

# NATIONAL PHYSICAL LABORATORY

(Council of Scientific & Industrial Research)

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

## Advertisement No. 1/2010

**Closing date of application received: 26.02.2010**

Applications are invited from Indian nationals for filling up the following positions at National Physical Laboratory, New Delhi as per details given below. The National Physical Laboratory, a premier institution in the family of Council of Scientific & Industrial Research (CSIR), is devoted to R&D activities in the following major areas.

### 1. Standards

R&D, maintenance and upgradation in calibration and measurement in areas such as, Mass, Volume, Density, Viscosity, Length, Temperature, Optical radiation, Force, Pressure, Vacuum Torque, Hardness, Acoustics, Ultrasonics, Fluid Flow, Magnetism, Electrical power, voltage, current, frequency, impedance, attenuation, Time, etc.

### 2. Materials development and Characterization

Research and Development of materials, processes and technologies in the areas of Metals & Alloys, Carbon technology, advanced ceramics, Polymeric & Soft Materials, Liquid Crystals, Single crystals, Thin film technology, Optical coatings, Superconductors, Ferrofluids, Photovoltaics, Luminescent Materials and Devices, Light emitting diodes, Porous silicon, nanoparticles, sensors, Certified Reference Materials, etc. NPL is having many advanced and sophisticated characterization facilities like AFM, Powder XRD, HRXRD, SEM, TEM, EPR, FT-IR/Raman, UV-Vis., AAS, ICPEs, SIMS, PL, AES, LEED, XPS, STM(UHV) etc. to meet the requirements of in-house as well as other Institutions/Industries.

### 3. Radio and Atmospheric Sciences

R&D programmes pertaining to Radio Propagation and Media (Tropospheric and Ionospheric) Characterization includes modeling, effects of space weather, Atmospheric Sciences with a special focus on Global Change, effect of green house and other toxic gases. Study of Antarctic environment with a large number of radio, acoustic and optical techniques is another important activity. NPL has a network of Ionosondes, GPS and Tomographic receivers. Indian regional warning centre (RWC-India) is one of the international facilities for providing space-weather alerts to the users in the country.

### 4. Support units for Organization and Management

For its organization and Management, NPL has several Scientific/Technical Support units like Central Computer Facility (CCF), Library, Central Workshop, Quality control, Photography, Transport, Hindi Unit, Director's Secretariat, Administration, Finance & Accounts, Stores & Purchase etc.

**TABLE OF POSTS**

Post Code	Name and No. of positions	Educational Qualifications	Desirable
1.0	Scientist Gr. IV(4) (1 post) - Unreserved	Ph .D. in Physics (Experimental studies of semiconductor materials and devices) or its equivalent with atleast seven years of post Ph.D. research/ industrial experience in processing and characterization of semiconductor devices	Experience in silicon solar cell fabrication and characterization / semiconductor device processing / Characterization of semiconductor devices
2.0	Scientist Gr. IV(3) (1 post) – Unreserved	Ph.D. in chemistry or its equivalent with at least four years of post Ph.D. research/ industrial experience in analytical chemistry	Hands-on experience with sophisticated analytical instruments for aerosol chemistry/ metrology and environmental monitoring and control

