

**CENTRAL POWER RESEARCH INSTITUTE – BANGALORE 560 080
(A GOVERNMENT OF INDIA SOCIETY, MINISTRY OF POWER)**

CENTRE FOR COLLABORATIVE AND ADVANCED RESEARCH (CCAR)

ADVERTISEMENT NO: CPRI/02/2010

SENIOR /JUNIOR RESEARCH FELLOWSHIP (SRF/JRF) PROGRAM

Central Power Research Institute is a premier National body under Ministry of Power, Government of India, promoting applied research in Power System Technology Development. It has several laboratories and state-of-art facilities for evaluation of Electrical Materials and performance of Power Equipment. It also acts as the National Testing & Certification Authority and the apex body for initiating and coordinating Research and Development.

As a part of the research initiative of CPRI, Senior/Junior Research Fellowship Programme is being launched. Under this programme a Senior/Junior Research Fellow will work full time at CPRI's Centre for Collaborative & Advanced Research (CCAR) on a research theme/project for two years (extendable up to six months). The identified projects are given in **Annexure – I**. Necessary laboratory, computational and Library facilities shall be provided.

General Information

Minimum eligibility: SRF: Post Graduate in Engineering with first class in the relevant area of specialization with consistently high level of academic record and aptitude for research.

JRF: Graduate in Engineering / Masters Degree in Science, with first class in the relevant branch of Engineering / Science with consistently high level of academic record and aptitude for research.

Selection: Based on Written test/ Interview and past record.

Duration: Duration of research project will be two years with a provision of extension up to six months in exceptional cases, based on the recommendation of the competent authority.

Evaluation of Project: The progress of the research project carried out by SRF/JRF will be evaluated every three months by the evaluation committee.

Remuneration and other facilities:

1. SRF shall get Rs 18,000/ (Fixed) (Eighteen thousand rupees only) per month
2. JRF shall get Rs 15,000/ (Fixed) (Fifteen thousand rupees only) per month
3. SRF and JRF shall get up to Rs 25,000 (Twenty five thousand rupees only) as a lump sum payment per year, based on the recommendation of the committee.
4. Reimbursement of expenditure up to Rs. 20,000/- (Twenty Thousand only) during the programme for contingency expenditure purpose for the project and recommended by the competent authority.
5. The SRF/JRF will stay at CCAR within the CPRI premises on chargeable basis.
6. The SRF/JRF are required to visit/stay at project sites depending on the exigencies in connection with the project work.

7. Expenditure towards attending seminars/training programmes relevant to the project, will be provided as per CPRI norms.

Publication / Patent:

The results of Fellows research work may be published in standard Journals / Seminars / Conferences etc., at the discretion of the guide. It should be ensured that the assistance provided by CPRI is always acknowledged in all such publications / presentations. One copy of the published research paper / papers shall be sent to CPRI. The right to commercial exploitation of the results and patent right arising out of the investigation / research will, however, rest exclusively with CPRI.

Other terms:

1. CPRI will have exclusive rights on the selection of research subject & research findings.
2. Research Fellows may be permitted to extend his/her research work for the award of Doctoral/Post Doctoral degree.
3. The research programme is on tenure basis only and CPRI will be under no obligation to provide permanent employment to SRF/JRF. A few research fellows with right aptitude may be utilized for consultancy work carried out in CPRI.
4. The upper age limit for the above posts is 35 years as on last date for submission of applications. However, the age is relaxable by 3 years in case of OBC candidates and 5 years for candidates belonging to SC/ST category. Government of India norms will be followed.
5. Candidates who wish to apply for more than one project may submit separate applications indicating Project code.
6. Copies of the certificates related to age, qualifications, caste, experience etc., shall be submitted along with the application form.
7. One recent passport size photograph shall be affixed to the application form.
8. Candidates already working in any organisation, should apply through proper channel.
9. CPRI reserves the right not to fill up the posts, if it so desires. Mere fulfillment of the minimum prescribed conditions will not vest any right to a candidate being called for Written test/Interview. No correspondence will be entertained as regards short-listing/calling for written test/Interview, selection, appointment etc.
10. Candidates called for written test/Interview shall appear for the same at their own cost.

How to apply:

Candidates may apply in the prescribed application form given in **Annexure – II**. The envelop containing the application shall be superscribed as ‘**APPLICATION FOR SRF/JRF _____**’ (**indicate Project Code in the bracket**) and send it to the following address:

ADDITIONAL DIRECTOR (CCAR)
CENTRE FOR COLLABORATIVE & ADVANCED RESEARCH (CCAR)
CENTRAL POWER RESEARCH INSTITUTE
PB NO.8066, RMV II STAGE
SADASHIVANAGAR P.O.; BANGALORE – 560 080

Last Date :

Last date of receipt of Application: **19-Feb-2010**

ANNEXURE - I**National Perspective Plan (NPP) Projects**

Project Code	Research Theme Area	Qualification
NPP-1	Development of Silt Erosion Resistant Nano-composite Coatings by Physical Vapour Deposition for Hydro Turbine Components.	Masters degree in Civil/Metallurgy
NPP-2	Tunneling in water charge zones under high hydro static pressure.	Masters degree in Civil
NPP-3	High Temperature Superconducting technology: Design and development of HTS fault current limiter (FCL) Design and development of HTS transformers	Masters degree in Electrical/Cryogenics
NPP-4	Development of DVR based voltage source stabilizers for process Industry	Masters degree in Electrical
NPP-5	Improvement in reliability, safety and long term performance of power and converter transformers through improvements in quality of transformer oil.	Masters degree in Electrical / M. Sc., in Chemistry
NPP-6	A Study on Stability & Reliability of the power system with large penetration of Wind Power.	Masters degree in Power System with knowledge in Simulation of Wind Generators.
NPP-7	Design, Development and Application aspects of STATCOM	Masters degree in Electrical

Research Contingency Projects

Project Code	Research Theme Area	Qualification
RC-1	Polymer campsite sections for compact transmission towers	Masters degree in Machine design / Manufacturing
RC-2	Study of smart grids and impact of renewable integration	Masters /Bachelors degree in CS, IT / Masters in Electronics
RC-3	Development of miniature specimen test techniques and advanced NDE approach for damage assessment in in-service high temperature power plant	Masters /Bachelors degree in Metallurgy/ Material science
RC-4	Design and development and validation of test suites for IEC 62056 (DLMS/COSEM) compliant energy meters	Masters /Bachelors degree in CS, IT
RC-5	Development of high performance polymeric components based on PEEK & PC for power sector applications	Masters/Bachelors degree in Chemical Engg/Chemistry
RC-6	Technology for design and development – engineering of HTS power apparatus: HTS power transformer and superconducting fault current limiter	Masters degree in Electrical/ Material Sc Cryogenics/Physics

Exploratory Projects

Project Code	Research Theme Area	Qualification
EP-1	Compact Transformers	Masters degree in Electrical
EP-2	Power System Control and Protection: Wide Area Measurement system (WAMS)	Masters degree in Electrical
EP-3	Energy Storage Devices	Masters Degree in Mechanical / Material / Chemical
EP-4	Design & Development of HVDC Controls	ME in Power Systems / Power Electronics. Knowledge in HVDC controls is preferred
EP-5	Development of Web based portal	BE (CS / IT)
EP-6	Seismic testing of Pressurized Piping Loops	M.Tech or BE in Mechanical with 2 years experience in Vibration Testing

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CENTRE FOR COLLABORATIVE AND ADVANCED RESEARCH (CCAR)

**APPLICATION FORM FOR SENIOR/ JUNIOR RESEARCH FELLOWSHIP
(SRF/JRF) PROGRAMME**

**AFFIX YOUR
PASSPORT SIZE
PHOTOGRAPH**

PROJECT CODE :

ADVERTISEMENT NO: CPRI/02/2010

Sl.No	Item	Details	
1	Name of Applicant		
2	Current Designation and Affiliation		
3	Address for correspondence (Ph No, e-mail, Mobile no. etc also may please be given)		
4	Date of Birth		
5	Please specify whether you belong to SC/ST/OBC		
6	Field (s) of specialization		
7	Academic Record (Intermediate onwards, specify % marks obtained and Class awarded)	Academic qualifications	% of marks & class obtained
		Intermediate	
		B.E / B.Tech / B.Sc	
		M.E / M.Tech / M.Sc	
8	Experience (Industry/Research & Development/Academic/Consultancy/Other)		

9	Post-Doctoral experience (if any)	
10	Awards received	
11	Fellowships/Memberships of Academies/Professional Societies	
12	Publications (copies may please be enclosed): (i) A list of Publications in referred journals (ii) Papers published in conference proceedings (iii) No. of Books Authored	
13	List of Research Projects completed as Principal Coordinator	
14	Number of thesis supervised at Doctoral and Masters level	
15	Summary of outstanding achievements and research contributions (in 500words) (Please enclose in a separate sheet)	
16	Brief note on subject (Please enclose in a separate sheet)	
17	Name and address of two referees who are familiar with your professional work.	
18	Please specify the relevant Project Code No. for which applied.	

Signature

Date:

Place: