

सीएसआईआर-राष्ट्रीय वांतरिक्ष प्रयोगशालाएं पी बी सं.1779, एचएएल एयरपोर्ट रोड, बेंगलूरु – 560017

# विज्ञापन सं. 07/2023

सीएसआईआर-एनएएल वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर), नई दिल्ली की एक घटक प्रयोगशाला, निम्न पदों केलिए योग्यता प्राप्त अनुभवी एवं प्रतिभावान व्यक्तियों से आवेदन आमंत्रित करती है :

10/07/2023 से 21/07/2023 के दौरान परियोजना कर्मचारियों केलिए वॉक-इन-साक्षात्कार					
परियोजना सहायक परियोजना एसोसिएट – 1 परियोजना एसोसिएट-॥ वरिष्ठ परियोजना एसोसिएट	45 पद				

विज्ञापन के पूर्ण विवरण केलिए कृपया सीएसआईआर-एनएएल की वेबसाइट www.nal.res.in देखें।

> ह/-प्रशासन नियंत्रक



**CSIR - NATIONAL AEROSPACE LABORATORIES** 

P B No.1779, HAL Airport Road, Bengaluru – 560 017

# ADVT. No. 07/2023

CSIR-NAL, a constituent Laboratory of CSIR, New Delhi is inviting applications from experienced and talented persons possessing required qualification for the following positions.

Walk-in-Interview for Project Staff during 10/07/2023 to 21/07/2023				
Project Assistant				
Project Associate-I	45			
Project Associate-II	Positions			
Senior Project Associate				

For complete details of advertisement, please visit CSIR-NAL website: <u>www.nal.res.in.</u>

-/Sd Controller of Administration



సిఎಸ್ಐಆರ್ - రాజ్క్రియ వీత్రమాంతరిక్ష ప్రయೋగతాలిగళు सीएसआईआर-राष्ट्रीय वांतरिक्ष प्रयोगशालाएं, बेंगलुरु – 560017, भारत CSIR- NATIONAL AEROSPACE LABORATORIES (Council of Scientific & Industrial Research) Bengaluru – 560017, INDIA

Date of Publication: 29/06/2023

### ADVT. No. 07/2023

# 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 experience 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 <u>10/07/2023</u> to <u>21/07/2023</u> along with the application, in the prescribed format enclosed.

SI. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
1	10/07/2023	PA-I	M.Sc/BE/B.Tech Physics/ Chemistry/ Meteorology/Atmospheric Science/Oceanography/ Material Science/ Polymer Science or biopolymer Science/Chemical Engg.	06*	35	<ul> <li>Analysis Evolution of Weather Parameters Over Different Altitudes for Hap Programme, Knowledge About Analysis of Atmospheric Parameters and Atmospheric Modelling</li> <li>To Assist the Project Leader in S&amp;T Activities Related to the Project</li> <li>Thin Film Material Preparation and Characterization, Device Fabrication</li> <li>Piezoelectric Material and Thin Film Processing, Wafer Scale Material Property Analysis-Electrical, Mechanical and Electromechanical</li> <li>Deposition of Thin Films</li> <li>To Develop Smart &amp; Nano Composite Structures</li> </ul>
2	2	PA	B.Sc/Diploma Chemical Engg.		50	<ul> <li>Development of Intumescent Coating Formulations, Preparation of Substrates &amp; Coatings</li> <li>Optimization of controls for combustion test facility, Operation of Test facilities w.r.t. certification.</li> </ul>

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SI. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
3	12/07/2023	РА	<b>B.Sc/BCA</b> ECE/Computer Science	01*	50	<ul> <li>Software GUI development using Matlab</li> </ul>
4	12/07/2023	PA-I	<b>BE/B.Tech</b> Computer Science/Electronics and Communication/Electronics and Electrical/Computer Science/ Mechatronics/Instrumentation/ RF & Microwave	05*	35	<ul> <li>EM Design and Performance Analysis of Antenna/Array Using Full Wave Simulation Software, Radar Cross Section Simulations, Documentation</li> <li>Signal Processing, Programming Skills in MATLAB and Simulink Design</li> <li>Basic Understanding of Control/ Instrumentation.</li> <li>Knowledge of C/C++</li> <li>Experience with Autopilot</li> <li>Technical Assistance in The Development and Testing of Battery and Battery Management Systems, Solar PV and Peak Power Tracking Systems and Ground Power Control System for Solar Powered Unmanned Aircraft.</li> <li>EM Design of Low RCS Electronic Warfare Antennas, Electromagnetic Simulations and Performance Analysis, Documentation</li> <li>Engine Instrumentation, Programming Data Acquisition and Processing, Control Circuitry Design &amp; Implementation, Knowledge On High Speed Motors &amp; Control</li> <li>To Work On Sensor and Actuator Materials</li> </ul>

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SI. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
						Safety Critical Embedded Software Design, Development and Analysis
						MATLAB/Simulink Implementation
						Real Time Code Generation.
						Interface to Various Ground Test Platforms (Hardware in Loop, Pilot in Loop Etc.)
						Evolving The Generic Procedure for Real Time Testing of Control Laws for Aircraft
						Knowledge of MATLAB & Simulink and Familiarity in C/C++
			BE/B.Tech			<ul> <li>Electrical Load Analysis for the Aircraft</li> </ul>
			with 2 years' Experience Electronics and	07*		Electrical Detailed Design for all the Sub Systems
						Generate Documents for the Activities Carried Out
5	14/07/2023	PA-II	Communication/Electrical and Electronics/Computer		35	Preparation of Line Diagram
			Science/ Instrumentation & Control/			Avionics Interconnection and 2D Drawing
			Antennas and Microwave			Avionics System ATP/ATR Preparation
						EMI/EMC Analysis
						Technical Report Generation
						To Assist in the Design, Development and Testing of Energy Management and Power Systems Which Include Solar - PV with MPPT, Battery with Smart Management Systems and Wiring Harness
						Yo work on sensor and actuator materials
						Antenna Design and Development

SI. No.	Date of Interview	Posi tion	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
6	14/07/2023	SPA	BE/B.Tech with 4 Years' Experience OR ME/M.Tech with 2 Years' Experience OR Ph.D Flight Dynamics & Control/Guidance Navigation and Control/Control and Instrumentation/Systems and Control/Avionics	02*	40	<ul> <li>Design of Control Laws and Autopilot for Aircrafts and MATLAB/Simulink Implementation</li> <li>Interface to Various Ground Test Platforms (Hardware in Loop, Pilot in loop etc.,)</li> <li>Real Time Code Generation and Hardware Implementation, Familiarity in C/C++</li> <li>Instrumentation, Data Acquisition and Lab View Programming of Turbo Machinery Rigs like Propellers, Gas Turbine and Gas Turbine Engines</li> <li>Design and Development of Antenna</li> </ul>
7	17/07/2023	РА	<b>Diploma</b> Mechanical	04*	50	<ul> <li>CAD Modelling and Drawing preparation for airframe Structural parts using CATIA and DraftSight. Generation of CAD model and drawing for feature level and box level testing. Preparation of tool CAD models and drawings</li> <li>Operating a CNC Vertical Machining Center and Turning Center, knowledge of CNC Turning Programming, good communication skill to interact with students and trainees, maintain the equipment, support students and faculty in using the machines, tools and equipment's</li> <li>Manufacturing of composite tools and parts</li> <li>Composite Fabrication, Painting, Composite Testing and Maintenance of Equipment's</li> </ul>

