

**DEPARTMENT OF ATOMIC ENERGY (DAE)**  
**BOARD OF RESEARCH IN NUCLEAR SCIENCES (BRNS)**  
 Invites Applications for its Prestigious Scheme  
**DR. K.S.KRISHNAN RESEARCH ASSOCIATESHIP (KSKRA) – 22<sup>nd</sup> Batch**  
**For a challenging career in pursuit of front ranking R & D programmes in Atomic Energy**  
**Advertisement No.7/2010**  
 DAE strives to have a workforce which reflects gender balance and women candidates are encouraged to apply

Research Associates selected under the prestigious KSKRA programme are given an opportunity to work on R&D programmes of national importance relevant to the DAE mandate in one of the following advanced research centres of the Department:

1. Bhabha Atomic Research Centre (BARC), Mumbai.
2. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam.
3. Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.
4. Variable Energy Cyclotron Centre (VECC), Kolkata.
5. Atomic Energy Regulatory Board (AERB), Mumbai.

Up to 20 KSKRAs can be selected every year and paid a stipend of Rs.20,000/- (likely to be revised) + benefits for a maximum period of 2 years. Anytime during the 2<sup>nd</sup> year of associateship, subject to satisfactory performance, the KSKRAs will be absorbed in one of the above given R&D units of DAE and appointed in the grade of Scientific Officer/ Engineer-D/ E. The associateships are available in the following broad disciplines:

Subjects	Subject Code	Subjects	Subject Code
Engineering: All Branches	01	Chemical Sciences	03
Physical Sciences	02	Biosciences	04

#### ELIGIBILITY CRITERIA

##### A) Minimum Educational Qualification and Experience:

i) **For Engineers:** Ph.D. degree in Engineering (Those who have submitted thesis for Ph.D. may also apply) or Master's degree in Engineering (M.Tech./ M.E./M.S.) with a minimum of 2-year R&D experience after obtaining M.Tech./M.E./M.S. degree.

ii) **For Scientists:** Ph.D. degree in Science (Those who have submitted Ph.D. thesis may also apply).

All candidates must have a First Class at either Masters or Bachelors level.

**All candidates must provide a list of publications in support of their R&D experience.**

**B) Nationality/ Age:** Indian nationals who are not more than 32 years as on 1<sup>st</sup> January in the year of the application. The age criterion is relaxable by 5 years for SC/ ST candidates and 3 years for OBC candidates. The SC/ ST/ OBC certificate should be as per the prescribed format. Physically challenge persons are eligible for age relaxation of 5 years.

#### SELECTION AND APPOINTMENT

Selection will be done by an interview committee (appointed by BRNS) from among the short listed candidates based on their qualification, published R&D work and performance in the interview. The selected candidates would be appointed as KSKRA for an initial period of one year, which is extendable by one more year based on performance during the first year. KSKRAs would be paid a monthly stipend of Rs. 20,000/- (likely to be revised) + benefits. Those candidates who have submitted their Ph.D. thesis but are yet to receive their Ph.D. degree, if found suitable by the interview committee in view of their expertise and academic record, would be first designated as Research Associate (RA) and paid Rs.16,000/- per month and only after completion of their Ph.D. and obtaining a provisional certificate, they would be designated as KSKRA and paid Rs.20,000/- (likely to be revised) per month. For all other benefits, their date of joining as RA will be treated as the date of joining KSKRA Scheme. In addition Rs.10,000/- per year will be paid as Educational Material Allowance. Associates will be provided Hostel accommodation, medical and leave benefits during the Associateship.

#### CAREER DEVELOPMENT

Anytime during second year of Associateship, subject to satisfactory performance as evaluated by the concerned DAE unit, KSKRAs will be appointed as Scientific Officer/ Engineer-D in the Pay Band-3 (PB-3) (Rs.15,600-39,100) plus Grade Pay (GP) Rs.6,600/- and up to 4 advance increments may be awarded depending upon qualification, experience and performance. Exceptionally brilliant candidates with excellent track record in advanced technologies and having a Ph.D. may be considered for Scientific Officer/ Engineer-E in PB-3 with higher GP of Rs.7,600/-. In addition benefits under Performance Related Incentive Scheme (PRIS) as applicable to the scientists and engineers in DAE will also be provided. Total starting emoluments including Incentives and Allowances at the time of absorption in a Class-A1 city as on 01.01.2009 are more than Rs. 50,000/- for Scientific Officer/Engineer-D and Rs. 54,000/- for Scientific Officer/Engineer-E.

The additional benefits on regular appointment for employees and their dependent family are:

Conducive environment for working; Knowledge Update Allowance; PRIS incentives; Healthcare scheme and Leave Travel Concession for self and family; Accommodation (subject to availability) with excellent ambience in well developed colony having

- Educational facility for children upto junior college level
- Crèche facility for children of working couple

#### HOW TO APPLY

- a. The application should be preferably typewritten on a plain paper as per the pro-forma given in the advertisement for only one of the subjects listed above. Multiple applications received would be rejected.
- b. Attach only photocopies of the following documents/ certificates duly attested by a Gazetted Officer/ Head of the Institute (Do not enclose original certificates).
  - i. All degree certificates and mark sheets **starting with the eligibility qualification (for example Ph.D.) certificate.**
  - ii. GATE Score, GATE Subject and GATE Year or NET Qualification (optional).
  - iii. Proof of date of birth e.g. CBSE/ HSC/ SSC/ Matriculation certificate.
  - iv. SC/ ST/ OBC/ Physically Handicapped/ DODPKIA certificate, if applicable, as per the prescribed format.
- c. Affix one passport size photograph on the top right corner of the application and enclose one spare photograph inside the envelope indicated at "c" above. Append your signatures across both the photographs.
- d. Postal Order/Demand Draft of Rs.100/- as application fee drawn in favour of Accounts Officer, BARC payable at Mumbai. SC/ST, Persons with Disabilities, Women candidates and Dependents of Defence Personnel Killed In Action (DODPKIA) are exempted from application fee.

- e. Persons working under the Central/ State Government/ Public Sector Undertakings should submit their application through proper channel.
- f. Enclose 3 envelopes (size 5"x7") with complete addresses including PIN code: One envelope for self and one each for the two referees who are familiar with your work. For a letter to be sent to Hindi-belt in India, the address on the envelope should be written in Hindi.
- g. On the left hand corner of envelope please clearly mark your Subject Code Number and inscribe KSKRA with application due date.
- h. Send application by Registered Post with Acknowledgement Due Card to the Deputy Establishment Officer (R-IV), 4th floor, Central Complex, Bhabha Atomic Research Centre, Trombay, Mumbai-400085.
- i. Applications will be received throughout the year. Selection interviews will be held twice every year.
- j. The applicants who submit their applications by 1<sup>st</sup> March will be called for interview in June and those who submit their applications by 1<sup>st</sup> September will be called for interview in December of the same year.

#### SELECTION PROCEDURE

Applications will be screened and candidates found suitable will be called to appear for an interview in Mumbai. A list of shortlisted candidates will be placed on BARC's web-site after second week of October, 2010 and will also inform by post. Preference will be given to those candidates whose research interest and work experience has relevance to the mandate of DAE. Outstation candidates will be paid sleeper class (ordinary) train fare or actual fare, whichever is less. Candidates are advised to come prepared to stay in Mumbai for 2 to 3 days as a few short listed candidates will be asked to undergo a medical examination on the day following the interview. Final selection will be made from among the short listed candidates found medically fit.

#### A BRIEF NOTE ON BOARD OF RESEARCH IN NUCLEAR SCIENCES

Board of Research in Nuclear Sciences (BRNS) is an advisory body to recommend financial assistance to universities/ institutions/ laboratories with the objective to encourage and promote scientific research in areas of relevance to the mandate of the Department of Atomic Energy (DAE). BRNS plays a vital role in strengthening collaboration with educational institutions/ universities to meet the scientific and the technological needs of the Department. Main mandate of DAE is the production of safe and economical nuclear power, using indigenous uranium and thorium resources. Towards this end, it is involved in developing, in stages, pressurized heavy water reactors, fast breeder reactors, and advanced thorium reactors with associated fuel cycle systems. It builds research reactors for production of radioisotopes and carries out programmes on isotope and radiation technology applications in medicine and agriculture and industry. It develops advanced technology in areas like accelerators, lasers, control and instrumentation, computers, biotechnology, information technology, materials technology etc., and also encourages technology transfers to other users and industry. It supports basic research in nuclear energy and related frontier areas of science.

#### APPLICATION PROFORMA AND ANNEXES

1. Subject & Subject Code Number:
2. Full name in capital letters (underline the portion of the name candidate is generally known by):
3. Postal address including Phone/ Mobile No., Fax No. & Email (should be written very clearly and legibly):
4. Date of birth (DD-MM-YYYY):
5. Category: General/ SC/ ST/ OBC (SC/ ST/ OBC/ Physically Handicapped to attach a copy of the relevant certificate):
- 6.a. Gender: Male/Female:
- 6.b. Marital Status:
- 6.c. Nationality:
- 6.d. Religion:
- 7.a. Whether applied earlier for KSKRA and called for interview: YES/ NO
- 7.b. If "Yes", give Year & Month of your interview:
8. Name, address and telephone numbers of two referees who are familiar with the work done by the candidate.
9. DD No., name and branch of the bank / Postal Order No.:
10. List of documents attached. Please also attach Annexes 1, 2, 3 & 4 as indicated below.
11. Declaration: I hereby declare that all the statements made in the application are true to the best of my knowledge and belief and I am also aware that my application is liable to be rejected, if the information given above is incomplete or found to be incorrect.

Date:

Place:

Signature of the Candidate

Please provide information on one page each for the following four annexes:

**Annex-1: Educational Qualifications:** Give details beginning with the latest degree in a table format with the following columns: Branch of specialization; Name of institute/ university/ board; Year of passing; % Marks obtained; Subjects taken. Also give details of Awards, Merit Certificates and Scholarship received. Give GATE Score, GATE Subject and GATE Exam Year or NET Qualification, if available (optional). **Note:** Those who have submitted thesis and but have not been awarded Ph.D. shall give **Date of Submission of Ph.D.** Thesis duly supported with documentary proof from the **Registrar/ Controller of Examination.**

**Annex-2: Field of Research:** give title of thesis, specific area of discipline, **5-key words that describe your work** and a brief description of the research work done for Ph.D. (max. 500 words) or for the project work done for Masters in Engineering (max. 250 words) and the R&D work done after Masters (max. 250 words). For candidates who have not done project work during masters, only work experience details may be given

**Annex-3: List of Research Publications/Patents** give publication details on single sheet in the following format: Title, Authors, Name of the journal/ conference proceedings, Volume, Page Nos. **Enclose up to five selected reprints.** Also give details of patents, if any.

**Annex-4: Current Assignment:** give details about your **current assignment and nature of work** being carried out by you.

**Note:** Please retain a 'photocopy' of your application with **Annexes 1 to 4.** Later on you may be required to submit additional copies of your application with the annexes (but without enclosures such as certificates/ reprints).



*Due date for receipt of applications: 1<sup>st</sup> September, 2010*

The above advertisement is also published in  
The Employment News dated July 31, 2010, Abridge Advtg. In  
News Papers on July 7, 2010, A brief Advtg. In National leading  
News Papers on August 1<sup>st</sup>, 2010 and Current Science Journal  
dated July 24, 2010