

ಸಿಎಸ್‌ಐಆರ್ - ರಾಷ್ಟ್ರೀಯ ವೈಮಾಂತ್ರರಿಕ್ಷ ಪ್ರಯೋಗಶಾಲೆಗಳು
सीएसआईआर-राष्ट्रीय वांतरिक्ष प्रयोगशालाएं, बेंगलुरु - 560017, भारत
CSIR- NATIONAL AEROSPACE LABORATORIES
(Council of Scientific & Industrial Research)
Bengaluru - 560017, INDIA

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WALK-IN-INTERVIEW FOR PROJECT STAFF

CSIR-NAL is a unit under the Council of Scientific and Industrial Research (CSIR), an autonomous body under the Ministry of Science and Technology, Govt. of India. Applications are invited from qualified candidates (Indian nationals) who meet the necessary educational and work requirements for engagement of Project Staff to work in various projects at CSIR-NAL. The engagement of Project Staff is purely on temporary and contract basis under the CSIR/Externally funded /Other projects undertaken by CSIR-NAL. The engagement shall be for short period and **co-terminus** with the project.

Candidates who fulfil the under-mentioned educational qualifications and experience etc. may attend the Walk-in-Interview during **12-20, October 2022** along with the application.

Sl. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of posts	Age limit (in years)
1	12.10.2022	Project Associate-I	BE/B.Tech/M.Sc., in Materials / Metallurgy / Physics / Chemistry / Ceramics / Polymer Science	04*	35
2	13.10.2022	Project Assistant	B.Sc./3 years Diploma in EEE / ECE / Electrical/ Comp. Science	04*	50
3	13.10.2022	Project Associate-I	BE/B.Tech/M.Sc., in ECE/EEE / Instrumentation / Control / Computer Science / IT / Computer Network Security	06*	35
4	14.10.2022	Project Associate-II	BE/B.Tech/M.Sc., in ECE/ EEE / Instrumentation / Control / Flight Control / Avionics / Instrumentation & Control / RF & Microwave / Antenna / Computer Science / IT / Computer Network Security with 2 years' experience.	08*	35
5	18.10.2022	Project Associate-I	BE/B.Tech/M.Sc., in Mechanical/Aerospace/ Aeronautics / Civil / Mechatronics	20*	35
6	19.10.2022	Project Associate-II	BE/B.Tech/M.Sc., in Mechanical/Aerospace/ Aeronautics/Civil/Mechatronics/Structures/ Thermal with 2 years' experience.	16*	35
7	19.10.2022	Senior Project Associate	BE/B.Tech in Mechanical / Aerospace/ Aeronautical Engineering from a recognized University OR equivalent with Four years' experience OR ME/M.Tech with 2 years' experience in R&D in Industrial and Academic Institutions or S&T Organisations and Scientific activities and services OR Doctoral degree in Science & Technology from a recognized university.	01*	40
8	20.10.2022	Project Assistant	B.Sc./3 years Diploma in Mechanical / Aero/ Production	16*	50

***Positions may vary as per the Project requirements and CSIR-NAL will make a panel of waitlisted candidates to fill vacancies occurring in near future. Such panel will be valid for one year from the date of notification of result, or until project completion, whichever is earlier.**

Monthly Stipend / Emoluments:

Project Assistant: ₹20,000/- + HRA

Project Associate-I

- (i) ₹31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests – CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.
- (ii) ₹25,000/- + HRA for others who do not fall under (i) above.

Project Associate-II

- (i) ₹35,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests – CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.
- (ii) ₹28,000/- + HRA for others who do not fall under (i) above.

Senior Project Associate: ₹42,000/- + HRA

NOTE: Candidates appearing for position of PA-I & PA-II having valid GATE score card will be paid ₹31,000/- + HRA / ₹35,000/- + HRA respectively only for projects which needs GATE qualification. Otherwise they will be paid ₹25,000/- + HRA / ₹28,000/- + HRA respectively.

