



# 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. 02/2014**

### **[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 **12<sup>th</sup> – 13<sup>th</sup> August, 2014** 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.	Post Code	Project No.	Name of the Position	No. of Positions	Educational Qualification and Experience	Tenure	Upper age limit	Consolidated Remuneration per month (Rs.)
01.	P-1701	GAP 041112	Junior Research Fellow (Professional)	01	M.E. / M.Tech in Mechanical / Production / Metallurgy & Materials/ Materials Science & Engineering with at least 60% marks.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
02.	P-1702	GAP 121512	Project-JRF Or Project-SRF	01	<b>For Project Junior Research Fellow (JRF) :</b> B.E. / B.Tech in Mechanical/Production Engg. with valid GATE score. <b>OR</b> <b>For Project Senior Research Fellow (SRF):</b> M.E./M.Tech. in Mechanical / Thermal / Production Engg. with at least 60% marks. <b>Or</b> B.E. / B.Tech in Mechanical/Production Engg. with at least 60% marks and two years of research experience 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/-
03.	P-1703	ESC0112/RP-II/T1.1	Project Fellow Or Senior Project Fellow	02	<b>For Project Fellow :</b> B.E. / B.Tech in Mechanical / Production / Manufacturing Engg. with valid GATE/NET score. <b>OR</b> <b>For Senior Project Fellow :</b> M.E./M.Tech. in Machatronics / Manufacturing / Nano Technology with at least 60% marks and B.E/B.Tech. in Mechanical/Production Engg.. <b>Or</b> B.E. / B.Tech in Mechanical / Production / Manufacturing Engg. with at least 60% marks and two years of research experience in Labs./Industry Desirable : Working experience in Micro machining, Micro-nano Scale patterning is preferred..	02 Yrs. (Extendable)	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Senior Project Fellow ₹18000/-
04.	P-1704	ESC 0113	Project Fellow	01	B.E. / B.Tech in Mechanical Engineering. 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.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
05.	P-1705	ESC0203/04	Project Fellow	01	B.E./B.Tech in Mechanical Engg. with valid GATE score. Desirable : Machine Design, Kinematics /Dynamics	02 Yrs. (Extendable)	28 Yrs.	₹16000/-