3.0	Scientist-IV(2) (1 post) – O.B.C.	Ph.D. in Physics or its equivalent with atleast one year post Ph.D. R&D experience in the relevant area.	Experience (i) in working with charcaterisation tools such as AFM/ STM/ SEM or (ii) in Automation, Data acquisition and their anaylsis, or (iii) in interferometry and /or measurement science & technology of nanoelectronics and nanodimension
4.0	Scientist-IV(2) (1 post) - Unreserved	Ph.D. in experimental Physics or its equivalent with atleast one year post Ph.D. R&D experience in the relevant area.	Research experience in ultrasonic instrumentation and techniques
5.0	Scientist-IV(2) (1 post) - Unreserved	Ph.D. in the area of surface science or its equivalent with M.Sc. (Physics) and at least one year post Ph.D. R&D experience in the relevant area.	Research experience in characterization techniques like SIMS, UHV, Raman spectroscopy etc.
6.0	Scientist-IV(2) (1 post) – Unreserved	Ph.D. in the area of surface science or its equivalent with M.Sc. (Physics) and at least one year post Ph.D. R&D experience in the relevant area.	Research experience in structure determination by single crystal XRD, powder XRD, FTIR and Raman spectroscopy etc.
7.0	Scientist-IV(2) (1 post) – Unreserved	Ph.D. in Biology/Biotechnology or its equivalent with physics at graduation level and atleast one year post Ph.D. R&D experience in biomaterials.	Experience in biosensors
8.0	Scientist IV(2) (3 posts) –  01 – Unreserved 01 – S.C. 01 – O.B.C.	Ph.D. in Experimental Solid State Physics or its equivalent with atleast one year post Ph.D. R&D experience in the relevant area.	R&D experience in experimental solid state physics/material science/measurement science
9.0	Scientist IV(1) (1 post) – Orthopaedically physical handicapped	Ph.D. (Physics) or its equivalent in the relevant area OR 1 <sup>st</sup> Class M.Sc. (Physics) or its equivalent	R&D experience in experimental physics

Group/ Grade	Pay Band	Grade Pay	Total Emoluments*	**Upper Age limit not exceeding (as on 26.02.2010)
Gr.IV(4)	Rs.37400-67000 (PB-4)	Rs.8700/-	Rs.77000/-	45 years
Gr.IV(3)	Rs.15600-39100 (PB-3)	Rs.7600/-	Rs.51000/-	40 years
Gr.IV(2)	Rs.15600-39100 (PB-3)	Rs.6600/-	Rs.44000/-	35 years
Gr.IV(1)	Rs.15600-39100 (PB-3)	Rs.5400/-	Rs.37000/-	35 years

\* Total Emoluments means approximate total emoluments on minimum of scale including House Rent Allowance

\*\* Please see Age Relaxation column under General Condition.

Last date for receipt of applications is **26.02.2010**.

**Note : Candidates who have already applied against Advertisement No. 2/2009 published in the month of May, 2009 need not apply again, their applications against said advertisement will be also considered.**

### **General Conditions :**

- 1 a) The posts carry usual allowances as admissible to Central Government employees as made applicable to CSIR employees of the same pay and status stationed at New Delhi.
- b) Deserving candidates may be considered for higher start of pay.
- c) The post is pensionable based on defined contribution under the New Pension Scheme which has been in vogue with effect from 01.01.2004.
- d) The number of vacancies indicated against each category are provisional and may vary at the time of selection.
- e) Scientists in Group-IV(2) are also eligible for 2 additional increments (without DA) and Professional update allowance of Rs.10000/- per annum.
- f) Scientists in Group-IV(4) and above are also eligible for 2 additional increments (without DA) and Professional update allowance of Rs.20000/- per annum.

### **2. Age Relaxation :**

- a) ***The date for determining the age limit/experience/qualifications shall be the closing date prescribed for receipt of applications i.e. 26.02.2010.*** The upper age limit is however, relaxable upto 5 year for SC/ST and 03 years for OBC as per Government orders in force only in those cases where the post are reserved for respective categories.
- b) Relaxation in age limit up to 5 years may be allowed to Council/ Government/Autonomous Bodies/Public Sector employees in accordance with the instructions and orders issued by the Government of India from time to time in this regard.
- c) SC/ST/OBC candidates are required to produce attested copy of community certificate in the prescribed format along with the Application Form.
- d) Relaxation in the upper age limit for Physically Handicapped will be 5 years, over and above SC/ST/OBC as the case may be.
- e) Candidates belonging to Other Backward Classes (OBC) must submit a photocopy of the latest certificate in the prescribed form issued by the specified competent authority (SDO/District Magistrate/Dy. Commissioner) along with the Application Form. The certificate issued by Gazetted Officers should be countersigned by the District Magistrate or Dy. Commissioner. OBC candidates will be considered as per CSIR/Govt. of India rules.
- f) Relaxation in the upper age limit of 5 years applicable for the persons who had been domiciled in the Kashmir Division of the State of J&K during the period of 01.01.1980 to 31.12.1989 subject to production of a certificate from the District Magistrate in the Kashmir Division within whose jurisdiction he/she had ordinarily resided OR from any other authority designated in this behalf by the Government of J&K State to the effect that he/she had ordinarily been domiciled in the Kashmir Division of State of J&K during the period from 01.01.1980 to 31.12.1989.
- g) Relaxation in age, qualification and/ or experience may be permitted if sufficient number of candidates possessing the requisite qualification and/ or experience are not likely to be available to fill up the posts.

### **3. How to Apply & Application Fee**

- a) Prescribed Application form should be downloaded from NPL website [www.nplindia.org](http://www.nplindia.org). Completed application(s) in all respects, supported by attested copies of certificates of educational qualifications, experience, etc together with an application fee (if applicable) of Rs.100/- (Rupees One hundred only) in the form of crossed Demand Draft valid for at least 6 months in favour of Director, National Physical Laboratory payable at New Delhi is to be sent in an envelope superscribing *Application for the post of Scientist Group-IV* (Post code) to the Controller of Administration, National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi –110012, so as to reach on or before **26.02.2010**.
- b) Candidate belonging to SC/ST/Physically Handicapped category and regular employees of CSIR are exempted from payment of application fee.
- c) Separate applications along with appropriate fees are to be made for different posts if a candidate is desirous of applying for more than one post.
- d) Candidates who are applying from abroad may enclose draft along with the application in currency of concerned country equivalent to Indian currency of Rs.100/- plus service charges of bank etc.

- e) Applications from employees of Government Departments will be considered only if forwarded through proper channel, certified by the employer that the applicant will be relieved within one month of the receipt of the appointment orders, if selected. 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 NPL at the earliest.
  - f) Candidates should specifically note that the applications received after the closing date for any reason whatsoever (such as envelopes wrongly addressed, delivered elsewhere, postal delay etc.) will not be entertained by NPL. Any enclosure received separately subsequent to the receipt of the application cannot be connected therewith. No representation in this regard will be entertained.
  - g) Incomplete application (i.e. without photograph, without attested copy of educational certificates/experience certificate, unsigned and blank columns will not be entertained and will state rejected.
- 4 **Mode of Selection:**
- a) Mere fulfillment of educational qualifications and experience does not entitle a candidate to be called for interview. The duly constituted Screening Committee will adopt its own criteria for short-listing the candidates to be called for interview. Only those candidates, who are in the opinion of the Institute, suit the Institutional requirements, will be called for interview. The candidate should therefore, mention in the application all the qualification and experiences in the relevant area over and above the minimum prescribed qualification supported with documents.
  - b) Candidate should ensure that he/she possesses educational qualification/experience in the relevant area as required in the category/post, for which he/she is applying, on the last date of receipt of application
  - c) The period of experience in the requisite discipline/area of work wherever prescribed shall be counted w.e.f. the date of acquiring the prescribed minimum educational qualifications required for that post.
  - d) 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 New Delhi Railway Station on production of Rail Tickets/Rail Ticket Numbers or any other proof of journey. 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.
- 5 Canvassing in any form or bringing of any influence, political or otherwise, will be treated as a disqualification.
- 6 The decision of the NPL/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 and no enquiry or correspondence will be entertained in this connection from any individual or his/her agency.

**Check list: Attested copies of following documents must be attached along with the application form.**

- a. Secondary School certificate showing Date of Birth.
- b. Mark sheets of Educational qualifications.
- c. Experience certificate.
- d. Demand Draft of Rs. 100/-.
- e. Certificate of OBC/SC/ST/PH.
- f. NOC (from Govt. employee).

Do not attach any reprint or testimonial.

**NATIONAL PHYSICAL LABORATORY**  
*(Council of Scientific & Industrial Research)*  
**Dr. K.S. Krishnan Marg, New Delhi-110012**

Candidate may kindly go through the advertisement carefully before filling up the application form (each column and each page). Incomplete application will not be entertained.

To be filled up by the candidate's own handwriting and forwarded to the **Controller of Administration, National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi -110012.** (Information should be factual and not descriptive)

Advertisement No.	1/2010	Paste your recent photo here. Put your signature across the photo, partly on photo and partly on form
Application for the post of	Scientist Gr.IV(____)	
Post Code		
Demand Draft No.		
Amount	Rs.	
Date of Issue		
Bank Name:		
Branch Name		

1. NAME : Dr./Mr./Ms. \_\_\_\_\_ SEX : Male/Female

2. FATHER'S NAME : \_\_\_\_\_

3. ADDRESS FOR CORRESPONDENCE : \_\_\_\_\_

3A. PERMANENT ADDRESS : \_\_\_\_\_

4. PHONE NO. WITH STD CODE: \_\_\_\_\_ MOBILE: \_\_\_\_\_

E MAIL : \_\_\_\_\_ FAX NO. : \_\_\_\_\_

5. DATE OF BIRTH: \_\_\_\_\_

5A. AGE AS ON 26.02.2010 : \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_ Days

6. CITIZENSHIP \_\_\_\_\_

7. STATE YOUR

a) ARE YOU A MEMBER OF A SCHEDULED CASTE/TRIBE OR O.B.C. :  
 (Answer "Yes" or "No" and if the answer is "Yes" give particulars and attach a certificate of the competitive authority in support of your claim)

GEN	SC	ST	OBC

b) ARE YOU BELONGED TO PHYSICALLY HANDICAPPED CATEGORY

Yes	No

8. ARE YOU RELATED TO ANY OF THE EMPLOYEE OF NPL/CSIR OR ITS SISTER LABORATORY? (If so, the name of employee, designation, lab./instt. & nature of relation may be stated)

\_\_\_\_\_

SIGNATURE OF APPLICANT: \_\_\_\_\_

9. AREAS OF SPECIALISATION (Relevant to post) : \_\_\_\_\_

\_\_\_\_\_

10. NAME OF 03 REFEREES FAMILIAR TO YOUR WORK WITH THEIR E-MAIL ADDRESS AND PHONE NUMBERS.

11. EMPLOYMENT / EXPERIENCE RECORD [if govt. employee, please attach another sheet forwarding the application through proper channel] :

Name of Employer/Place of Work	Area of experience	Designation and pay scale	Period (Dates)	
			From	To

12. QUALIFICATIONS (Including certification, if any)

Exam./ Degree	Main subjects	Board/University/Institute	Year of passing	Class / Div.	% marks / GPA
10 <sup>th</sup> /Matric					
12 <sup>th</sup> /Intermediate					

YEAR OF QUALIFYING CSIR-NET or GATE : \_\_\_\_\_ NET \_\_\_\_\_ GATE

13. PUBLICATIONS (Only those printed in Journals) (Add extra sheet, if space below is insufficient)

S. No.	Journal	Authors	Vol.	Year	Pages

14. No. OF PATENTS (Granted only) : \_\_\_\_\_

SIGNATURE OF APPLICANT: \_\_\_\_\_

15. PRIZES/AWARDS (Only important ones) : \_\_\_\_\_

\_\_\_\_\_

16. WRITE WITHIN 200 WORDS "WHY YOU ARE SUITABLE TO WORK AT NPL". (Attach extra sheet, if required)

### **DECLARATION**

I hereby declare that all the statements made in this application are true and complete to the best of my knowledge and belief and nothing has been concealed/distorted. I am aware that, if at any time I am found to have concealed/ distorted any material information, my appointment is liable to be summarily terminated without notice.

SIGNATURE OF APPLICANT (with date)

**Candidate already employed should get the following endorsement signed by his/her present employer.  
ENDORSEMENT BY THE HEAD OF THE DEPARTMENT/OFFICE**

No:

Date:

Full Signature

Designation

Seal/Stamp

NOTE:

Any change of address given in S.No.04 above should at once be communicated to the Controller of Administration, NPL, Dr KS Krishnan Marg, New Delhi – 110012. Candidate must arrange for redirection of communications to their addresses, if necessary. The Council will make every effort to take account of changes in candidate's address but cannot accept any responsibility in this matter.