

# **ಸಿಎಸ್ಐಆರ್ - ರಾಷ್ಟ್ರೀಯ ವೈಮಾಂತರಿಕ್ಷ ಪ್ರಯೋಗಶಾಲೆಗಳು** सीएसआईआर-राष्ट्रीय वांतरिक्ष प्रयोगशालाएं, बेंगलुरु – 560017, भारत

# **CSIR- NATIONAL AEROSPACE LABORATORIES**

(Council of Scientific & Industrial Research)

Bengaluru - 560017, INDIA

## ADVT. No. 01/2023

### 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 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 30.01.2023 to 09.02.2023 along with the application.

Sl. No.	Date of Interview	Position	Qualification and Area / Specialisation	No. of Positions	Age limit (in years)	Job Requirements
1	30/01/2023	Senior Project Associate	BE/B.Tech with 4 years' exp. OR ME/M.Tech with 2 years exp. OR Ph.D.  Antennas & Microwave Electrical / Electronics / Flight dynamic and control, guidance Navigation and control  Aero / Mechanical	03*	40	<ul> <li>Design and EM simulation of EM materials and characterization of Antennas</li> <li>Aircraft NMG generation using CATIA V5. Experience in kinematics is desirable</li> <li>Autopilot design and development for civil aircraft, Nonlinear non real time simulation assessment, model-based design of control laws, verification of control law performance in ground-based simulation platforms</li> </ul>
2	31/01/2023	Project Associate-I	BE/B.Tech/MSc., in ECE / EEE / Instrumentation/ Telecommunication / Control / Avionics/ Computer Science / IT / Network etc.	09*	35	<ul> <li>Network Programming, C, C++, Matlab</li> <li>Flight dynamic and sub-system modeling, Matlab-Simulink, C, C++</li> <li>Knowledge of electronics equipment, Literature survey and documentation skills, to assist in avionics / Electrical committee in PDP phase of RTA</li> <li>To assist in Airworthiness Certification related activities of Transport Aircraft (Electrical System / Avionics System)</li> <li>Matlab code development for IRST and radar data simulation, tracking and testing and ported on target hardware</li> <li>Videography, video editing, graphic design and animation of virtual lab experiments</li> </ul>

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SI. No.	Date of Interview	Position	Qualification and Area / Specialisation	No. of Positions	Age limit (in years)	Job Requirements
3	01/02/2023	Project Associate-II	BE/B.Tech/M.Sc., in ECE/EEE / Instrumentation / Control / Flight Control / Avionics / Instrumentation & Control / RF & Microwave / Antenna / Computer Science / IT / IS / Network etc. with 2 years' experience.	08*	35	<ul> <li>Autopilot design and development for civil aircraft, Nonlinear non real time simulation assessment, model-based design of control laws, verification of control law performance in ground-based simulation platforms.</li> <li>Knowledge of electronics equipment, Literature survey and documentation skills, to assist in Avionics / Electrical committee in PDP phase of RTA.</li> <li>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 &amp; Simulink and familiarity in C/C++</li> <li>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 &amp; Simulink and familiarity in C/C++</li> <li>EM design of Antenna Array, Simulations, Software Code Development, Measurements, Documentation</li> </ul>
4	02/02/2023	Project Assistant B.Sc.,/3 years Diploma BMLT / DMLT		01*	50	<ul> <li>Blood sample drawing, Centrifugation, Hematology analysis (cell counts etc.,), Biochemistry analysis, Clinical Pathological analysis</li> <li>Working knowledge of MS Office, Communication skills (in English &amp; Hindi)</li> <li>Any other responsibilities defined by the Project Leader</li> </ul>
5	07/02/2023	/2023 Project BE/B.Tech in Mechanical/Production/ Design / Aerospace / Aeronautics		07*	35	<ul> <li>To assist in Airworthiness Certification related activities of Transport Aircraft (Airframe / Mechanical Systems/ Powerplant and Fuel System)</li> <li>Hydraulic System Layout Design/Architecture and Mechanical Design using CATIA-V5, AutoCAD or Draft Sight.</li> <li>Generation of Layout, CAD Models of Aircraft Cabin Layout, Generation of Engineering Drawings and Preparation of BOM using CATIA/Solid works/AutoCAD/Draft Sight. LG Kinematics, Preliminary Sizing, Performance</li> <li>Environmental Systems – ECS design Layout using CATIA and Draft Sight.</li> </ul>

SI. No.	Date of Interview	Position	Qualification and Area / Specialisation	No. of Positions	Age limit (in years)	Job Requirements
6	09/02/2023	Project Associate-II	BE/B.Tech in Mechanical / Design / Production/ Aerospace / Aero / Propulsion/ Aeronautics / with 2 years' experience.	11*	35	<ul> <li>Estimation of engine installation losses, engine performance/analytical studies, CATIA V5</li> <li>Preliminary design of engine mounting scheme Preliminary sizing of nacelle, intake ducts, oil cooler ducts, selection of engine ancillaries and LRUs such as oil cooler, vibrations isolators, Preliminary architecture, layout and sizing of fuel system components, fuel requirement calculations, preliminary layout of wing tank selection of APU. Layout preparation - CAD tools</li> <li>3 years of experience in CATIA-V5, AutoCAD or DraftSight Generation of Layout, CAD modelling, LG Kinematics and Mechanical Engineering Design Wheels and Brakes System Preliminary Sizing, Performance System Sizing / Performance / Selection of LRUs / Identification of Probable OEMs / Cost Estimation</li> <li>Aircraft interior layout design, Generation of 3D CAD Models, Engineering Drawings, BOM and Weight Estimation using CATIA/AutoCAD/DraftSight. Selection of materials and cabin LRUs. Candidate shall have experience in design of Aircraft/Automobile interior layouts and furnishing</li> <li>CAD modelling and CAD cleaning for mesh generation, Structured and Unstructured CFD meshing, Steady/Unsteady flow analysis over aircraft / launch vehicles (software tools: ICEM CFD, Starccm+/Fluent)</li> <li>Desirable: 3 years' experience in CATIA - V5, AutoCAD or DraftSight Generation of Layout, CAD modeling, LG Kinematics, Mechanical Engineering Design Wheels and Brakes System, Performance System Sizing/Performance/Selection of LRUs/ Identification of Probable OEMs/Cost Estimation</li> <li>Development of Mathematical Models of Physical Systems, Knowledge of 6 DOF Simulation of an aircraft. Multibody Modelling &amp; Simulation, Knowledge of MATLAB &amp; Simulink.</li> </ul>

<sup>\*</sup>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**

(a) ₹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.

(b) ₹25,000/- + HRA for others who do not fall under (a) above.

#### **Project Associate-II**

- (a) ₹35,000/- + HRA to Scholars who are selected through a process as mentioned in (a) above.
- (b) ₹28,000/- + HRA for others who do not fall under (a) 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.

#### **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. Utilisation 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: <a href="https://www.nal.res.in">https://www.nal.res.in</a>. 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-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 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 copy of Aadhar Card and Filled Application (available in our website) without fail, along with latest passport size photograph, original certificates 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.
- Further you may have to come with necessary preparation 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 © 080-25086078. Email: recruitment@nal.res.in