06.	P-1706	ESC0112/RP-I	Project Fellow or Senior Project Fellow	01	<p><b>For Project Fellow :</b> B.E./B.Tech in Mechanical Engg. with valid GATE score.</p> <p style="text-align: center;">OR</p> <p><b>For Senior Project Fellow :</b> M.E. / M.Tech. in Mechanical Engg. with at least 60% marks.</p> <p style="text-align: center;">Or</p> <p>B.E. / B.Tech in Mechanical Engg. with at least 60% marks and two years of research experience.</p> <p>Desirable : Knowledge and working experience in the area of 3D CAD Modeling, 2D CAD Drawing, Analysis of Mechanical Systems and Hands on experience.</p>	02 Yrs. (Extendable)	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
07.	P-1707	GAP 152812	Project Fellow	01	<p><b>B.E./B.Tech in Mechanical / Civil / Aerospace / Aeronautical Engg. with valid GATE score.</b></p> <p>Desirable : Knowledge and working experience in the area of Solid and Fluid Mechanics, and measurement techniques. Preference will be given for persons with knowledge in data analysis and/or image processing.</p>	02 Yrs. Initial appointment will be for 01 Yr.	28 Yrs.	₹16000/-
08.	P-1708	GAP 152812	Project Fellow	01	<p><b>B.E./B.Tech in Electronics / Instrumentation Engg. with valid GATE Score.</b></p> <p style="text-align: center;">Or</p> <p><b>M.Sc. in Physics with minimum 55% marks and valid GATE/NET score.</b></p> <p>Desirable : Knowledge and experience in developing and handling force/pressure and other sensors, designing and building circuits and knowledge of instrumentation, measurement techniques, data acquisition, acquaintance with Labview programming, knowledge of C/C++ programming, and proficiency in analytical techniques.</p>	02 Yrs. Initial appointment will be for 01 Yr.	28 Yrs.	₹16000/-
09.	P-1709	ESC 0113	Senior Project Fellow	01	<p><b>M.E./M.Tech. in Electronics &amp; Communication / Electronics / Electrical Engg. with at least 60% marks.</b></p> <p>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</p>	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
10.	P-1710	ESC 0113	Senior Project Fellow	01 or 02	<p><b>M.E./M.Tech. in Electronics &amp; Communication Engg. with at least 60% marks.</b></p> <p>Desirable : Good flair of MatLab/Simulink for Signal Processing, Estimation and Detection, Digital Signal Processing Tools, Digital Communication Fundamentals, Image Processing, C/C++ Programming, Serial Port Programming, Embedded C/VHDL/Verilog Programming, Hands on with Texas Instruments DSP Kits or other Embedded Boards, Knowledge on underwater signal processing for communication.</p>	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
11.	P-1711	ESC 0113	Project Fellow	02	<p><b>B.E./B.Tech. in Electronics / Instrumentation / Electrical Engg. with valid GATE score.</b></p> <p>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</p>	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
12.	P-1712	ESC 0113	Project Fellow	01	<p><b>B.E./B.Tech in Electrical / Electronics / Instrumentation / Electronics and Instrumentation Engg. with valid GATE score.</b></p> <p>Desirable : Control System Basics, Electrical/Electronic Hardware Interfacing, Basics of Power Systems. Proficiency in Computer Programing, Knowledge of Matlab.</p>	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
13.	P-1713	GAP 152612	Project Fellow or Senior Project Fellow	02	<p><b>For Project Fellow :</b> B.E./B.Tech in Electronics / Electronic &amp; Telecommunication / Electronic &amp; Communication / Mechatronics / Electrical Engineering with valid GATE score.</p> <p style="text-align: center;">OR</p> <p><b>For Senior Project Fellow :</b> M.E. / M.Tech. in Electronics/Electronic &amp; Telecommunication/Electronic &amp; Communication / Mechatronics / Electrical Engineering with at least 60% marks.</p> <p style="text-align: center;">Or</p> <p>B.E. / B.Tech in Electronics / Electronics &amp; Telecommunication / Electronics &amp; Communication / Mechatronics / Electrical Engineering with at least 60% marks and two years of research experience.</p> <p>Desirable : Knowledge and working experience in the area of Analog Electronics, Digital Electronics, Micro-controller &amp; Micro-controller Programming Technical Report writing and Hands on experience.</p>	Up to 31 <sup>st</sup> August 2015	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-