Job Requirements:

Project Assistant:

- Working knowledge of Mechanical design and testing. Manufacturing composites and metals
- SARAS Mk-2 Project Assistant Mechanical CAD
- To assist in procurement activities
- To carry out administrative tasks of the Aerospace Skill Development Centre, CSIR-NAL, to provide Secretarial Assistance and office record keeping
- For detail design of SARAS MkII Environmental systems
- Fabrication of composite parts
- Mechanical Design / Drafting using CATIA-V5
- Composite part manufacturing. Tool manufacturing. Preparation of specimen coupons for testing
- Knowledge in Composite fabrication and Structural assembly
- Working knowledge in CATIA 3D modelling & 2D drawing generation. Tool design experience in metallic and composite tools
- Composite part manufacturing and Assembly

Project Associate-I (Mechanical / Aero stream)

- Preparation of job cards for machining of Aircraft components in methods engineering and follow-up of machining activities
- Dimensional inspection of Aerospace Components, Inspection of components on CMM. Inspection of Jigs and Fixtures using Laser tracker
- To assist in processing of Carbon silicon carbide composites. Auto CAD, Catia knowledge preferred
- Knowledge of Mechanics of composites materials. Experience in Finite element analysis of composites/metals. Experience in FE tool Hyper Mesh, Abaqus, Nastran is desirable
- Operation and maintenance of carbon fiber and prepreg plant in shifts basis
- To work in the manufacturing Lab and CAD/CAM/CAE Lab of ASDC, Provide Teaching assistance, Maintenance of Lab equipment in operational condition, support students and faculty in using of software, machines, tools and equipment. Min. 2 years of CATIA experience, Knowledge of CNC Machining-Programming
- Finite Element Modelling and analysis, Strength of Material Calculations
- To carry out Finite element analysis and theoretical calculations for the design of aerospace components and documentation.
- To carry out the aerodynamic design and flight stability analysis of a high aspect ratio stationary wing aircraft. To study and report the effect of flexibility on the aerodynamics and static stability of the vehicle. To develop a numerical toolbox incorporating the aerodynamic design procedure
- 3D CAD modelling, generating manufacturing drawings, FEM analysis
- Knowledge in Autocad and CATIA 3D modelling & 2D drawing generation. Tool design knowledge in forming/press tools and Jig & Fixtures
- Desirable: 0-2 years of relevant experience and Knowledge in CAD Modelling & Preparation of 2D detail Drawings for Parts, Tools, Jig & fixtures related to Aircraft Structures. Software Tools: CATIA/Draftsight/AutoCAD Software
- Assist in the development of thermoplastic laminate processing and joining of thermoplastics. Development of TPC structural element using a hydraulic press / forming
- Desirable: 0-2 years of relevant experience and Knowledge in CAD Modelling & Preparation of 2D detail Drawings for Parts, Tools, Jig & fixtures related to Aircraft Structures. Software Tools: CATIA/Draftsight/AutoCAD Software
- To develop coatings by cold spray and its characterization

Project Associate-I (ECE/EEE/Electrical/CS/IT/Computer Network Security stream)

- Framework for Online System for IT infrastructure Lifecycle Management / Secured Infrastructural solutions and optimal networking architectures / Secured Domain Network Implementation using existing software and AI based customization
- Matlab code development for IRST and radar data simulation, tracking and testing and ported on target hardware
- Sensor fabrication, Testing, Algorithm development. Knowledge on Arduino programming
- EM Design of Antennas, Simulations, Analysis, Software Code Development, Measurements, Documentation
- Software development (HTML, CSS, JavaScript, PHP) and programme management
- Videography, video editing, graphic design and animation of virtual lab experiments

Project Associate-II (Mechanical / Aero stream)

- Preparation of PZT and lead free piezo powders. Fabrication of PZT and lead free piezo samples of different dimensions and their characterization
- Finite Element Modelling, Fatigue Analysis and Estimation of Fatigue Life
- Create Finite Element Models of wing-related structural members. Carryout various types of structural analysis. Carryout theoretical / design calculations to validate the analysis results. Programming using MATLAB. Documentation
- CAD modelling & Drafting using Solidworks, CATIA etc. Grid generation and CFD Software like ANSYS CFX, Fluent, Numeca etc.
- Development of Mathematical Models of Physical Systems, Knowledge of 6 DOF Simulation of an aircraft. Multibody Modelling & Simulation, Knowledge of MATLAB & Simulink.
- CAD modelling and CAD cleaning for mesh generation, Structured and Unstructured CFD meshing, Steady/Unsteady flow analysis over aircraft / launch vehicles (software tools: ICM CFD, Starccm+/Fluent)
- Finite element modelling, Linear/Non-linear structural analysis, Steady/Unsteady flow analysis based Fluid-Structure-Interaction studies of aircraft lifting components/ launch vehicles (software tools: Hyper mesh, Abaqus, Starccm+/Fluent)
- Candidate to work in the field of Aircraft Aerodynamics, Stability, Control and Aircraft Performance Estimation Programming skills in C/MATLAB) Desirable: CAD skills (CATIA V5)
- Aircraft Structural Design, Finite Element Modelling and Analysis using CAE Tools (Hyper Mesh, MSCNastran, etc.)
- Generation of 3D CAD Models using CATIA and 2D CAD Drawings using AutoCAD / DraftSight
- For detail design of SARAS MKII Environmental Systems. (Preferably M.Tech (Thermal))
- To carry out Finite element analysis and theoretical calculations for the design of aerospace components and documentation.
- Aircraft Structural Design, Finite Element Modelling and Analysis using CAE Tools (Hyper Mesh, MSCNastran, etc.)
- Working knowledge in Catia & Solid Works Matlab Data Analysis. Experimental Knowledge.
- Experience with NDT/NDE

