



सी एस आई आर-केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान CSIR-CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद/Council of Scientific & Industrial Research)

महात्मा गांधी एवेन्यू, दुर्गापुर – 713 209/Mahatma Gandhi Avenue, Durgapur - 713 209

Advertisement No. 07/2013

[WALK-IN-INTERVIEW FOR SENIOR PROJECT FELLOW/PROJECT-SRF/PROJECT FELLOW/PROJECT-JRF]

CSIR-Central Mechanical Engineering Research Institute, established in 1958, is the apex R&D institute for mechanical engineering and allied disciplines under the aegis of the Council of Scientific and Industrial Research (CSIR), which is an Autonomous Body under the Government of India. The Institute has started a two year Post Graduate Research Programme in Engineering under the auspices of AcSIR. The Institute is also offering two year Post-Graduate degree in Mechatronics in collaboration with Bengal Engineering and Science University, Sibpur and other CSIR Institutes. The present priority areas of research of the institute are: **Robotics & Mechatronics, Microsystem Technology, Rapid Prototyping & Modeling, Clean Energy, Farm Machineries, Residual Life Enhancement, Advanced Mechanical Design, Manufacturing, Simulation & Modeling and Chemistry & Biomimetics.**

A Walk-in-interview will be conducted in the Committee Room of CSIR-CMERI, Durgapur at the above address during **27th – 29th August, 2013** to select candidates for engagement as **Senior Project Fellow/Project-SRF/Project Fellow/Project-JRF** under various projects. The vacancy position may vary either way even across the disciplines and projects.

Sl. No. of the Post	Post Code	Project No.	Position	No. of Position(s)	Educational Qualification and Experience	Tenure	Upper age limit	Consolidated Remuneration per month (Rs.)
01.	P-1501	NMITLI-082712/2	Project Fellow	01	B.E. / B.Tech in Mechanical/ Applied Mechanics/Production Engg. with valid GATE score. Desirable : Working experience in Mechanical design, Finite element analysis of structures, CAD.	Up to 31 st March 2014	28 Yrs.	₹16000/-
02.	P-1502	ESC0103	Project Fellow	01	B.E. / B.Tech in Mechanical / Applied Mechanics/Production Engg. with valid GATE score. Desirable : Working experience in Mechanical design, CAD, CAM, Manufacturing.	Up to 31 st March 2015	28 Yrs.	₹16000/-
03.	P-1503	GAP121512	Project-JRF Or Project-SRF	01	For Project Junior Research Fellow (JRF): B.E. / B.Tech in Mechanical Engg. with valid GATE score. Or For Project Senior Research Fellow (SRF): M.E./M.Tech. in Mechanical Engg. with at least 60% marks. Desirable : Proficiency in Multi-Phase Flow simulation / Granular Flow Modeling/ Simulation of Metal solidification.	02 Yrs. (Extendable)	28 Yrs. for Project JRF or 32 Yrs. for Project SRF	Project JRF ₹16000/- or Project SRF ₹18000/-
04.	P-1504	ESC0112	Senior Project Fellow	01	M.E. / M.Tech. in Metallurgical / Mechanical Engg. with at least 60% marks. Or B.E./B.Tech in Metallurgical / Mechanical Engg. with at least 60% marks and 2 years of research experience.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
05.	P-1505	ESC0112	Senior Project Fellow	01	M.E. / M.Tech. in Thermal Engg. with at least 60% marks. Or B.E./B.Tech in Mechanical Engg. with at least 60% marks and 2 years of research experience in fluid flow modelling. Desirable : Modeling and simulation of multiphase flow and phase change phenomena; knowledge of programming languages C, Fortran etc.; Experience with CFD solvers such as FLUENT, CFX etc.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
06.	P-1506	GAP152612	Project Fellow or Senior Project Fellow	01	For Project Fellow : B.E./B.Tech in Mechanical Engg. with valid GATE score. Desirable : Design & analysis of Mechanical systems, Technical Report writing and Hands on experience. OR For Senior Project Fellow : M.E. / M.Tech. in Mechanical Engg. with at least 60% marks. Or B.E./B.Tech in Mechanical Engg. with at least 60% marks and 2 years of research experience on design and analysis of mechanical systems. Desirable : Design & analysis of Mechanical systems, Technical Report writing and Hands on experience.	Up to 31 st August 2015	28 Yrs. for Project Fellow or 32 Yrs. for SPF	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-