14.	P-1714	ESC203/11	Senior Project Fellow	01	<p><b>M.E./M.Tech. in Electronics / Computer Science and Engineering with at least 60% marks and consistent good academic background.</b></p> <p>Desirable : Preferably should have a good knowledge in Machine Learning, Computer algorithm development. Should be conversant with program development in Embedded platform.</p>	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
15.	P-1715	ESC0102	Project Fellow	01	<p><b>B.E./B.Tech in Electronics / Instrumentation / Computer Science and Engineering with valid GATE score and consistent good academic record.</b></p> <p>Desirable : Working knowledge of software development in JAVA, VISUAL STUDIO &amp; C. Preferably one year experience / knowledge of software development on android platform, interfacing with Arduino.</p>	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
16.	P-1716	ESC0203/04	Project Fellow	01	<p><b>B.E. / B.Tech in Computer Science / Electronics / Electrical / Instrumentation Engg. with valid GATE score.</b></p> <p>Desirable : Knowledge of Computer interfacing, Microcontrollers, Programming in C/C++ or MATLAB or LabVIEW.</p>	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
17.	P-1717	ESC-0203/5	Project Fellow or Senior Project Fellow	01	<p><b>For Project Fellow :</b> B.E./B.Tech in Electrical / Electronics / Instrumentation Engg. with valid GATE score. OR <b>For Senior Project Fellow :</b> M.E. / M.Tech. in Electrical/Electronics / Instrumentation Engg. with at least 60% marks. Or B.E. / B.Tech in Electrical / Electronics / Instrumentation Engineering with at least 60% marks and two years of relevant experience. Desirable : Knowledge in Control System, MATLAB &amp; C/C++.</p>	02 Yrs. (Extendable)	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
18.	P-1718	ESC0112/RP II/T.2.4	Project Fellow or Senior Project Fellow	01	<p><b>For Project Fellow :</b> B.E./B.Tech in Electrical / Electronics and Instrumentation Engg. with valid GATE score. OR <b>For Senior Project Fellow :</b> M.E. / M.Tech. in Electrical/Electronics and Instrumentation/Mechatronics Engg. with at least 60% marks. Desirable : Strong background on control system, programming knowledge in C and MATLAB, Working knowledge in Labview and hardware integration will be preferred.</p>	02 Yrs. (Extendable)	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-
19.	P-1719	ESC 0113	Project Fellow	02	<p><b>B.E./B.Tech in Computer Science and Engineering with valid GATE score.</b></p> <p>Desirable : Knowledge in C/C++/C# Programming, Data Structures &amp; Algorithm Design, Numerical Methods, Socket Programming. Application development in Windows/Linux.</p>	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
20.	P-1720	ESC0112/RP-I	Project Fellow or Senior Project Fellow	04	<p><b>For Project Fellow :</b> B.E. / B.Tech in Computer Science and Engineering / IT / MCA (Full time regular course with Science background at Graduation level) and valid GATE score. OR <b>For Senior Project Fellow :</b> M.E. / M.Tech. in Computer Science and Engineering / IT with at least 60% marks. Or B.E. / B.Tech in Computer Science and Engineering / IT / MCA (Full time regular course with Science background at Graduation level) and at least 60% marks and 2 years research experience. Desirable : Working knowledge of Programming skills in VC++ &amp; MATLAB, Proficiency in System integration, use of third party dlls and Drivers.</p>	02 Yrs. (Extendable)	28 Yrs. for Project Fellow or 32 Yrs. for Senior Project Fellow	Project Fellow ₹16000/- or Sr. Project Fellow ₹18000/-

21.	P-1721	GAP 183212	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
22.	P-1722	ESC0306/1.6.2	Project Fellow	01	M.Sc. in Geology /Environmental System Management (Applied Geology)/Environmental Science/ Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
23.	P-1723	ESC 0112/RP-II/T1.3	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	02 Yrs. (Extendable)	28 Yrs.	₹16000/-
24.	P-1724	GAP 183012	Project Fellow	01	M.Sc. in Chemistry with minimum 55% marks and valid GATE/NET score.	Up to 30 <sup>th</sup> June 2016	28 Yrs.	₹16000/-
25.	P-1725	ESC0112/RP-II/T4.3	Senior Project Fellow	01	M.E./M.Tech. in Biotechnology / Nanotechnology/ Biomedical Engineering with at least 60% marks. Or M.Sc. in Chemistry / Bio-Chemistry / Microbiology with minimum 55% marks and two years of experience in industry or R&D. Desirable : Working knowledge in magnetic/polymeric nanomaterials fabrication and characterization, biological cell and spectroscopic instrument handling.	02 Yrs. (Extendable)	32 Yrs.	₹18000/-
26.	P-1726	ESC0112/RP-II/T4.2	Senior Project Fellow	01	M.E./M.Tech. in Biotechnology with at least 60% marks. Or M.Pharm in Pharmacology with minimum 60% marks. Desirable : Experience in sensor instrumentation, Electrode Fabrication, Biological sample preparation, Handling Biosensing Instruments.	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 2<sup>nd</sup> Class Rail / Bus fare for attending the interview as per rules.

### **Schedule of Interview**

Sl. No.	Post Code	Position wise Sl. No.	Date of Interview	Reporting Time
I	P-1701, P-1702, P-1703, P-1704, P-1705, P-1706, P-1707, P-1719 & P-1720	01 to 07 & 19 and 20	12 <sup>th</sup> August, 2014 (Tuesday)	09:30 AM to 10:30 AM
II	P-1708, P-1709, P-1710, P-1711, P-1712, P-1713, P-1714, P-1715, P-1716, P-1717, P-1718, P-1721, P-1722, P-1723, P-1724, P-1725 & P-1726	08 to 18 & 21 to 26	13 <sup>th</sup> August, 2014 (Wednesday)	

**Administrative Officer**