

Government of India  
**BHABHA ATOMIC RESEARCH CENTRE**  
Personnel Division

ADVERTISEMENT NO. 3/2012(R-II)

LAST DATE FOR RECEIPT OF APPLICATIONS **April 20, 2012**

**ONE YEAR POST-M.Sc. DIPLOMA COURSE IN  
RADIOLOGICAL PHYSICS (Dip.R.P.)**

Radiological Physics and Advisory Division (RP & AD) of Bhabha Atomic Research Centre (BARC) is conducting the Diploma in Radiological Physics (Dip. R.P.) Course since 1962. This is a post M.Sc., programme and the duration is one year. Forty nine courses have been successfully conducted by RP & AD so far. The first forty five courses were affiliated to University of Mumbai, Mumbai. Thereafter the course is conducted under the aegis of Homi Bhabha National Institute (HBNI), Mumbai. HBNI is deemed to be University (more details can be obtained at URL link: <http://www.hbni.ac.in>) and BARC is one of its Constituent Institutes. The current 50<sup>th</sup> course (academic year 2011-2012) is scheduled to be completed by the end of July 2012. **The 51<sup>st</sup> Dip. R.P. Course is planned to commence from the first week of August 2012. It is proposed to induct a maximum of 30 candidates (25 non-sponsored + 5 sponsored) in this course. When 5 sponsored candidates are not available/not found suitable, 30 number of non-sponsored candidates may be admitted to the Dip.R.P. course.**

**1. COURSE MATERIAL**

Cancer is better managed by radiotherapy and therefore radiation physics is a dominant subject of the course. The course material covers statistics, numerical methods, basic radiation physics, interaction of radiation with matter, principles of radiation detection and measurements, radiation dosimetry and standardization, radiation biology, applications of radioisotopes in medicine, industry, agriculture and in research, radiotherapy treatment planning, transport of radioactive materials, radiation hazards, evaluation and control, radiation emergencies and management, etc. In addition, the training is supplemented by practicals and field training. The duration of field training: two weeks at BARC, two weeks each at Tata Memorial Centre (TMC) and Radiation Medicine Centre at Mumbai. The medium of instruction is English.

**2. ELIGIBILITY CRITERIA**

**The basic qualification for applying to this course is M.Sc., (Phys.). The candidates should have scored minimum of 60% marks (aggregate) in both B.Sc. (Phys.) and M.Sc. (Phys.). In case of grade system, grade to percentage of marks conversion scheme obtained from University should be submitted along with the application.** Those who await the final results of M.Sc. (Phys.) can also apply. Such candidates when selected should submit their final mark sheet by October 30, 2012. In addition to the above qualification, the sponsored candidates should have at least one-year working experience in a Radiotherapy Centre in India. These sponsored candidates should also submit a documentary evidence of availing personnel monitoring services from BARC.

**3. AGE LIMIT**

Age limit as on August 01, 2012 for: **(a) General Category** – 26 years **(b) OBC** - 29 years **(c) SC/ST** – 31 years **(d)** dependents of those who died in the riots of 1984 **(Dep 1984)** – 31 years and **(e)** candidates domiciled in Kashmir Division of Jammu & Kashmir State from 01/01/1980 to 31/12/1989 **(DomKashmir)** - 31 years.

For **Physically Challenged** candidates, there is a relaxation of age by upto 10 years. The candidates with physical disabilities limited to the lower extremities, but permitting to stand and move and physically able to carry out the course requirement only will be considered. The sponsored candidates who were born on or after **August 01, 1972** are also eligible to apply.

**4. SELECTION PROCEDURE**

- (a) A list of candidates who are eligible to participate in the CET will be short-listed based on merit and such candidates will be informed in advance. Selection of non-sponsored candidates is based on Common Entrance Test (CET) followed by an interview (only those who clear the CET will only be interviewed). The sponsored candidates will be called for the interview directly.

(b) M.Sc. (Phys.) candidates applied for one-year Orientation Course for Engineering Graduates and Science Post-Graduates for the year 2012-2013 (OCES-2012) conducted by BARC Training School may also be considered for admission to the Dip.R.P. Course.

(c) The successful candidates will be admitted to the course only after they are declared medically fit by the BARC hospital at Anushaktinagar, Mumbai.

#### **5. TRAVELLING ALLOWANCE AND STAY**

The candidates called for the CET are eligible for travelling allowance (round trip **sleeper class** railway fare). Round trip defines travel from his/her place of residence to Mumbai and back by the shortest route. The candidates need to produce the railway tickets while claiming travelling allowance. However, sponsored candidates and the candidates from Mumbai and its suburban regions are not eligible for TA. The candidates are required to make their own arrangements for their stay in Mumbai at least for three days as the successful candidates of the CET will be interviewed on the subsequent days of the CET.

#### **6. STIPEND**

On admission to the course, each candidate is eligible to receive a stipend of ₹ 9300/- (Rupees nine thousand and three hundred only) per month for a period of one year. The sponsored candidates are not eligible for the stipend.

#### **7. ACCOMMODATION**

All the candidates admitted to the course will be provided hostel accommodation at Government Guest House at Anushaktinagar, Mumbai for one year. The charges towards this accommodation should be borne by the candidates.

#### **8. ADMISSION FEE**

The candidates should pay an admission fee of ₹ 3000/- (Rupees Three Thousand only) at the time of admission. The fee should be paid in the form of a crossed Demand Draft (DD) drawn in favour of **Accounts Officer, HBNI**, payable at Mumbai.

#### **9. BOND**

Selected non-sponsored candidates are required to execute a bond at the time of admission. In case the candidate desires to discontinue the course, he/she needs to refund the entire amount of the stipend received along with interest.

#### **10. AWARD OF CERTIFICATE AND EMPLOYMENT OPPORTUNITIES**

On successful completion of Dip. R.P. course, the candidates will be awarded Dip. R.P. certificate by HBNI. However, to qualify as Medical Physicists to serve in Radiotherapy Centres, the candidates are required to complete one year internship in reputed Radiotherapy Centres on successful completion of the Dip.R.P. course. This is in accordance with the recently introduced requirements by Atomic Energy Regulatory Board. Note that the candidates will not be paid any stipend during this one year internship programme. However, Radiotherapy Centres that offer internship programme may provide stipend. On successful completion of this internship programme, the candidates are eligible to participate in the Radiological Safety Officer – Medical (RSO-Medical) certification examination, which will be conducted by RP & AD. On successful completion of this RSO (Medical) examination, the candidates are eligible to work as RSO (Medical) in Radiotherapy Centres subject to approval by AERB. To work as RSO in industrial establishments, the candidates need to clear RSO (Industrial) certification examination, separately. This examination will be conducted by RP & AD. The candidates may appear for this examination after the successful completion of the Dip.R.P. course.

The requirement of Medical Physicists in India is increasing due to increase in the number of Radiotherapy Centres to cater to the growing need of managing cancer treatment. About 90% of candidates are therefore generally employed with good emoluments within three months of their successful completion of the course. There is a scope for deserving candidates to get on-the-job training at TMC (one of the leading radiotherapy centres in the country with the state-of-the-art radiotherapy treatment equipments), Mumbai, for a period of at least one year. This training will enhance their further job opportunities in the country. In addition, there is a scope for the first few rank holders to be recruited in the DAE establishments as Scientific Officer in the grade of SO/C, only after an interview. This recruitment is subject to the availability of vacancies.

## 11. APPLICATION FEE

Interested candidates should submit their applications in an appropriate format along with a non-refundable application processing fee of ₹ 200/- (Rupees Two Hundred only). With regard to payment of Application Fee, the candidate may download the three fold challan from the BARC website <http://www.barc.gov.in> and make the payment in any branch of the State Bank of India from 16/03/2012 to 20/04/2012. The portion of the challan marked "Institution Copy" should be attached along with the application. Candidates shortlisted for interview will have to produce original challan at the time of interview. **The SC/ST applicants, Dependents of Defence Personnel Killed in Action (DODPKIA), Women candidates and Physically Challenged candidates are exempted from payment of application fee.**

## 12. HOW TO APPLY

The candidates may please follow the guidelines below :

- a) Forward a single copy of application, preferably typewritten on a thick A4 size paper (size: 21 cm X 30cm).
- b) PHOTOGRAPH: Two recent photographs (passport size). One should be pasted at the marked place in the application with the candidate's signature partly covering the photograph and the application and other with name of the applicant written in block letters on the reverse, should be enclosed.
- c) ENVELOPE: A self addressed (**bilingual – Hindi & English**) unstamped envelope (size: 23cm X 10cm) should be attached to the application.
- d) COPIES OF CERTIFICATES : Attested copies of all certificates for (a) Mark sheets (b) Degree (c) Date of birth and (d) Caste certificate (for SC/ST/OBC candidates) (e) PH certificate (if applicable) must be attached.
- e) Application processing fee (please see Sr. No.11) should be enclosed.
- f) The envelope containing the application and the other attachments should be superscribed "**Application for Dip.R.P.- (2012-13)**".
- g) Applications complete in all respect should be sent to the **Dy. ESTABLISHMENT OFFICER (R-II), BHABHA ATOMIC RESEARCH CENTRE, TROMBAY, MUMBAI - 400 085**, so as to reach not later than **April 20, 2012**.
- h) Include a check list.

## GENERAL INSTRUCTIONS TO CANDIDATES

1. Persons working under the Central/State Governments or Public Sector Undertakings should submit their applications through proper channel. They may however, send an advance copy of the application along with enclosures as detailed above.
2. In the case of sponsored candidates, the sponsoring Institute must certify (in a format given below) that their candidate is a full time/permanent employee employed by the Institution and on successful completion of the course he/she would be designated as a Medical Physicist.
3. Applications which do not adhere to the requirements as described in the advertisement will be rejected. Mere fulfilling of requirements as laid down in the advertisement does not qualify a candidate for the CET or interview as only limited number of candidates (selection is based on the merit) will be called for the CET or interview.
4. No correspondence shall be entertained from candidates who are not called for the CET/interview.
5. **CANVASSING IN ANY FORM WILL LEAD TO A DISQUALIFICATION.**

(Last date of receipt of application is April 20, 2012)

Application No.

(For office use only)

**APPLICATION FOR ADMISSION TO THE ONE YEAR POST-M.Sc.  
DIPLOMA COURSE IN RADIOLOGICAL PHYSICS (DIP. R.P.)**

(To be filled in by the applicant)

Passport Size  
Photograph  
duly Signed by  
the Candidate  
across the  
photograph

1. Advertisement No. : 3/2012(R-II)
2. Name (Surname first) : Shri/Smt./Kum. \_\_\_\_\_  
(in Capital Letters)
3. Date of Birth : Date \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_
4. Address for correspondence (in block letters) :  
\_\_\_\_\_  
\_\_\_\_\_  
City : \_\_\_\_\_ State : \_\_\_\_\_ Pin : \_\_\_\_\_  
Phone: \_\_\_\_\_ e-mail : \_\_\_\_\_
5. Permanent address (in block letters) :  
\_\_\_\_\_  
\_\_\_\_\_  
City : \_\_\_\_\_ State : \_\_\_\_\_ Pin : \_\_\_\_\_
6. Nationality : \_\_\_\_\_
7. SC/ST/OBC/General : \_\_\_\_\_ Caste : \_\_\_\_\_
8. PH : Yes / No
9. Challan No. \_\_\_\_\_ Date : \_\_\_\_\_
10. Have you earlier applied for any Course in BARC : Yes/No  
(If yes, please give details) : \_\_\_\_\_
11. Educational Qualification :

Examinations passed	Board/University	Year of Passing	Subjects		% of marks/ grade
			Main	Subsidiary	
a) SSC					
b) Inter/PUC/PDC/HSC					
c) B.Sc.					
d) M.Sc.					
e) Any other					

N.B. : 1. Percentage of marks or grade should invariably be indicated otherwise the application will not be considered. In case of grade system, grade to percentage of marks conversion scheme obtained from University should be attached along with the application. Main and ancillary subjects should be clearly indicated.

2. Mention clearly if results not declared.

12. Are you undergoing any course presently : Yes/No  
(If yes, give details) \_\_\_\_\_

13. Experience (particulars of all previous and present employment are to be furnished here):

Name and address of Employer	Post held	Period		Whether Central or State Govt.	Permanent or Temporary	Reasons for leaving
		From	To			

14. Are you sponsored candidate : Yes/No  
(If yes, please attach a certificate from the sponsoring Institute)

15. Have you applied for OCES (Physics) 2012 (BARC Training School) ? Yes / No  
If yes, mention the Application No. \_\_\_\_\_

**DECLARATION**

I hereby declare that,

1. The information furnished above is correct to the best of my knowledge and belief.
2. I am aware that my application is liable to be rejected if the information given above is incomplete or found to be incorrect.
3. Following documents, as per the check list, are attached to the application.

Place:

Date:

\_\_\_\_\_  
Signature of the candidate

**CHECK LIST**

Make sure that the following documents have been attached to your application by putting a X in the box applicable.

- |   |                          |
|---|--------------------------|
| 1. Application form completed and signed.   | <input type="checkbox"/> |
| 2. Self addressed (bilingual – Hindi & English) envelope attached.                | <input type="checkbox"/> |
| 3. Challan marked "Institution Copy" attached                                     | <input type="checkbox"/> |
| 4. Two Photographs one signed & pasted and another enclosed.                      | <input type="checkbox"/> |
| 5. An attested copy of each of the following Certificates attached.               | <input type="checkbox"/> |
| 5.1 Certificate indicating your Date of Birth.                                    | <input type="checkbox"/> |
| 5.2 Certificates of Educational Qualifications.                                   | <input type="checkbox"/> |
| 5.3 Experience Certificate (if applicable).                                       | <input type="checkbox"/> |
| 5.4 SC/ST/OBC certificate (if applicable).  | <input type="checkbox"/> |
| 5.5 PH certificate (if applicable)  | <input type="checkbox"/> |
| 6. Letter from sponsoring institution attached (in case of sponsored candidates). | <input type="checkbox"/> |
| 7. Grade to percentage conversion certificate obtained from the university.       | <input type="checkbox"/> |
| 8. Check list signed and attached.  | <input type="checkbox"/> |

