



**CSIR-NATIONAL INSTITUTE FOR INTERDISCIPLINARY SCIENCE AND TECHNOLOGY**  
Industrial Estate P.O., Pappanamcode, Thiruvananthapuram-695 019

Advt. No.: 02/2020

**CLOSING DATE OF ON-LINE APPLICATIONS: 27/10/2020 at 5.30pm**  
**Last date for receipt of hard copy of on-line application: 04/11/2020 up to 5.30PM**

The National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, is a premier Institute of the Council of Scientific & Industrial Research (CSIR), involved in multidisciplinary R&D programmes of both basic and applied nature across scientific disciplines for economic, environmental and societal benefits for the people of India. This Institute is engaged in R&D of five broad areas namely (i) Agroprocessing Technology, (ii) Microbial Process Technology, (iii) Chemical Science & Technology, (iv) Materials Science & Technology and (v) Environmental Technology. NIIST offers excellent infrastructure support, start-up research funding along with a vibrant environment to perform research in a unique interdisciplinary environment, wherein scientists enjoy a mix of individual freedom and collective scientific support to undertake research of international quality, Product Development/Technology Innovation/Applied Technology etc. within the mandate of the Institute.

**On-line** 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 different fields, to fill up the posts of scientists at various levels as detailed below:

The total emoluments and age limit for various posts are as follows:

| Designation         | No. of Posts & Reservation category   | Pay Level & Pay Matrix     | Total Emoluments* | Upper Age Limit not exceeding (as on last date)** |
|---------------------|---|----------------------------|-------------------|---|
| Scientist           | 03 (UR)<br>01 (EWS)<br>02 [SC (including 1 backlog vacancy)]<br>01 (ST)<br>01 (OBC) | Level-11<br>₹67700-208700  | ₹94,253/-         | 32 years  |
| Senior Scientist    | 01 (UR)   | Level-12<br>₹78800-209200  | ₹1,09,016/-       | 37 years  |
| Principal Scientist | 01 (UR)   | Level-13<br>₹123100-215900 | ₹1,67,935/-       | 45 years  |

\*Total Emoluments means approximate total monthly emoluments on minimum of pay matrix including House Rent Allowance in Class 'Y' City etc.

\*\*Please see age relaxation under Relaxation column

| Sl. No. | Post Code, No. of position & reservation category | PayLevel & Pay Matrix     | Designation and Age limit | Essential Educational qualification & Experience  | Desirable Qualification & Experience   | Job Specification  |
|---------|---|---------------------------|---------------------------|---|--|--|
| 1       | APTD 1<br>1 post<br><b>OBC</b>                    | Level-11<br>₹67700-208700 | Scientist<br>32 yrs       | M. Tech in Food Technology/Agriculture Engineering<br><br>OR<br>Ph.D (submitted) in Food Technology/Agriculture Engineering | At least 2 SCI publications<br><br>At least one year industrial/postdoctoral experience in relevant technologies in post harvesting areas  | The selected candidate will have to work effectively as a team member in the area of post-harvest value addition, product and process development in the upcoming areas of agri/food research.   |
| 2       | APTD 2<br>1 post<br><b>UR</b>                     | Level-11<br>₹67700-208700 | Scientist<br>32 yrs       | Ph.D (submitted) in chemistry with specialization in edible oil / fats / allied area  | At least one year industrial/postdoctoral experience with expertise in sophisticated analytical equipment, evidenced by publications in SCI journals/patents/technologies  | The selected candidate will have to work effectively as a team member in the area of edible oils and fats and allied products and/or essential oils  |
| 3       | CSTD 1<br>1 post<br><b>UR</b>                     | Level-11<br>₹67700-208700 | Scientist<br>32yrs        | M.E./M. Tech in Chemical Engineering  | Ph.D (Chemical Engineering)<br><br>Expertise in design of microfluidic reactors, chips & flow chemistry reactors for process intensification of chemicals and for development of lab-on-a chip devices for screening, diagnosis etc.<br><br>At least one year experience in handling commercial CFD codes like ANSYS FLUENT, COMSOL, etc. with ability to develop standalone software codes. | The selected candidate will have to work as a team member in terms of process intensification for organic chemistry reactions, API's etc In addition should be able to give modelling & simulation support to various R&D activities of the Institute  |
| 4       | CSTD 2<br>1 post<br><b>UR</b>                     | Level-12<br>₹78800-209200 | Senior Scientist<br>37yrs | Ph.D in Industrial Chemistry/Chemical Engineering with 2 years' post-doctoral research experience                           | R&D experience in the design and synthesis of organic ligands and metal-organic systems for applications as smart and functional materials.<br><br>Experience in energy efficient device fabrication   | The selected candidate will have to lead/supplement the ongoing research programmes in the area of smart materials/coatings and should work in collaboration with other scientists for the integration of these coatings with other energy generation /saving technologies currently being pursued by the Institute. |