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SI. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
8	19/07/2023	PA-I	BE/B.Tech Mechanical/Aerospace/ Aeronautical/ Aerodynamics/ Civil/Machine Design/Avionics/ Structures	15*	35	<ul> <li>&gt; 3D CAD Modelling, Manufacturing DWG and SOM for Design of Futuristic Unmanned Fighter Aircraft (FUFA)</li> <li>&gt; To Carry Out Theoretical/Experimental Work in The Field of Thermal and Heat Transfer</li> <li>&gt; CAD Modeling, SOM, FEM Analysis and Manufacturing DWG</li> <li>&gt; Knowledge and Experience in CAD Modelling, Drafting, FE and Aeroelastic analysis, Software Awareness, CATIA, Auto CAD, HyperMesh, NASTRAN, PATRAN</li> <li>&gt; Flight simulation model development</li> <li>&gt; Strength of Materials Calculations, Aircraft Structural Design, Finite Element Modelling and Analysis using CAE Tools (HyperMesh, MSC NASTRAN, etc.)</li> <li>&gt; Drawing Preparation Using Commercially available design Software, GD &amp; T, Inspection and Experimentation</li> <li>&gt; Design of Mechanical Systems &amp; Test Rigs, FEA Analysis, Drawings Preparation, Experimentation.</li> <li>&gt; Working of CATIA CAD/CAM software, CNC programming in CATIA, teaching of CAD/CAM Software, generating teaching data in CATIA, good communication skills to interact with Students and Trainees, general Computer and Software Management, support Students and Faculty in using of Software.</li> <li>&gt; CAD modelling and drawing preparation for airframe structural parts using CATIA and DraftSight, tool design for composite part fabrication design of jigs and fixtures.</li> <li>&gt; To carry out strength of material calculation, static and buckling analysis aircraft structures using HyperMesh / NASTRAN</li> <li>&gt; CAD Modelling of Engine Components Using Solid works, Finite Element Analysis Using Ansys, Engine Test Support and Data Analysis</li> <li>&gt; Knowledge On CATIA S/W, Radome Design for Antennas</li> <li>&gt; Engineering Drawing/Surface &amp; 3D CAD Modelling using CATIA Software.</li> <li>&gt; Preparation of Composite Substrates and Intumescent Coatings, Testing and Documentation w.r.t. Certification</li> <li>&gt; Detail design and drawing for tooling</li> </ul>

SI. No.	Date of Interview	Position	Qualification and Area / Specialization	No. of Positions	Age limit (in years)	Job Requirements
9	21/07/2023	PA-II	<b>BE/B.Tech</b> with 2 years' Experience Mechanical/ Aeronautical/Aerospace/ Aerodynamics/Avionics/St ructures/Civil	04*	35	<ul> <li>CFD Analysis of Propellers or Rotating Machines, Drawing and Drafting of Mechanical Components. Knowledge in ANSYS FLUENT, CFX, CATIA, Solid Works, MS Office</li> <li>Lightening Antenna Siting</li> <li>Good Knowledge of the Strength of Materials and Theory of Structures Required for Carrying Out Structural Design and FE Analysis of Aerospace Structures. M.Tech candidate with hands-on experience in using HyperMesh, NASTRAN and ABAQUS FE tools is desirable.</li> <li>Specialization in CFD, working knowledge of CAE tools, ANSYS, Knowledge of Aircraft Propulsion and CFD Analysis, Good Communication Skill to Interact with Students and Trainees, create teaching data for the Propulsion Course, Support students and faculty in using the software.</li> <li>Composite Fabrication and Testing and Documentation w.r.t Certification</li> </ul>
		SPA	BE/B.Tech with 4 Years' Experience OR ME/M.Tech with 2 Years' Experience OR Ph.D Mechanical/Machine Design	01*	40	Structural Analysis of Composite Propellers or Turbo Machines, Rotor Dynamic Analysis, Knowledge of ANSYS Workbench, HyperMesh, CATIA, Solid works and MS Office

\*Positions may vary as per the Project requirements and CSIR-NAL will make a panel of waitlisted candidates to supplement the new projects. Such panel will be valid for one year from the date of notification of result, or till the completion of the project, whichever is earlier.

#### Monthly Stipend / Emoluments:

I. Project Assistant: ₹20,000/- + HRA

#### II. Project Associate-I

- (a) ₹25,000/- + HRA
- (b) \* ₹31,000/- + HRA to Scholars who are selected through (i) National Eligibility Tests CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (ii) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

#### III. Project Associate-II

- (a) ₹28,000/- + HRA
- (b) \* ₹35,000/- + HRA to Scholars who are selected through (i) National Eligibility Tests CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (ii) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.
- **IV. Senior Project Associate:** ₹42,000/- + HRA

\* NOTE: Candidates appearing for position of PA-I and PA-II having valid GATE score card will be paid only ₹25,000/- and ₹28,000/- + HRA respectively. If at all, the project needs GATE qualification, only then, they will be paid ₹31,000/- and ₹35,000/- + HRA respectively.

#### **General Conditions:**

- 1. 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.
- 2. Project Staff would be governed by the CSIR/NAL Guidelines relating to engagement of project staff in CSIR Projects including NMITLI projects, OLP/MLP, Contract R&D and non-CSIR funded Projects.
- 3. 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.
- 4. 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.
- 5. If the candidate is already working in CSIR-NAL or any other CSIR labs, a "No Objection Certificate" from the Project Leader/HOD is mandatory at the time of interview.

- 6. 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.
- 7. 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.
- 8. 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.
- 9. The candidates may clearly mention the category they belong to i.e., SC/ST/OBC/PH/EWS and attach documentary proof of the same.
- 10. No TA/DA will be paid to the candidates for attending the Walk-in-Interview.
- 11. 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**.
- 12. List of selected candidates will be notified on our website: <u>https://www.nal.res.in</u>. In addition, panel of waiting list will also be drawn for future requirements and it will be valid for a period of one year.
- 13. The selected candidates are expected to join within 15 days from the date of receiving the offer letter and no further extension is normally 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.
- 14. 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.

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- 15. The date of determining qualification and age shall be the date of Walk-in-Interview.
- 16. Candidates are requested NOT to send the application by post/speed post/e-mail.
- 17. Canvassing in any form and/or bringing any influence political or otherwise will be disqualified.

## Walk-in-Interview Dates:

The candidates willing to attend the Walk-in-Interview 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 9.30 AM for registration and verification of documents.

## NOTE:

- > No candidates are allowed for registration after 09.30 AM.
- > Candidates who wish to apply for more than one position need to **apply separately for each position**.
- Candidates are informed to bring a copy of Aadhar Card or any Government issue ID Cards with photograph of the applicant and duly filled in application form (available in our website) without fail, along with latest passport size photograph, original certificates with one 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.
- Further, you may have to come with necessary preparations to attend the interview on the next day in the event of your interview is not completed on the indicated day for any reason.

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

For any query please contact **28** 080-25086078, Email: recruitment@nal.res.in

Sd/-Controller of Administration



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Bengaluru – 560017, INDIA

Affix your latest passport size photograph

# ADVT. No. 07/2023

**APPLICATION FORM FOR WALK-IN-INTERVIEW** 

DATE: \_\_\_\_\_

1	Name of the Dest applied for	Project Assistant	Project Associate-I	Project Associate-II	Senior Project Associate
1.	Name of the Post applied for				
2.	Specialization				
3.	Name in full (Block letters)				
4.	Father's / Husband's Name (Block letters)				
5.	Date of Birth (as per X Std. / SSLC Certificate) (DD/MM/YYYY)				
6.	Age				
7.	Sex (Male/Female)				
8.	Nationality				
9.	Category		UR/SC/ST	ſ/OBC/EWS/PV	WD
10.	Address for Communication with PIN code	Mobile No.	:		
		E-mail ID:			
11.	Permanent Address with PIN code				

# 12.Educational Qualification (attach relevant copies) Period of Course Board/ University/ Total %/ Details of Courses and Specialization Total Marks CGPA Marks From То **Obtained** score Institution (MM/YY) (MM/YY) SSLC / X Std. 10 + 2 / PUC Diploma Graduation **Post-Graduation** Ph.D

Name of the organization & Place		Pe	riod			Whether working on Regular/ Contractual / Adhoc Basis etc.,
(Please specify whether Central/Govt. /State Govt./Public Sector/Autonomous Body/Private Sector)	Position(s) held	From (MM/YY)	То (ММ/ҮҮ)	Nature of Work	Gross Pay Scale	

14.	Are you having CSIR-U	GC NET/GATE Score card?		YES / NO				
		(If ye	s, please attac	h valid score card / certificate)				
15.	Any other information							
16.	Particulars of close rel	atives working in CSIR / CS	SIR-NAL.	YES / NO				
10.	Tatticulars of close rela	atives working in CSIR / C						
Nan	16		(If yes, pl	ease provide following details)				
Des	ignation							
Divi	sion							
Rela	itionship							
17.		/ Bond / Contractual						
	obligation to serve Central / State Govt. / PSU / Autonomous or any other body / organization							
10								
18.	<ul><li>18. Whether dismissed from service from any other institution / office or debarred by the Public</li></ul>							
	Service Commission. If							

- 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:

Signature:

Date:

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Name: