SELECTION OF JUNIOR RESEARCH FELLOWS
NO. OF FELLOWSHIPS: 30 (Indicative)
If You Have A Desire To Innovate, We Have An Opportunity To Stimulate!
Come...... Join Hands!!!
We provide the means to realize your dreams towards seeking an excellent scientific pursuit

Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam is a premier research institute dedicated to the development of robust fast reactor technology based on intense multidisciplinary research. IGCAR is empowering young, talented and motivated students to contribute to path-breaking discoveries in frontier areas of engineering/scientific research and cutting-edge technologies by offering Junior Research Fellowships.

Applications are invited from interested students for the award of Junior Research Fellowships of the Department of Atomic Energy tenable at the Centre. The selected candidates will be eligible to register for Ph.D. in Homi Bhabha National Institute (HBNI, a deemed to be University of Department of Atomic Energy). IGCAR offers a unique opportunity to carry out research for their Ph.D. under the guidance of internationally renowned scientists. IGCAR possesses ambience of an academic institute coupled with an advanced R&D infrastructure in a mission mode. It provides the best infrastructure, motivation and personality development prospects for talented students, dreaming of unparalleled success in their professional endeavors. Endowed with scenic beauty and serene surroundings, Kalpakkam offers the right ambience for the pursuit of academic research.

The vibrant research and developmental activities of IGCAR encompass a wide spectrum of fields including condensed matter physics, high temperature chemistry, environmental science, applied mechanics, non-destructive evaluation, structural mechanics, fluid dynamics, etc. State-of-the-art infrastructure is available at IGCAR for carrying out excellent research.

STATE-OF-THE-ART INFRASTRUCTURE:

- Ion accelerators, Rutherford Backscattering, Channeling, Positron lifetime measurements and Mossbauer Spectroscopy, Laser Raman Spectroscopy, Advanced sensor technology like SQUIDS, Pulsed Laser ablation, Magnetron Sputtering and Plasma methods
- Laser induced vaporization mass spectrometry, High temperature mass spectrometry, MALDI-TOFMS, Different types of Calorimetry and Differential Scanning Calorimetry, Supercritical Fluid Extraction Chromatography, IR spectroscopy, Neutron Activation Analysis, X-ray diffractometry, Thermal Expansion and Phase transition studies.
- High temperature component testing facilities, In-sodium testing facility, Steam Generator Test Facility, Large components testing facility and Boron enrichment plant.
- Shake Table for seismic simulations, Core Disruptive accident analysis. Design of major equipments and components for PFBR, Gas entrainment studies, Thermal Hydraulics and Structural Integrity assessment (experimental and theoretical).
- Nuclear counting facility, Thermo Luminescent Dosimetry (TLD) facility, Radon laboratory, Aerosol Transport Facility, ECR X-ray source and ESR spectrometer, Gamma scanning facility, Bubble detectors, Automated Metaphase finder, fluorescent light microscope, inverted phase contrast microscope, PCR machine and electrophoresis apparatus for bio-dosimetry, Core Catcher and Sodium fire experimental facility.

Emphasis is on research areas at the interface of science, engineering and technology. Selected JRFs will have to undergo one year of course work starting from September, 2009 as stipulated by HBNI.

Candidates are advised to visit our website: [http://www.igcar.gov.in](http://www.igcar.gov.in) for further information on

1. AREAS OF RESEARCH
2. QUALIFICATIONS
3. ELIGIBILITY
4. APPLICATION AND SELECTION PROCEDURE
5. GENERAL INFORMATION

CALENDAR FOR IMPORTANT TASKS

- Last date for receipt of applications: 31 March 2009
- Written Test: 1 week of June 2009
- Interview: 1 week of July 2009
- Likely Date of Joining: 4 week of July 2009

At IGCAR, we believe in ‘EXCELLENCE WITH RELEVANCE’

Our strengths are the highly stimulating and scholarly environment, knowledgeable and motivating faculty and state-of-the-art facilities