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07.	P-1507	GAP 152812	Project Fellow	01	B.E. / B.Tech in Mechanical / Civil/Aerospace/Aeronautical Engineering with valid GATE score. Desirable : One year research experience. Knowledge and working experience in the area of Fluid Mechanics, proficiency in measurement techniques and engineering mechanics. Preference will be given for persons with skills in image processing, data acquisition and data analysis..	02 Yrs.	28 Yrs.	₹16000/-
08.	P-1508	ESC 0113	Senior Project Fellow	01	M.E. / M.Tech in Mechanical/Aerospace or Equivalent with at least 60% marks. Desirable : Good understanding in Fluid Mechanics/Numerical Methods, Proficiency in computer programming (Fortran or C) or capability of handling commercial CFD codes such as Ansys Fluent/CFX etc.	3 Yrs.	32 Yrs.	₹18000/-
09.	P-1509	ESC 0113	Project Fellow	02	B.E. / B.Tech in Mechanical Engg. or Equivalent with valid GATE score. Desirable : Good understanding in Mechanical Design/Dynamics/Engg. Mechanics/Solid Mechanics/Numerical Methods Proficiency in computer Programming, Modeling using Solid Works/ADAMS, Knowledge of Matlab.	3 Yrs.	28 Yrs.	₹16000/-
10.	P-1510	PSC0101	Project Fellow	01	B.E. / B.Tech in Mechanical / Production Engg. with valid GATE score. Desirable : Working experience in CAD, CAM and CNC machining.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
11.	P-1511	ESC0105	Project Fellow	01	B.E. / B.Tech in Mechanical Engg. with valid GATE score. Desirable : Good understanding of pumps, pipe lines, valves etc. and knowledge of AutoCad, MS-Office (Word, Excel).	01 Yr. (Extendable)	28 Yrs.	₹16000/-
12.	P-1512	ESC0112 /RP-II/T2.3	Senior Project Fellow	01	M.E. / M.Tech. in Mechanical/Material Science/Metallurgical/Electrical Engg. with at least 60% marks. Or B.E./B.Tech in Mechanical/ Material Science/Metallurgical/Electrical Engg. with at least 60% marks and 2 years of research experience. Desirable : Knowledge in Magnetic Bearings/COMSOL Multi-Physics/MAXWELL software.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
13.	P-1513	ESC0112 /RP-II/T1.8	Senior Project Fellow	01	M.E. / M.Tech. in Mechanical/ Metallurgical /Material Science Engg. with at least 60% marks. Or B.E./B.Tech in Mechanical/Metallurgical Engg. with at least 60% marks and 2 years of research experience. Desirable : Knowledge in Material Processing using Laser and its characterization (AFM/NSOM)	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
14.	P-1514	ESC0112 /RP-II/T1.13	Project Fellow	01	M.Sc. in Chemical/Polymer/Material Science with minimum 55% marks and valid GATE/NET score. Or BE/B.Tech in Chemical Engg with valid GATE/NT score. Desirable : Knowledge in Polymer/Nano-Carbon Materials i.e. CNT/Graphene.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
15.	P-1515	ESC0112 /RP-II/T1.12	Project Fellow	01	M.Sc. in Chemical/Material Science with minimum 55% marks and valid GATE/NET score. Or BE/B.Tech in Chemical Engg with valid GATE score. Desirable : Knowledge in DFT/MD Simulation.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
16.	P-1516	ESC-0112/RP-II/T1.8	Project JRF	01	B.E. / B.Tech in Metallurgical/Mechanical Engg. with valid GATE/NET score. Or M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score. Desirable : Knowledge on synthesis and processing of nano powder, High temperature corrosion and protective coatings.	02 Yrs.	28 Yrs.	₹16000/-
17.	P-1517	CSC0102	Project Fellow	02	B.E. / B.Tech in Mechanical / Chemical /Power Engg (Mechanical). with valid GATE score. Or M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-

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18.	P-1518	CSC0101	Project Fellow or Senior Project Fellow	01	For Project Fellow : B.E. / B.Tech in Biotechnology / Chemical Engg. with valid GATE score. Or M.Sc. in Physical/Bio Chemistry/Organic Chemistry / Materials Science / Biotechnology with minimum 55% marks and valid GATE/NET score. OR For Senior Project Fellow : M.E. / M.Tech. in Materials Science with at least 60% marks.	02 Yrs. (Extendable)	28 Yrs. for Project Fellow OR 32 Yrs. for SPF	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
19.	P-1519	ESC0112 /RP-II/T3.1	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
20.	P-1520	ESC0203/6	Project Fellow or Senior Project Fellow	01	For Project Fellow : B.E./B.Tech in Chemical/Materials Science Engg. with valid GATE score. Or M.Sc. in Chemistry/Materials Science with minimum 55% marks and valid GATE/NET score. OR For Senior Project Fellow : M.E. / M.Tech. in Chemical/Materials Science/ Mechanical Engg. with at least 60% marks. Desirable : Working knowledge in tribology and coatings technology.	02 Yrs. (Extendable)	28 Yrs. for Project Fellow OR 32 Yrs. for SPF	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
21.	P-1521	ESC0306/1.6.2	Project Fellow	01	M.Sc. in Geology /Environmental Science/ Chemistry with minimum 55% marks and valid GATE/NET score.	3 Yrs.	28 Yrs.	₹16000/-
22.	P-1522	GAP201412	Project Fellow	02	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
23.	P-1523	ESC0203/1	Project Fellow	01	B.E./B.Tech in Chemical Engg. with valid GATE score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
24.	P-1524	GAP183012	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
25.	P-1525	ESC0203/2	Project Fellow	01	B.E./B.Tech in Biotechnology with valid GATE score. Or M.Sc. in Chemistry/ Biotechnology /Biochemistry/Molecular Biology with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
26.	P-1526	ESC0112 /T-1.3	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
27.	P-1527	ESC0203/2	Project Fellow	01	B.E./B.Tech in Electrical/Electronic Engg. with valid GATE score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
28.	P-1528	GAP 152812	Project Fellow	01	B.E. / B.Tech in Electronics / Instrumentation Engg with valid GATE score. Or M.Sc. in Physics with minimum 55% marks and valid GATE/NET score. Desirable : One year research experience. Knowledge and experience in developing and handling force/torque, pressure and other sensors, experience in designing and building circuits and interfacing for motor control and instrumentation measurement techniques, data acquisition, data processing and/or image processing, acquaintance with Labview programming, and knowledge of C/C++ programming, mathematical analysis related to sensor data processing, filtering, stochastic analysis, knowledge in numerical and computational techniques and algorithms and proficiency in analytical techniques.	02 Yrs.	28 Yrs.	₹16000/-
29.	P-1529	ESC0102	Project SRF	01	M.E./M.Tech in Electronics / Instrumentation / Computer Science and Engineering with at least 60% marks and consistent good academic background. Desirable : Sufficient knowledge in hardware and software in the field of Embedded system, Microcontroller etc.. Conversant with MATLAB based simulation technique, Machine learning, predictive algorithm development, time series analysis, computer network.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-

Sl. No. of the Post	Post Code	Project No.	Position	No. of Position(s)	Educational Qualification and Experience	Tenure	Upper age limit	Consolidated Remuneration per month (Rs.)
30	P-1530	NWP55	Senior Project Fellow	01	M.E. / M.Tech. in Electrical / Electronics /Instrumentation Engg. with at least 60% marks. Or B.E./B.Tech in Electrical / Electronics /Instrumentation Engg. with at least 60% marks and 2 years of research experience. The candidate would be required to work for R&D on Power electronic converters and should have hands-on experience with hardware design, hardware development of Familiarity with simulation software like PSIM / MATLAB & Data Acquisition techniques would be considered an added asset.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
31.	P-1531	NWP56	Senior Project Fellow	01	M.E. / M.Tech. in Electrical / Electronics /Instrumentation Engg. with at least 60% marks. Or B.E./B.Tech in Electrical / Electronics /Instrumentation Engg. with at least 60% marks and 2 years of research experience. The candidate would be required to work for R&D on Power electronic converters and should be familiar with simulation software like PSIM / MATLAB & Data Acquisition techniques.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
32.	P-1532	NMITLI 082712/1	Project Fellow	02	B.E./B.Tech in Electrical / Electronics /Instrumentation Engg. or equivalent with valid GATE Score. The candidate would be required to work for R&D on design and development of electric drives for electric vehicles, design of motor controllers etc. and suitable skill sets are desired.	Up to 31 st May 2014	28Yrs.	₹16000/-
33.	P-1533	ESC0112 /RP-II	Senior Project Fellow	01	M.E. / M.Tech. in Electrical / Electronics / Electronics & Communication Engineering with at least 60% marks. Or B.E./B.Tech in Electrical / Electronics / Electronics & Communication Engineering with at least 60% marks and 2 years of research experience. Desirable : Proficiency in MATLAB, C & LabView and hardware integration will be preferred.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
34.	P-1534	ESC 0112/RP II/T2.4	Project Fellow or Senior Project Fellow	01	For Project Fellow : B.E./B.Tech in Electrical/Electronics and Instrumentation Engg. with valid GATE score. OR For Senior Project Fellow : M.E. / M.Tech. in Electrical/Electronics and Instrumentation/Mechatronics Engineering or equivalent with at least 60% marks. Desirable : Strong background on control system, Programming Knowledge in C and MATLAB, Working Knowledge in Lab View and hardware integration will be preferred.	02 Yrs. (Extendable)	28 Yrs. for Project Fellow OR 32 Yrs. for SPF	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
35.	P-1535	ESC0112/R P-II/T4.2	Project Fellow	01	B.E./B.Tech in Biotechnology/Bio-Medical/Instrumentation/Mechatronics Engg. with GATE Score. Desirable : Sound knowledge on MEMS, Sensor and Instrumentation at Undergraduate level.	02 Yrs. (Extendable)	28Yrs.	₹16000/-
36.	P-1536	ESC 0113	Senior Project Fellow	01	M.E./M.Tech. in Computer Science (CSE)/Electronics Engg. or Equivalent with at least 60% marks. Desirable : C/C++/C# Programming, Data Structures & Algorithm Design, Numerical Methods, Image Processing, Statistical Methods & Probability, Knowledge of Real Time Systems, System Administration, working knowledge on Real Time OS.	3 Yrs.	32 Yrs.	₹18000/-
37.	P-1537	ESC 0113	Senior Project Fellow	01	M.E./M.Tech. in Electrical/Electronics Engg. or Equivalent with at least 60% marks. Desirable : Nonlinear Control System Design, Working Knowledge on MatLab/Simulink, working knowledge of Micro-controllers, C/C++ Programming, Numerical Methods, Sensor Integration, Fundamentals of DSP.	3 Yrs.	32 Yrs.	₹18000/-
38.	P-1538	ESC 0113	Senior Project Fellow	01	M.E./M.Tech. in Electronics & Communication Engg. (ECE) or Equivalent with at least 60% marks. Desirable : C/C++/C# Programming, Digital Signal Processing Tools, Digital Communication Fundamentals, Good Fluor of MatLab/Simulink for Signal Processing, Estimation and Detection Embedded C/VHDL/Verilog Programming, Hands on with Texas Instruments DSP Kits or Other Embedded Boards, Knowledge on underwater signal processing for communication.	3 Yrs.	32 Yrs.	₹18000/-

Sl. No. of the Post	Post Code	Project No.	Position	No. of Position(s)	Educational Qualification and Experience	Tenure	Upper age limit	Consolidated Remuneration per month (Rs.)
39.	P-1539	ESC 0113	Project Fellow	04	B.E. / B.Tech in Electronics / Electrical /Instrumentation/Computer Science and Engineering or Equivalent with valid GATE score. Desirable : C/C++/C# Programming, Sensors and Measurements, working knowledge of Micro-Controllers, Device Interfacing, Basics of Control System Design, Working Knowledge on MatLab/Simulink, Signal Processing Basics of Image Processing/Vision, Numerical Methods, Filter Design using MatLab/Simulink, Embedded C/VHDL/Verilog, DSP Programming.	3 Yrs.	28 Yrs.	₹16000/-
40.	P-1540	ESC 0113	Project Fellow	02	B.E. / B.Tech in Electrical /Electronics Engineering or Equivalent with valid GATE score. Desirable : Control System Basics, Electrical/Electronic Hardware Interfacing, Basics of Power System. Proficiency in Computer Programming, Knowledge of Matlab.	3 Yrs.	28 Yrs.	₹16000/-
41.	P-1541	ESC 0113	Project Fellow	01	B.E. / B.Tech in Computer Science and Engineering (CSE) or Equivalent with valid GATE score. Desirable : Knowledge in C/C++/C# Programming, Data Structures a Algorithm Design, Numerical Methods, Socket Programming. Application development in Windows/Linux.	3 Yrs.	28 Yrs.	₹16000/-
42.	P-1542	GAP 121512	Project SRF	01	M.E./M.Tech. in Computer Science and Engineering (CSE) /Electronics/Operation Research or Equivalent with at least 60% marks. Desirable : Proficiency in Programming Language i.e. C/C++, MATLAB and LabView.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
43.	P-1543	GAP 121512	Project SRF	01	M.E./M.Tech. in Surface Coating Technologies/Corrosion Science or equivalent with at least 60% marks. Desirable : Surface Modification and Analysis.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-

The candidates who have already served CSIR-CMERI or any other Lab./Instt. of CSIR as a Trainee / Project Assistant / Project Fellow / JRF / SRF / Research Associate etc. for a period of 5 years or more are not eligible for the above engagements. The candidates who have served for a period less than 5 years, upon selection, their tenure will automatically end on completion of five years.

The date for determining the upper age limit, qualification and/or experience etc. will be the date of interview of the respective Post Code. Relaxation in age limit of the candidates belonging to SC/ST/OBC and Women shall be provided as per the Government rules.

The interested candidates may appear before the Selection Committee with **all their original certificates / mark sheets with an attested photo copy of each of it and a recent passport size photograph along with the filled-in Application Form** available in the Institute website, as per the date and time given below. Eligible outstation candidates will be paid to and fro 2nd Class Rail / Bus fare for attending the interview as per rules.

Schedule of Interview for Senior Project Fellow/Project-SRF/Project Fellow/Project-JRF

Sl. No.	Post Code	Sl. No. of the Post	Date of Interview	Reporting Time
I	P-1501, P-1502, P-1503, P-1504, P-1505, P-1506, P-1507, P-1508, P-1509, P-1510, P-1511, P-1512, P-1513	01 to 13	27 th August, 2013 (Tuesday)	09:00 AM to 10:30 AM
II	P-1514, P-1515, P-1516, P-1517, P-1518, P-1519, P-1520, P-1521, P-1522, P-1523, P-1524, P-1525, P-1526	14 to 26	28 th August, 2013 (Wednesday)	
III	P-1527, P-1528, P-1529, P-1530, P-1531, P-1532, P-1533, P-1534, P-1535, P-1536, P-1537, P-1538, P-1539, P-1540, P-1541, P-1542, P-1543	27 to 43	29 th August, 2013 (Thursday)	

Administrative Officer