Nil	Developing and microprocessor based electronics for atomic frequency standards	Single Trapped ion Optical frequency standards (STIOS)	31.03.2017  Rs.15,000/-+HRA	28 years

## Day 2 (15.01.2013)

21.0	Jr. Research Fellow One (01)	M.Sc Chemistry + NET or GATE with 55% marks or B.Tech.60% marks	Experience in Organic synthesis	Synthesis of Organic Photovoltaic materials and devices fabrication	Fellowship for INSPIRE Faculty	02/10/2017  Rs.16000/ +HRA	28 years
22.0	Project Assistant One (01)	M.Sc.Chemistry /Organic) with 1st class	One year desired experience with handling microfluidic system, fabrication of biosensor	Experimental work	Fabrication of pump less microfluidic channel on circular mounts	31.09.2014  Rs.16,000/- fixed	28 years
23.1	Research Intern Two (02)	M.Sc. in chemistry with 1st Div.	Knowledge of polymer chemistry		Under CSIR Diamond Jubilee Award Scheme	Rs.15000/- for 2 years	25 years  (25 years for male and 30 years in case of SC/ST/OBC and female candidate)
23.2	Research Intern Two (02)	B.E./ B.Tech in Electronics with 1st Div.	--		Under CSIR Diamond Jubilee Award Scheme	Rs.15000/- for 2 years	25 years  (25 years for male and 30 years in case of SC/ST/OBC and female candidate)

### General Conditions :-

- 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 co-terminus 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 28.03.2003 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 TA/DA: Project staff will be entitled for TA/DA as per JRF, SRF and RA respectively while on official tour.
- 2.4 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.
- 2.5 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 two years and have atleast cleared CSIR-UGC Lecturership (NET) or GATE examination or published 02 papers in international peer reviewed journals.
- 2.6 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 to 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 the dates and areas as mentioned above 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 from time to time on the subject.**

**NO TA will paid to the candidates for appearing in the interview.**

Administrative Officer

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