



GOVERNMENT OF INDIA  
BHABHA ATOMIC RESEARCH CENTRE  
ADVERTISEMENT NO. 03/2020 (R-V)  
**SELECTION OF JUNIOR RESEARCH FELLOWS**



**NO. OF FELLOWSHIPS: 105 (Indicative)**

**LAST DATE FOR RECEIPT OF APPLICATION: 15/01/2021**

Bhabha Atomic Research Centre (BARC), Mumbai, is a premier institute dedicated to the intense multi-disciplinary research supporting the ambitious nuclear energy programme of India. BARC is empowering young, talented and motivated students to contribute to path-breaking discoveries in frontier areas of scientific research and cutting-edge technologies by offering **Junior Research Fellowships** in the areas of Physical, Chemical and Biological Sciences.

Applications are invited from interested students for the award of **Junior Research Fellowships** at this Centre.

All the selected candidates will register for Ph.D. in Homi Bhabha National Institute (HBNI) a deemed to be University of Department of Atomic Energy).

**1. AREAS OF RESEARCH PROJECTS IN SCIENCE DISCIPLINES**

Physical Sciences	Charged Particle Accelerator Development, Nuclear Physics using Accelerators, Neutrino related experiments, Astrophysics using gamma-ray Telescopes, Plasma Physics, Laser based Physics, Spectroscopy of Atoms and Molecules, Condensed Matter Physics at low temperature, High Pressure and Magnetic fields, Crystallography, thin films, Nano materials, Optics, Physics of sensors and detectors, Synchrotron Radiation and Neutron scattering based experiments and Computational & Theoretical Physics.
Chemical Sciences	Nuclear and radiochemistry, actinide chemistry, radiopharmaceuticals, radiation processing, solid state and high temperature chemistry, nuclear materials, nano materials, electrochemistry, spectroscopy, chemistry using lasers, advanced separation techniques, analytical sciences, materials for energy conversion and storage, chemical sensors, biomaterials, polymers, computational chemistry, active pharmaceuticals ingredients.
Life Sciences	Mutation breeding, plant & agriculture biotechnology, radiation effects on cells, radio-resistance, prokaryotic stress biology, bioremediation, genetic engineering, radiation treatment of food, food preservation & packaging, biosensors, cancer biology & diagnostics, cancer therapeutics, immunology, microbiome, TB diagnostics & treatment, biofilms & biofouling, thermal ecology, structural biology of proteins.

The Centre also encourages high quality inter-disciplinary research in areas relevant to its programmes.

**2. AGE LIMIT :**

The candidate must be an Indian national. The candidate should be less than 28 years of age as on last date for receipt of application. Age relaxation is applicable up to 3 years in case of Other Backward Class applicants, 5 years in case of Scheduled Caste and Scheduled Tribe applicants and 10 years in case of persons with disabilities applicants.

Note : ONLY SSC/ MATRICULATION CERTIFICATE OR BIRTH CERTIFICATE WILL BE ACCEPTED AS PROOF OF DATE OF BIRTH, NO SUBSEQUENT REQUEST FOR CHANGE SHALL BE ENTERTAINED.

### 3. ELIGIBILITY CRITERIA :

- I. Candidates should have consistently good academic record and should have secured minimum of 60% aggregate in B.Sc. and 55% aggregate in M.Sc. from a recognized University.
- II.
  - a. Candidates those who have completed and awaiting the final results of M.Sc. Degree may also apply. However, such candidates should necessarily attach copies of the mark sheets of B.Sc. Degree and a copy of M.Sc. first year mark sheet(s) along with the application. Such candidates should have scored marks above 60% aggregate until the previous semester/year and minimum aggregate of 60% in B.Sc. level. In case such candidates eventually join the Fellowship, they shall have acquired aggregate marks of 55% in the qualifying degrees.
  - b. Candidates with five years integrated M.Sc. degree should have secured minimum of 55% aggregate in M.Sc./B.S.-M.S. (Dual degree).
  - c. In case appearing candidates are selected for JRF, they should secure 55% marks in aggregate in the M.Sc. examination and submit their M.Sc. Degree and mark sheet by July 01, 2021, failing which their candidature may be terminated.
- III. Relevant certificates to this effect should be submitted at the time of joining the Centre. Wherever the results are declared as CGPA/GPA, it may be converted to percentage and entered. (The formula prescribed by the institute for conversion to be indicated at the time of verification).

**M.Sc. / Integrated M. Sc** is the eligible qualification with the following subjects :-

Post Code	Main Subject	Additional Requirements
1	Physics	Mathematics/Numerical Methods must be one of the subject at M.Sc. level
2	Chemistry (General, Applied, Organic, Inorganic, Physical and Analytical)	Physics as ancillary subject at B.Sc. Level; and Mathematics at H.Sc. level
3	Life sciences* (Agriculture, Biochemistry, Microbiology, Molecular Biology, Biotechnology, Marine Biology, Bioinformatics, Genetics, Botany, Zoology, Plant Science, Plant Breeding, Plant Pathology, Entomology, Animal Science, Life Science, Biomedical Sciences and Biosciences)	M.Sc. applicants should have at least one of the following subjects at B. Sc. Level : Physics or Chemistry or Biochemistry or Agriculture Chemistry as a main subject.  In case of five years integrated M.Sc. the candidates should have studied any one of the above subjects as a subsidiary/ ancillary level.

\* Candidates with M.Sc/Integrated M.Sc in Fisheries, Horticulture, Forestry, Agronomy, Animal Husbandry, Bio-analytical Sciences, Polymer, Medicinal, Pharmaceutical, Home Science are **NOT** eligible to apply.

**IV. In addition to the above, ONLY those candidates who have appeared and successfully cleared at least one of the following qualifying examinations will be shortlisted for interview at BARC, Mumbai.** Applications will be scrutinized and suitability of candidates will be decided on the basis of their academic performance and qualifying examination. The recommendation / decision of the Selection Committee will be final and binding.

- a. With valid UGC-CSIR-NET Fellowship (SLET/ Lecturership is not eligible)
- b. With valid JEST score
- c. With valid ICMR-JRF Test, ICAR-JRF Test
- d. With valid DBT-JRB Biotechnology Eligibility Test
- e. With valid GATE Score 2019/2020 in Physics / Chemistry / Life Sciences / Biotechnology

At the time of application candidates should clearly indicate the details of the qualifying examinations listed as above for consideration of application and submit the proof at the time of interview.

#### **4. SELECTION PROCEDURE**

Applications will be scrutinized and candidates will be shortlisted for interview based on their academic performance and score obtained in the Qualifying Examination.

A first screening will be made based on previous academic records of the applicants.

A further shortlisting of candidates will be made based on the performance in nationwide screening test (Qualifying Examination).

#### **5. GENERAL INSTRUCTIONS**

- i. Before applying, the candidate should ensure that he/ she fulfills all the eligibility conditions mentioned in the advertisement. Candidates should ensure that they fill in the correct information. Furnishing of incomplete, false or misleading information shall render the application liable to be rejected. The candidate would be admitted to various stages of the recruitment process based on the information furnished by the candidate in his/ her application. Only a summary scrutiny of the application would be made before the final stage of the recruitment process and detailed scrutiny of the eligibility of the candidate would be done only at the final stage of the recruitment process. As such, the candidature of the applicant shall remain provisional till detailed scrutiny is undertaken and the candidate is found eligible in all respects. BARC would be at liberty to reject any application at any stage of the recruitment process if the candidate is found ineligible for the post or if it comes to notice that the candidate has furnished false information. The decision of BARC shall be final in deciding the eligibility of the candidate. The mere fact that a call letter has been issued to the candidate and allowed to appear in the interview will not imply that his/ her candidature has been finally cleared or that entries made by the candidate in his/ her application have been accepted as true and correct.
- ii. Age, qualification, experience, community status, creamy layer status will be reckoned as on the closing date for submission of application online.
- iii. Those who are in employment under any Central/ State Govt./Public Sector Undertakings/ Corporations/ Local Govt. etc. should submit a No Objection Certificate from the employer at the time of interview.

- iv. Candidates will be required to bring the printouts of their online applications at the time of interview along with original documents.
- v. SC/ST/OBC (clearly indicating Creamy Layer status) certificate should be as per the format prescribed for employment in Government of India.
- vi. The original certificates/ documents of the candidates will be verified at the final stage of the recruitment process. The shortlisted candidates must bring all original certificates of educational qualifications, experience, date of birth, caste certificate in the prescribed format, disability certificate in respect of PWD candidates, No Objection Certificate if in regular employment under any Central/ State Govt./ Public Sector Undertakings/ Corporations/ Local Govt. etc.
- vii. The list of candidates selected for the award of Junior Research Fellowship will be displayed on the BARC website. The selected candidates will also be informed by mail. The final induction of the selected candidates as JRFs will be subject to production of all necessary documents in original (Proof of Date of Birth/ Caste Certificate/ physically challenged certificate if applicable, S.S.C/H.Sc./B.Sc./ M.Sc. degree and Mark sheets) on the dates intimated to the candidates by the Department.
- viii. The number of fellowships indicated in this advertisement is approximate and may vary as per the requirement at the time of final selection. The Centre reserves the right not to fill up the fellowships if it is so desires. BARC reserves the right to screen and call only such candidate as are found prima-facie suitable for being considered by the Selection Committee. Thus, just fulfilling the prescribed conditions should not entitle one to be called for interview. The fellowship shall not confer any claim or right for regular employment in the Centre or any Unit of Department of Atomic Energy. Opportunity for meritorious candidates exists for the position of visiting scientist under KSKRA scheme.
- ix. Candidates who are NOT meeting the mentioned qualifications NEED NOT apply.
- x. The period of service rendered as research fellow will not be counted in any post of DAE/Other Government Department.
- xi. Admission shall not be claimed by any candidate as a matter of right. The admission shall be entirely at the discretion of the Selection Committee, which may refuse to admit any candidate without assigning any reason thereof.
- xii. No correspondence whatsoever form will be entertained from candidates regarding reason for not being called for interview/ outcome of interview.

## 6. APPLICATION FEE

- i) Application fee of ₹500/- (Rupees five hundred only) is payable at the time of submission of online application. Mode of payment of the Application Fee is only through **Online**.
- ii) Application fee is exempted for Women candidates and candidates belonging to Scheduled Caste, Scheduled Tribe and Person with Disabilities.
- iii) After submission of online application, the applicant has to make online payment of application fee using Application Number generated. If application fee is not paid, the application will be treated as incomplete and **rejected**.

- iv) For payment of fee, candidates should click on the 'Make Payment' option under the 'My Account' menu. The Application number generated while submission of application can be selected from Drop-down box and on clicking the submit button candidates can go to the next page for making the online payment.
- v) Detailed guidelines for payment of application fee is available under the menu "How to Apply → Payment of fees."
- vi) Fee once paid shall not be refunded under any circumstances and cannot be held in reserve for any other recruitment.
- vii) **Application fee should be paid on or before the last date of receipt of online application.**

## 7. HOW TO APPLY ONLINE :

- i. Facility for submission of online application will be available from 18/12/2020 to 15/01/2021. For detailed information about online submission of application and procedure for payment of application fee, please visit <https://recruit.barc.gov.in>. Please read the instructions given on Home page of our website by clicking the option 'How to apply'.
- ii. Applications will be accepted ONLINE only. Candidate **should not** apply multiple applications.
- iii. Candidate should read the instructions in the advertisement and online application form carefully before making any entry or selecting any option. While filling up the online application form candidates should ensure that all the required details are entered.
- iv. Before filling application form, candidates should keep ready the necessary documents/ certificates required. Candidate is required to fill up personal details and details of discipline applied for etc. and upload recently taken front facing passport size photograph in JPEG format with size not exceeding 20 KB. Photograph not in conformity with the specification shall render the application liable to be rejected.
- v. While filling the application online, **it is mandatory** for the candidates to indicate all their Educational and Professional Qualifications under the column 'Educational & Professional Qualifications', failing which their application will not be processed.  
  
In case candidates are "pursuing MSc" Or "pursuing MSc(Intg)", correct option should be selected from the 'Name of Examination' Drop-down box. Those who have completed M.Sc. may select "MSc." OR "MSc.(Intg)" from the 'Name of Examination' Drop-down box.
- vi. A valid e-mail ID and Mobile Number is mandatory for submitting application online and email ID should be kept active till the declaration of results. BARC will send call letter for interview to the registered/ given e-mail ID or candidates may be required to download from the website of BARC. No correspondence will be sent through post/ courier.

- vii. The candidate must ensure that their photo and signature is clearly visible in preview at the time of filling application in online mode. If photo/ signature displayed is small or not visible in preview on website, that means photo/ signature is not as per the required format and in that case the application will be rejected. Therefore, candidates must ensure that photo and signature are clearly visible.
- viii. Candidate should upload their SSC/H.Sc./B.Sc./M.Sc. Mark sheets and Degree Certificate along with the valid Qualifying Examination Score Card and Caste certificate(if applicable), while applying online. The online applications without the attachment of these documents shall be disqualified.
- ix. Before clicking the submit button, the candidate is advised to check that all the details filled in are correct. Candidate may also ensure that name, date of birth, etc., are entered correctly in the application form as per Secondary School Certificate (SSC). Any incorrect information may disqualify candidature. After final submission of application no request for change/ correction in any of the information in the application form shall be entertained under any circumstances.
- x. In case the original SSC/H.Sc./B.Sc./M.Sc./Qualifying Exam Score card/mark sheets/certificates have been submitted to any other institution for pursuing other courses, copies can be uploaded and candidates are required to submit a letter to that effect from the Head of that institution at the time of interview.
- xi. In case of any difficulty in applying online or uploading the document, please mail your complaints along with screenshots to: [jrf@barc.gov.in](mailto:jrf@barc.gov.in)

## 8. TRAVELLING ALLOWANCE

Candidates called for the interview will be reimbursed to and fro Third AC railway fare by the shortest route (subject to production of original tickets) as per rules.

## 9. MEDICAL

The selected candidates are eligible to join the Contributory Health Services Scheme of this Centre as applicable.

## 10. ACCOMODATION

Limited hostel accommodation is available. The selected candidates will be provided with subsidized bachelor Hostel Accommodation for an initial period of one year only. The candidates will be assisted to get accommodation on rental basis. The candidate who could not be provided with accommodation is entitled for HRA @ 24% of the Fellowship.

## 11. FELLOWSHIP AND TENURE

The selected candidates will be initially taken as **Junior Research Fellows (JRF)** and will be paid a stipend of **₹31,000/- per month**. The fellowship will be provided initially for a period of **two years**. Continuation of the fellowship is subject to satisfactory performance and review at the end of each year. On satisfactory performance, the tenure of Fellowship will be further extended and upgraded to **Senior Research Fellowship (SRF)** from the **third year** onwards with a stipend of **₹35000/- per month (consolidated)**. The total period of the fellowship shall in no case exceed **five years**. They are entitled for contingency grant including book allowance of **₹40,000/- per year**.

In addition, the fellows are entitled for House Rent Allowance of ₹7440/- p.m.(JRF) and ₹8400/- p.m. (SRF), if not in occupation of Government accommodation.

## 12. CANCELLATION OF THE CANDIDATURE

Candidate is cautioned not to furnish any incomplete, false or misleading information or submit any document which is defective, forged or fabricated or otherwise not admissible or claim fraudulently SC/ST/OBC/Person with Disability status etc., or resort to any sort of malpractice during the selection process. Notwithstanding verification of original documents during various stages of the selection process, if any such case is detected at any stage of the selection process or later on, this Centre reserves the right to withdraw/cancel candidature or selection apart from taking other appropriate legal action.

**Candidates will not be allowed to appear for the interview if they fail to bring the print out of the Application and a valid photo identity card (such a Voter ID, Driving License, AADHAR Card, Passport, College ID) and all the documents in original at the time of interview.**

### CALENDER WITH IMPORTANT DEADLINES

Receipt of applications	18/12/2020 from 1000 hours onwards
Last date of receipt of applications	15/01/2021 upto 1700 hours
Interview (tentative dates)	April /May 2021

### Important Notes :

- 1) The Application is deemed to have been received only after the uploading of the following by the last date of receipt of application, failing which the application will not be processed:-
  - a) Online application duly filled and signed along-with photograph affixed.
  - b) Prescribed fee.
  - c) Online uploading of S.S.C., H.Sc., B.Sc., M.Sc., Degree certificates, Mark Sheets, Qualifying Examination Score Certificate and Caste Certificate.
- 2) **All information related to the Screening/Interview/Selection will be made available on the website i.e. <http://www.barc.gov.in>.** Candidates are advised to visit the website periodically for information and updates in this regard. Information displayed on the website will be deemed as intimation to the candidates.
- 3) Any legal disputes arising out of this notification are subject to Mumbai jurisdiction only and in case of any dispute, English version of detailed Advertisement placed on BARC website shall be referred.

**CANVASSING IN ANY FORM WILL BE A DISQUALIFICATION**

**RECORD OF THE NON-SELECTED CANDIDATES SHALL NOT BE PRESERVED BEYOND SIX MONTHS FROM THE DATE OF PUBLICATION OF SELECT LIST.**