|   |  |                           |                    |   |  |  |
|---|--|---------------------------|--------------------|---|--|--|
| 5 | ETD 1<br>1 post<br><b>SC (backlog)</b> | Level-11<br>₹67700-208700 | Scientist<br>32yrs | M.E /M. Tech in Environmental Engineering   | At least one year experience in Environmental Impact Assessment/Environmental Management/Remediation/Remote Sensing and GIS in Environmental science and Engineering.<br><br>Should have hands on experience on Tools used in EIA like Calpuff, Aermoc, ArcGIS. etc. for prediction of impacts | The selected candidate will have to work on EIA projects, preliminary survey<br><br>Statistical analysis of data and inferences.<br><br>Development of add-on modules for prediction of impacts in EIA.  |
| 6 | ETD 2<br>1 post<br><b>EWS</b>          | Level-11<br>₹67700-208700 | Scientist<br>32yrs | Ph.D (submitted) in Chemistry in the area of chemical process/product development for industrial waste (air/solid/liquid) treatment and value addition. | At least one-year postdoctoral experience in Chemical process/product development, Heterogeneous catalysis, Industrial waste treatment process development (chemical/catalytic) for air/liquid/solid pollution mitigation and value addition and experience in analytical method development   | The selected candidate will have to play a lead role in research activities directed towards knowledge generation and catalytic chemical process/product development in the area of Industrial waste water treatment and air pollution control processes |
| 7 | MPTD 1<br>1 post<br><b>UR</b>          | Level-11<br>₹67700-208700 | Scientist<br>32yrs | Ph.D (submitted) in Biophysics/ Molecular Biophysics/Molecular Lifesciences.  | At least one-year postdoctoral experience/expertise in the area of cell surface phenomena/structure biology/membrane biology/signal transduction   | The selected candidate has to work with the team working on microbial cell surface phenomena, especially on membrane transport and signal transduction and the role of cell surface proteins in these activities   |
| 8 | MPTD 2<br>1 post<br><b>ST</b>          | Level-11<br>₹67700-208700 | Scientist<br>32yrs | M. Tech or Ph.D (submitted) in Biochemical - Engineering/Biotechnology.   | At least one year experience in the development of enzyme based biocatalysts for biotransformation/green synthesis   | Selected candidate will have to work on the chemistry-biology interface on developing enzyme biocatalysts for green synthesis/biotransformation applications. Experience in immobilized enzyme catalysts for synthesis /biosensor applications.          |
| 9 | MSTD 1<br>1 post<br><b>SC</b>          | Level-11<br>₹67700-208700 | Scientist<br>32yrs | M.E./M.Tech in Metallurgical/ Materials Engineering.  | Ph.D. in Engineering in the area of casting process simulation or ICME based approach for design of non-ferrous alloys.<br><br>R&D / industrial experience in processing and characterization of   | The selected candidate will have to work actively in the ongoing research programmes in product design and development of metallic materials for energy, automotive and aerospace sector   |