Project Associate-II (ECE/EEE/Electrical/CS/IT/Computer Network Security stream)

- Basic Knowledge of battery operations and management. Working with HV systems (50V). Different battery chemistry like Lead Acid, Li-ion, Lithium-polymer batteries, system performance and safety requirements. Desirable: ME/M.Tech with a min. 1 year of related experience
- Signal processing (using tools like MATLAB) and Instrumentation (using lab equipment like DAQ, function generator, Oscilloscope, sensors etc.) and having some understanding of structural testing
- "BLDC Motor design, definition and modelling MATLAB and LabVIEW (old) -
- The job involves design activities like preparation of Interface control documents, test schedules, integration testing in ground rig, functional testing on both ground rig and candidate platforms. This would involve electronic/ electrical logic design for relays, interfaces and protocol implementation"
- Design and implementation of control laws for military aircraft, autopilot for passenger aircraft. MATLAB/SIMULINK based model based design and development, real time nonlinear simulation on various test platforms. Knowledge of MATLAB & Simulink and familiarity in C/C++
- Design and implementation of control laws for military aircraft, autopilot for passenger aircraft. MATLAB/SIMULINK based model based design and development, real time nonlinear simulation on various test platforms. Knowledge of MATLAB & Simulink and familiarity in C/C++
- MATLAB/Simulink Implementation, 2. Real time code generation. 3. Interface to various ground test platforms (Hardware in loop, Pilot in loop etc.) 4. Involving the generic procedure for real time testing of control laws for aircraft. 5. Knowledge of MATLAB & Simulink and familiarity in C/C++
- EM Design of Antenna Array, Simulations, Software Code Development, Measurements, Documentation

General Conditions:

- (a) The engagement of Project Staff which is on contract basis in respect of all above positions will confer no rights on the candidates, whatsoever, implicitly and / or explicitly for their continuation beyond tenure /absorption/ regularization in CSIR. The engagement shall be for short period and co-terminus with the project and may be terminated at any time by giving a notice of one month from either side or one-month stipend in lieu thereof.
- (b) Project Staff would be governed by the CSIR Guidelines relating to engagement of project staff in CSIR Projects including NMITLI projects, OLP/MLP, Contract R&D and non-CSIR funded Projects.
- (c) Director, CSIR–NAL reserves the right to increase / decrease the number of positions and also cancel the recruitment process for the positions mentioned above at any stage of the recruitment process. The decision of the Director, CSIR-NAL will be final and binding on all candidates at any stage for engagement of Project Staff.
- (d) Maximum duration in one project or in different projects taken together in CSIR-NAL or other CSIR labs shall not be more than five years in any case.
- (e) If the candidate is already working in CSIR-NAL or any other CSIR labs, a “No Objection Certificate” from the Project Leader is mandatory at the time of interview.
- (f) The prescribed essential qualifications are the minimum and should be in the areas required as above. Mere possession of the same does not entitle candidates to be called for interview. CSIR-NAL will adopt its own criteria for shortlisting of candidates. The candidate should, therefore, mention in the application all the qualifications and experience in the relevant area over and above the minimum prescribed qualification, supported with documents and ensure that all details are complete and accurate.
- (g) The selection would be based upon the performance in the interview or any other criteria adopted by the selection committee(s). A panel of suitable candidates would be generated after the selection process and the validity of this panel would be for a maximum period of one year. Empanelment does not provide automatic guarantee of engagement. Utilization of panels depends on the number of positions available in various projects during the period and any interim inquiry will not be entertained.
- (h) In case a large number of candidates appear for the interview, the Selection/Screening Committee will have discretion to shortlist the candidates for the interview based on written exam or any other criteria deemed fit. In respect of equivalence clause in Essential Qualifications, if a candidate is claiming a particular qualification as equivalent qualification for recruitment 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.
- (i) The candidates may clearly mention the category they belong to i.e., SC/ST/OBC/PH/EWS and attach documentary proof of the same.
- (j) No TA/DA will be paid to the candidates for attending the Walk-in-Interview.
- (k) Candidates who have completed their degree with requisite educational qualifications only need to attend the Interview. However, candidates appearing/appeared for the qualifying examination whose results are awaited **are not eligible to attend the interview.**
- (l) List of selected candidates will be notified on our website: <https://www.nal.res.in>. In addition, panel of waiting list will also be drawn for future requirements and it will be valid for one year.
- (m) The selected candidates are expected to join within 15 days from the date of receiving the offer letter and no extension of duty joining date is entertained. If the candidates are unable to report within 15 days, the offer will be cancelled without further notice and the offer will be issued to the next waitlisted candidate.
- (n) **The engagement of Project Staff will be subject to production of ORIGINAL documents viz. Educational Qualification certificates with all mark sheets, Experience certificates, Caste Certificate etc.**
- (o) The date of determining qualification and age shall be the date of Walk-in-Interview.
- (p) Candidates are requested NOT to send the application by post/speed post/e-mail.
- (q) Canvassing in any form and/or bringing any influence political or otherwise will be disqualified.

Age Limit: Age limits are relaxable for candidates of statutory groups as per CSIR/Govt. of India instructions on the subject.

Walk-in-Interview Dates:

The candidates willing to attend the Walk-in-Interviews are informed to report at CSIR-NAL (RAB Meeting Complex, National Aerospace Laboratories [NAL], Adjacent to SBI, NAL Branch, Kodihalli, Bengaluru – 560017) on the specified dates between 8.30 AM to 10.00 AM for registration and verification of documents.

NOTE: No candidates are allowed for registration after 10.00 AM.

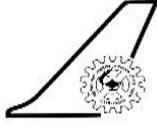
Candidates are informed to bring filled in applications (available in our website) without fail, along with latest passport size photograph, original certificates with mark sheets along with set of Xerox copies including Caste Certificate if any, in the proper format issued by the appropriate authority as per the latest instructions issued from time to time on the subject.

Preference will be given to those with experience as per the desirable skills and ability to work as a part of a team.

For further information, please visit: <https://www.nal.res.in>

For any query please contact
☎ 080-25086078, Email: recruitment@nal.res.in

Sd/-
Senior Controller of Administration



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Bengaluru - 560 017

Affix your latest
passport size
photograph

Advt. No. 07/2022

APPLICATION FORM FOR WALK-IN-INTERVIEW

1. Name of the Post applied for	Project Assistant Project Associate - I / Project Associate - II Senior Project Associate
2. Specialisation	
3. Name in full (Block letters)	
4. Father's / Husband's Name (Block letters)	
5. Date of Birth (as per 10 th / SSLC certificate (DD/MM/YYYY)	
6. Age as on	
7. Sex (Male / Female)	
8. Nationality	
9. Category	UR / SC / ST / OBC / EWS / PWD
10. Address for Communication with PIN code	
	Mobile No.:
	Email Id:
11. Permanent Address with PIN code	

12. Educational Qualification (attach relevant copies) :							
Details of Courses and Specialization		Period of course		Total Marks obtained	Total Marks	% / CGPA score	Board / University / Institution
		From (MM/YY)	To (MM/YY)				
SSLC / Matriculation / Xth Std.							
10 + 2 / PUC							
Graduation							
Post-Graduation							
Ph . D .							

13. Details of Employment (in Chronological order) (attach relevant copies)						
Name of the organization & Place (Please specify whether Central Govt. / State Govt. / Public Sector / Autonomous Body / Private Sector)	Position (s) held	Period		Nature of Work	Gross pay scale	Whether working on regular basis / contractual basis / Adhoc basis etc .
		From (MM/YY)	To (MM/YY)			

14. Are you having CSIR-UGC NET/GATE Score card? YES / NO (If Yes, please attach valid score card / certificate)	
15. Any other information: 	
16. Particulars of close relatives working in CSIR / CSIR-NAL	
Name	
Designation	
Division	
Relationship	
17. Are you under any Bond / Contractual obligation to serve Central / State Govt. / PSU / Autonomous or any other body / organization	
18. Whether dismissed from service from any other institution / office or debarred by the Public Service Commission . If Yes, give details	

- I hereby declare that all the statements made in this application are true, complete and correct to the best of my knowledge and belief .
- I understand that in the event of any information being found false or incorrect at any stage, my candidature / appointment shall be liable to be cancelled / terminated summarily without notice or any compensation in lieu thereof .

Place :
Date :

Signature :
Name :