

**NONFERROUS MATERIALS TECHNOLOGY DEVELOPMENT CENTRE**

**KANCHANBAGH, HYDERABAD – 500 058**

Fellowship offered	<p><b>Project Associates &amp; Senior Project Associates</b></p> <ol style="list-style-type: none"> <li><b>1. Electrical &amp; Electronics Engineering (EEE) – 4 Nos</b></li> <li><b>2. Electronics &amp; Instrumentation Engineering (EIE) : 4 Nos</b></li> <li><b>3. Instrumentation &amp; Controls Engineering (ICE) : 4 Nos</b></li> <li><b>4. Power Electronics (PE) : 4 Nos</b></li> </ol>
Code	<p><b>PA (Project Associate) &amp; Sr PA (Senior Project Associates)</b>  <b>R &amp; D Project based positions for fresh and experienced candidates.</b></p>
Organization Name	<p><b>N.F.T.D.C.</b> (Nonferrous Materials Technology Development Centre)</p>
Organization profile	<p>NFTDC is <b>an autonomous and self-financing R&amp;D institution</b> under the aegis of ministry of Mines, dedicated to the development of Advanced Materials + Innovative Processes on the one hand and Engineering Design + Analysis and Electronics + Instrumentation + Control, leading to component and Systems development &amp; Integration, on the other. NFTDC is an unique Technology Centre, in that it is a multi disciplinary knowledge domain based institution which ensembles the centre to undertake complex technology development endeavours as interdisciplinary projects involving both knowledge creation (scientific know-why) and knowledge integration (technical knowhow). NFTDC’s uniqueness also stems from its three genetic characteristics, namely, (i)self-financing nature, (ii) Multi-disciplinary all executive Human Resource and (iii) Policy of applied R&amp;D as contract/sponsored research, oriented to needs of user agencies.</p> <p>NFTDC is involved in development of advanced materials and systems in high technology areas such as (i) Aerospace &amp; Aeronautical (ii) Automotive (iii) <b>Energy (Conventional and Nonconventional)</b> (iv) Metallurgical &amp; Chemical Engineering, (v) Biomedical and Health care (v) <b>Environmental sectors</b>. The basic core competence of NFTDC in (a) Design (b) Advanced Materials &amp; Manufacturing and (c) Controls and Instrumentation have been integrated in all projects to render technology solutions in an end-to-end paradigm. NFTDC’s systems approach to technology development enables concept-to-product development thus addressing real gaps in translational research. NFTDC has state of art facilities in design, advanced manufacturing, product development and pilot production, together with advanced testing and characterization facilities. Centre of Excellence in (a) EV and Hybrid EV Drives under National Mission on Electric Mobility (NMEM), (b) Materials &amp; Energy Systems (c) Advanced Manufacturing Technologies cater to development of next generation technologies.</p>
Job Description	<p>The Project based candidate will be responsible for:</p> <ol style="list-style-type: none"> <li>a. Simulation of Converters, Inverters using MATLAB/PSIM software followed by development of prototype units;</li> <li>b. Simulation, development, fabrication and testing of <b>advanced</b></li> </ol>

	<p><b>motors for electric and hybrid automotive systems</b> using advanced software (MOTOR SOLVE, MOTOR CAD, SPEED etc) and state of art process equipments and test rigs.</p> <p>c. Development of Electronic Control Units <b>Controllers (ECUs) based on DSP and micro controller</b> with appropriate algorithms for hybrid and EV systems and solar grids.</p> <p>d. Development of Power Conversion units <b>for solar, automotive and other advanced applications.</b></p> <p>e. BMS for battery management ; Energy Management and control systems for micro and mini grids;</p> <p>f. Functional Test beds for integrated testing of motor + Energy device + control systems for EV and Hybrid Vehicle Systems;</p> <p>g. Control &amp; Instrumentation Systems Development for Processes control in chemical, mechatronics, metallurgical, biomedical, energy and aeronautical applications</p> <p>h. Control &amp; Instrumentation in Product Development in chemical, mechatronics, metallurgical, biomedical, energy and aeronautical applications</p>
Desired Profile of the candidate & Age	<p>Age: a. &lt; 24 For PA b. &lt; 27 for Sr.PA</p> <p>1<sup>st</sup> Division B.E./ B. Tech. in <b>Electrical &amp; Electronics Engineering (EEE) / Electronics &amp; Instrumentation Engineering (EIE) / Instrumentation &amp; Controls Engineering (ICE) /Power Electronics (PE)</b> from recognized University / Engineering colleges scoring minimum 70% or 7 CGPA.</p> <p>GATE qualification will be an added advantage.</p>
Desired Work experience	<p>1. 2- 3 Years experience candidates for the award of Senior Project Associate. / M. Tech in Power Electronics /Drives</p> <p>2. Meritorious fresh B.E / B. Tech candidates shall be awarded for Project Associate.</p>
Skill Set	<p>1. Must be conversant with basic engineering Concepts, Knowledge about Electrical Machines, electrical / electronics Circuits, Micro controllers , Programming and interfaces</p> <p>2. Hardware Design and development of micro controller,</p>

	<p>DSP boards, knowledge about linear and digital circuits</p> <p>3. Knowledge about electrical machines testing, Measurement instruments, Power analyser etc.</p> <p>4. Knowledge about process instrumentation, sensors, transducers, PLC, SCDA , Data Logging Instrumentation, Analytical Instrumentation, etc,</p> <p>5. Must be Fast learning, analytical and problem solving skills</p> <p>6. Must have willing to learn new frontiers and apply knowledge</p> <p>7. Should have good communication skill and ability to work in a team</p> <p>8. A Proactive self starter who can operate individually without direct day to day supervision.</p>
Stipend offered (CTC)	PA : ₹ 2.5 to 3.0 Lakhs /Annum Sr. PA: ₹ 3.5 to 3.8 Lakhs /Annum
Duration of the Award	1-3 Years
Selection criteria	1)First Division in B.E / B.Tech 2) Written Test in general aptitude (1 Hour) and core discipline (2 Hours) 3) Interview
Location & Application Last date:	Hyderabad 06-May-2017
Contact Details	<b>NFTDC</b> <b>P.O., KANCHANBAGH</b> <b>Hyderabad – 500 058</b> <b>Phone: +91-40-2434 1332, 2434 2300, 2434 2567</b> <b>Fax: +91-40-2434 0592</b>

Apply by sending your resume to email address: [career@nftdc.res.in](mailto:career@nftdc.res.in)