|    |                               |                            |                               |   |  |   |
|----|-------------------------------|----------------------------|-------------------------------|---|--|---|
|    |                               |                            |                               |   | metals, alloys and metallic composites.<br>CFD expertise & experience in handling commercial software like FLOW3D-CAST, PROCAST, NOVACAST etc.   | & technology development  |
| 10 | MSTD 2<br>1 post<br><b>UR</b> | Level-13<br>₹123100-215900 | Principal Scientist<br>45 yrs | Ph.D in Physics with 3 years' of post-doctoral experience | R&D experience in process development and device fabrication of energy storage systems. The candidate should have proven experience in material synthesis and characterization of materials for energy storage applications. | The selected candidate should initiate lead programmes in the area of electrochemical energy storage devices and work in collaboration with other scientists for the integration of these storage devices with the renewable energy programmes currently undertaken in the institute.<br><br>He/she will have to independently set up a complete fabrication and characterization facility for storage devices such as supercapacitors and batteries. |

**General Information and conditions:**

**1. Benefits under Council service.**

- These posts carry usual allowances i.e. Dearness Allowance(DA), House Rent Allowance(HRA), Transport Allowances(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.
- In addition to the emoluments indicated against each category posts, benefits such as applicability of New Pension Scheme 2004, reimbursement of Medical Expenses, Leave Travel Concession, Conveyance Advance and House Building Advance are available as per CSIR rules.
- Scientists in CSIR 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 also arise for foreign deputations for training/presentation of papers/specific assignments etc.
- CSIR provides excellent opportunities to deserving candidate for career advancement under Assessment Promotion scheme for scientists.

**2. Other Conditions.**

- The applicant must be a citizen of India.
- All applicants must fulfil the essential requirements of the post and other conditions stipulated in the advertisement as on the closing date of on-line application. They are advised to satisfy themselves before applying that they possess at least the essential qualifications laid down for various posts as on the closing date of on-line application. No enquiry asking for advice as to eligibility will be entertained.
- 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.

- d. The application should be accompanied by self attested copies of the relevant educational qualification, experience. The prescribed qualifications should have been obtained from recognized Universities/Institutions etc. Incomplete applications/applications received or not accompanied with the required certificates/documents are liable to be rejected.
- e. In respect of equivalent clause in essential qualification, 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.
- f. The period of experience rendered by a candidate on part time basis, daily wages, visiting/guest faculty will not be counted while calculating the valid experience for short listing the candidates for interview.
- g. If any document/certificate furnished is in a language other than Hindi or English, a transcript of the same duly attested by a Gazetted Officer or notary is to be submitted.
- h. The date for determining the upper age limit, qualifications and /or experience will be the closing date of on-line application i.e. **27/10/2020**.
- i. The period of experience in a discipline/area of work, wherever prescribed, shall be counted after the date of acquiring the minimum educational qualifications prescribed for that Grade.
- j. Persons with disabilities (PwD) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.
- k. In case a candidate is staying abroad, his/her candidature may be considered in absentia by the Selection Committee on his/her written request.
- l. 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 Trivandrum Central Railway Station on production of Rail Ticket Numbers or any other proof of journey.
- m. 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.
- n. The decision of the NIIST/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.
- o. Canvassing in any form and/or bringing any influence political or otherwise will be treated as a disqualification for the post.
- p. NO INTERIM ENQUIRY OR CORRESPONDENCE WILL BE ENTERTAINED.

### **3. Relaxations:**

- a. The upper age limit is relaxable upto 5 years for SC/ST and 3 years for OBC as per Government orders in force only in those cases where the posts are reserved for respective categories. Candidates seeking age relaxation under these categories should enclose self attested copy of the relevant certificate in the prescribed format signed by the specified authority. **For OBC candidates, the prescribed format is attached below.**
- b. Upper age limit is also relaxable upto five years for the regular employees working in CSIR Laboratories/institute, Government Departments, autonomous bodies and public sector undertakings.
- c. As per GOI provisions, age relaxation for Widows, Divorced Women and Women judicially separated from Husbands who are not remarried, the upper age limit is relaxable up to the age of 35 years (upto 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). The person 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/decree 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 Disability (PwD): Age relaxation of 10 years (15 years for SCs/STs, 13 years for OBCs) in upper age limit is allowed to persons suffering from (a) blindness and low vision; (b) deaf and hard of hearing; (c) locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy; (d) autism, intellectual disability, specific learning disability and mental illness; (e) multiple disabilities from amongst persons under clauses (a) to (d) including deaf-blindness, subject to the condition that maximum age of the applicant on **27/10/2020** shall not exceed 56 years. 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 Group 'A' posts to be filled by Direct Recruitment by Selection.
- e. Relaxation in age, over and above the stipulated limit, educational qualification and/or experience may be considered in case of exceptionally meritorious candidates or if sufficient number of candidates possessing the requisite qualification and /or experience are not available to fill up the posts.
- g. Relaxation of five years will also be permissible to those who had ordinarily been domiciled in the Kashmir division of the state of Jammu and Kashmir during the period from 01.01.1980 to 31.12.1989 subject to production of relevant certificate from concerned authority.

#### 4. How to apply:

- a. Eligible candidates are required to apply on-line through CSIR-NIIST website <http://www.niist.res.in>. No other mode of application will be accepted.
- b. Online application will be available on CSIR-NIIST website up to **27/10/2020 (5.30 pm)**
- c. The candidate has to **remit application fee of Rs.500/- (wherever applicable) through Net-Banking** to the following account and fill up the transaction details in the prescribed columns of on-line application:

|                        |                                      |
|------------------------|--------------------------------------|
| Name of Account Holder | : Director, NIIST (CSIR), Trivandrum |
| Account Number         | : 67047723825                        |
| Bank Name              | : State Bank of India                |
| IFSC Code              | : SBIN0070030                        |
| MICR No.               | : 695002943                          |

- d. Candidate should keep a copy of the print out of on-line application for their record.
- e. The duly signed print out of the computer generated application form (hard copy) along with self attested copies of certificates, mark-sheets, testimonials in support of age, educational qualifications, experience, re-prints of publications, caste certificate, if applicable, and proof of application fee remittance should be sent in an envelope superscribed "Application for the post of .....(Post Code.....) by post so as to reach **The Controller of Administration, CSIR-NIIST, Industrial Estate P.O, Pappanamcode, Thiruvananthapuram-695019, Kerala on or before 5.30PM on 04/11/2020.**
- f. The candidates belonging to Women/SC/ST/PwD/CSIR employees are exempted from submission of application fee.
- g. Candidates applying for more than one post should submit separate online applications and application fees.
- h. 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.
- i. Application fees once paid will not be refunded on any circumstances nor can it be held in reserve for any other recruitment or selection process.
- j. Applications from candidates working in Government Departments, autonomous bodies, Public Sector Undertakings and Government Funded Research Agencies will be considered only if the print out of online application is forwarded through proper channel with a clear certificate from the

employer that the applicant will be relieved of his/her duties within one month of receipt of appointment letter, if selected for the post applied for. However, advance copy of the application may be submitted before the closing date.

- k. After filling-up the electronic application form, the candidate can verify/edit the application to ensure that the application is complete and correct in all respects. After finalizing, candidate can print the application.
- l. On-line application will be treated as complete only if the hard copy along with relevant documents & proof of remittance of application fee (if applicable) are received at CSIR-NIIST. 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 CSIR-NIIST.
- l. Incomplete applications (i.e. without duly signed photograph, application fee, applicable testimonials and unsigned) will not be entertained and will be summarily rejected.

**5. Following documents must be attached along with application form sent by post:**

- a. Proof of remittance of application fee of ₹500/- where applicable.
- b. Coloured photograph pasted on the form and signed across in full.
- c. Self attested photocopy of Date of Birth Certificate/SSLC Certificate.
- d. Self attested photocopies of educational qualifications certificates.
- e. Self attested photocopy of caste certificate, if applicable. For OBC candidates, the GoI format is attached below.
- f. Self attested photocopy of EWS certificate in the prescribed format attached below.
- g. Self attested photocopies of experience certificates, if any.

Sd/-  
Controller of Administration

**Prescribed Format for OBC Certificate**

**FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR  
APPOINTMENT TO POSTS / ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER  
THE GOVERNMENT OF INDIA**

This is to certify that Shri / Smt. / Kum. \_\_\_\_\_ Son/  
Daughter of Shri / Smt. \_\_\_\_\_ of Village/Town  
\_\_\_\_\_ District/Division \_\_\_\_\_ in the  
\_\_\_\_\_ State belongs to the \_\_\_\_\_ Community which is  
recognized as a backward class under:

- (i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.
- (ii) Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- (iii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.
- (iv) Resolution No. 12011/96/94-BCC dated 9/03/96.
- (v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- (vi) Resolution No. 12011/13/97-BCC dated 03/12/97.
- (vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- (viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- (ix) Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.
- (x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- (xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 21/09/2000.
- (xii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- (xiii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- (xiv) Resolution No. 12011/4/2002-BCC dated 13/01/2004.
- (xv) Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India.

Extraordinary Part I Section I No. 210 dated 16/01/2006. Shri / Smt. / Kum. \_\_\_\_\_  
and/or his family ordinarily reside(s) in the \_\_\_\_\_ District/Division of  
\_\_\_\_\_ State. This is also to certify that he/she does not belong to the  
persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India,  
Department of Personnel & Training O.M. No. 36012/22/93-Estt.(SCT) dated 08/09/93 which is modified  
vide OM No. 36033/3/2004 Estt.(Res.) dated 09/03/2004.

Dated: \_\_\_\_\_

District Magistrate/Deputy Commissioner/Competent Authority  
Seal

**NOTE:**

- (a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- (b) The authorities competent to issue Caste Certificates are indicated below:
  - (i) District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / Ist Class Stipendiary Magistrate / Sub-Divisional magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
  - (ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
  - (iii) Revenue Officer not below the rank of Tehsildar' and
  - (iv) Sub-Divisional Officer of the area where the candidate and / or his family resides.



**Government of .....**  
**(Name & Address of the authority issuing the certificate)**

**INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS**

Certificate No. \_\_\_\_\_

Date: \_\_\_\_\_

**VALID FOR THE YEAR \_\_\_\_\_**

This is to certify that Shri/Smt./Kumari \_\_\_\_\_ son/daughter/wife of \_\_\_\_\_ permanent resident of \_\_\_\_\_, Village/Street \_\_\_\_\_ Post Office \_\_\_\_\_ District \_\_\_\_\_ in the State/Union Territory \_\_\_\_\_ Pin Code \_\_\_\_\_ whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income\* of his/her "family"\*\* is below Rs. 8 lakh (Rupees Eight Lakh only) for the financial year \_\_\_\_\_. His/her family does not own or possess any of the following assets\*\*\*:

- i. 5 acres of agricultural land and above;
- ii Residential flat of 1000 sq. ft. and above;
- iii Residential plot of 100 sq. yards and above in notified municipalities;
- iv. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

2. Shri/Smt./Kumari \_\_\_\_\_ belongs to the \_\_\_\_\_ caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List)

Signature with seal of Office \_\_\_\_\_  
Name \_\_\_\_\_  
Designation \_\_\_\_\_

Recent Passport size attested  
photograph of the applicant

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\*Note 1: Income covered all sources i.e. salary, agriculture, business, profession, etc.

\*\*Note 2: The term "Family" for this purpose include the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years

\*\*\*Note 3: The property held by a "Family" in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.