Date:

\_\_\_\_\_  
Signature of the candidate

**Proforma for the Certificate of Sponsorship**  
(To be issued on letterhead of the institute)

I, \_\_\_\_\_, Head/Director of this institute, hereby sponsor Shri/Smt./Kum. \_\_\_\_\_, to undergo the One Year Post-M.Sc. Diploma Course in Radiological Physics conducted by the Radiological Physics & Advisory Division, Bhabha Atomic Research Centre for the academic year 2012-2013.

I certify that Shri/Smt./Kum. \_\_\_\_\_ has been working as \_\_\_\_\_ on permanent basis in this institute since \_\_\_\_\_. He/She is under the Personnel Monitoring Service and his/her TLD registration no. is \_\_\_\_\_. I further declare that, on successful completion of the course and subsequent successful completion of one year internship programme in a reputed Radiotherapy Centre, he/she will be designated as Medical Physicist in our institute.

I hereby undertake to bear all the expenses in connection with the training of the above candidate and also pay him a monthly stipend/salary of ₹ \_\_\_\_\_ (Rupees \_\_\_\_\_) during the training period.

Place:  
Date:

\_\_\_\_\_  
(Signature)  
Head/Director of the Institute with the  
Name, Designation, Address and Office  
Seal.

Cash Voucher

Bank's Copy



भारतीय स्टेट बैंक  
State Bank of India

Branch (Code No. \_\_\_\_\_)

Advt. No. 03/2012(R-II) - Application Fee Payment

COLLECTION A/C NO. **31519633821**

Name of the Candidate \_\_\_\_\_

Present Address \_\_\_\_\_

Discipline Code \_\_\_\_\_

Date of Birth \_\_\_\_\_

Mobile/Landline No. \_\_\_\_\_

E-mail Address \_\_\_\_\_

Category \_\_\_\_\_

Physically Disabled \_\_\_\_\_

Head	Amount	Credit to
Application Fees	₹ 200.00	31519633821
Bankers Charges	₹ 50.00	98353XXXXXX
Total	₹ 250.00	

Amount in words

Rupees Two Hundred Fifty Only

Signature of the Candidate/ Remitter

For Receiving Branch use only

CHALLAN NO.

SEAL / DATE

AUTHORISED SIGNATORY

Cash Voucher

Institute's Copy



भारतीय स्टेट बैंक  
State Bank of India

Branch (Code No. \_\_\_\_\_)

Advt. No. 03/2012(R-II) - Application Fee Payment

COLLECTION A/C NO. **31519633821**

Name of the Candidate \_\_\_\_\_

Present Address \_\_\_\_\_

Discipline Code \_\_\_\_\_

Date of Birth \_\_\_\_\_

Mobile/Landline No. \_\_\_\_\_

E-mail Address \_\_\_\_\_

Category \_\_\_\_\_

Physically Disabled \_\_\_\_\_

Head	Amount	Credit to
Application Fees	₹ 200.00	31519633821
Bankers Charges	₹ 50.00	98353XXXXXX
Total	₹ 250.00	

Amount in words

Rupees Two Hundred Fifty Only

Signature of the Candidate/ Remitter

For Receiving Branch use only

CHALLAN NO.

SEAL / DATE

AUTHORISED SIGNATORY

Cash Voucher

Candidate's Copy



भारतीय स्टेट बैंक  
State Bank of India

Branch (Code No. \_\_\_\_\_)

Advt. No. 03/2012(R-II) - Application Fee Payment

COLLECTION A/C NO **31519633821**

Name of the Candidate \_\_\_\_\_

Present Address \_\_\_\_\_

Discipline Code \_\_\_\_\_

Date of Birth \_\_\_\_\_

Mobile/Landline No. \_\_\_\_\_

E-mail Address \_\_\_\_\_

Category \_\_\_\_\_

Physically Disabled \_\_\_\_\_

Head	Amount	Credit to
Application Fees	₹ 200.00	31519633821
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Total	₹ 250.00	

Amount in words

Rupees Two Hundred Fifty Only

Signature of the Candidate/ Remitter

For Receiving Branch use only

CHALLAN NO.

SEAL / DATE

AUTHORISED SIGNATORY