TATA MEMORIAL CENTRE
ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER
Kharghar, Navi Mumbai- 410 210
www.actrec.gov.in
Phone No : 91-22-27405000/6068
(A Grant-in-aid Institute of the Dept. of Atomic Energy, Government of India)

No. ACTREC/Advt/91 / 2024 14/06/2024

WALK – IN – INTERVIEW FOR
ADVANCED TRAINING COURSE IN MEDICAL LABORATORY TECHNOLOGY (2024)

Tata Memorial Centre, ACTREC announces "Advanced Training Course in Medical Laboratory Technology". This training program will be focused on Clinical Biochemistry including tumor markers and therapeutic drug monitoring studies, Microbiology including bacteriology, virology and mycology, Hematology, Surgical Pathology including IHC, Transfusion Medicine and Quality Management with emphasis on accreditation related activity. The course will cover theoretical, technical and practical aspects, and will include hands on training on state of the art analyzers with emphasis on quality control. Selected candidates will be rotated through all these laboratories as per schedule, examinations will be held in house periodically, and certificates will be awarded to successful candidates on completion of the course.

1	**QUALIFICATIONS**	Candidate must be HSC or B.sc/B.Tech and DMLT from a recognized university/ Technical Board and B. Sc. (MLT) may also apply.
2	**AGE LIMIT**	Upto 40 years as on **01.08.2024** (relaxable for sponsored candidates and SC / ST & OBC as per rules)
3	**NO. OF SEATS**	**5 (Five)**
4	**SECURITY DEPOSIT**	Selected candidates are required to **deposit an amount of Rs. 10,000/-** (Rupees Ten Thousand only) at the time of joining. The deposit will be refunded without interest on completion of the training course or internship whichever is later. If the trainee leaves the training at any time before completion of the training, the deposit will stand forfeited.
5	**STIPEND**	Non-sponsored Candidates: **Rs. 8,000/-per month** (Rupees Eight Thousand Only) for one year. **Sponsored Candidates: No Stipend.**
6	**SERVICE BOND**	Non sponsored Candidates will be required to execute an agreement to serve the Tata Memorial Centre on a consolidated remuneration of **Rs. 12,000/- p.m.** (Rupees Twelve Thousand only) for a period of one year, after successful completion of the training.

DETAILS OF THE COURSE:

(i)	**COURSE FEES (NON-REFUNDABLE)**	**Non-Sponsored Candidates : Nil** **Sponsored National Candidates : Rs.12,000/-**
(ii)	**DURATION OF THE COURSE**	One Year commencing **from 01st August, 2024** [One year training and one year bond]
(iii)	**STRUCTURE OF THE COURSE**	Rotation in various work areas (ACTREC and/or TMH) will be as follows: • Sample collection • Heamatopathology • Histopathology • Biochemistry • Microbiology

		• Transfusion Medicine • Laboratory Quality Management
(iv)	**OBJECTIVES**	At the end of the course, the student would be able to: a) Work as technologist in accredited laboratories attached to hospitals under the supervision of Hematologist, Biochemist, Microbiologist or Pathologist. They may be employed in a small laboratory functioning independently. b) Carry out advanced tests in all these fields personally, with effective quality control and provide patients with reliable reports. c) Acquire theoretical knowledge and practical skills leading to further specialization in the field.
(v)	**EXAMS**	Candidate must obtain 50% marks in all the individual theory and practical examinations of the course to be declared successful.

Outstation candidates may be provided accommodation **(subject to availability)** during the training period. They will have to pay accommodation charges as per institute policy.

Terms & Conditions:

During the period of training, the trainee shall not apply for any post or any other course / PG studies / scholarship or appear for any examination or interview outside without the permission of the Centre.

Any trainee leaving or remaining absent from the training before completion of this course will have to refund the amount of stipend together with interest thereon as per the rates fixed by the Centre. Candidates whose performance in the coursework is consistently found below expected standards will be terminated from the training course.

After one-year training, the candidate has to fulfill the 'bond' by working for next one year in any of the diagnostic services of TMC, viz. Hematology, Biochemistry and Microbiology, Histopathology. If the candidate leaves in between or breaks the bond, he/she will have to refund the full payment received. The decision of the Centre will be legal and binding in this respect.

If more than 30 candidates apply for the positions, a written examination will be conducted, and the short listed candidates will be interviewed. Candidates will be selected based on their performance in the interview.

Persons working under Central/ State Government, Autonomous Body, Semi Government Organizations and other Public Sector Undertakings must submit No Objection Certificate from their present employer.

TMC, ACTREC reserves the right to restrict the number of candidates for the interview to a reasonable limit on the basis of qualification and marks. Merely fulfilling the prescribed qualifications will not entitle an applicant for the interview. TMC, ACTREC also reserves the right to reject any of the applications without assigning any reason thereof.

Eligible Candidates may attend the walk in interview on 12th July 2024, and report at Venue-ACTREC, Kharghar, Navi Mumbai- 410210 along with recent CV and passport size photograph, original and Xerox copies of all educational certificates and Aadhar Card proof.

Reporting Time: 10:00 to 10:30 am

Officer-In-Charge
(Academic Cell-Clinical Service)
TMC-ACTREC

Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Diagnostic Services

Tata Memorial Centre
Kharghar, Navi Mumbai 410210

ADVANCED TRAINING PROGRAM FOR MEDICAL LABORATORY TECHNOLOGISTS

Course co-ordinators:

- **Dr. Preeti Chavan, OIC, Composite Lab, ACTREC**
- **Dr. Vivek Bhat, Prof & HOD, Microbiology Dept, ACTREC**

(All the Diagnostic Services are accredited by NABL)

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ACTREC -Tata Memorial Centre

Advanced Training Program for Medical Laboratory Technologists

1. **Title of the Program:** Advanced Training Program for Medical Laboratory Technologists

2. **Year of Implementation:** August 2024 onwards.

3. **Objectives of the Program:** At the end of the program the candidate will be able to:

a. Work as a technologist in accredited laboratories attached to hospitals under the supervision of seniors like Haematologist, Biochemist, Microbiologist or Pathologist. They may be employed in a small laboratory functioning independently.
b. Carry out advanced tests in all these fields personally with effective quality control and provide patients with reliable reports.
c. Acquire theoretical knowledge and practical skills leading to further specialization in the field.

4. **Duration: T**wo years (Full-Time)

5. **Pattern:** Annual (One-year training and one-year bond period)

6. **Medium of Instruction:** English

7. **Total number of seats for the course:** 5 (Five only)

8. **Eligibility for the course:**
    a. Candidate should have Diploma in Medical Laboratory Technology (DMLT) from a recognized university/technical board after HSc or BSc/B.Tech
    b. Candidates with BSc (MLT) will also be eligible.

9. **Structure of the Program:**

Candidates will train and work in the following departments//areas:

- Sample collection
- Haematology
- Histopathology
- Biochemistry
- Microbiology
- Transfusion medicine
- Laboratory Quality management

iv. Terms and conditions:

a. After one-year training – The candidate has to fulfil the 'bond' by working for next one year in diagnostic services of TMC viz. Haematology, Biochemistry and Microbiology, Histopathology at ACTREC, Kharghar, TMC.

b. Payment - During the training period of one year the candidate will be paid Rs. 10,000/- (Ten thousand) per month and during the 'bond' period the candidate will be paid Rs. 12,000/- (Twelve thousand) per month. If the candidate leaves in between or breaks the bond he should refund the complete payment received during the period of his presence including the training period.

c. Admission to the course shall be done once in a year. The course will begin in the month of July, every year.

d. Candidates will be selected based on the performance in the interview. In case more than 30 candidates apply for the positions, a written examination will be conducted. The selected candidates will be called for interview**.**

Syllabus:

Haematology		
S.no	**TOPICS**	
1	Induction and orientation	Onsite visit of the lab
2	Sample collection and importance of good smear	Blood smear preparation
3	Romanowsky's stains – principle and working	Preparation of Wright stain
4	Reticulocytes staining - principle and working	Preparation of reticulocyte stain
5	Buffer and its role in staining	Preparation of Sorenson's buffer
6	Different type of haematology cell counters	Onsite visit
7	Siemens Advia2120i, 5-part differential haematology analyzer – principle	Practical experience
8	Instrument Laboratory, ACL7000, Fully automated coagulometer – principle and working	Practical experience
9	Manual Differential Count	Practical experience
10	Special Staining Methods	Practical experience
11	Quality control aspects of hematology	Controls and Calibration, L-J chart, Westgard's rule, %CV
12	Laboratory Accreditation	Requirements for NABL accreditation of Medical laboratories

Biochemistry		
S.no	**TOPICS**	
1	Introduction and orientation	Onsite visit of the lab
2	Good laboratory practice	
3	Non- analytical instrument	Theory & practical
4	Automation (principles and working)	Theory & practical
5	Glucose	Theory & practical
6	Renal Function Test	Theory & practical
7	Liver function test	Theory & practical

8	Electrolytes (direct and indirect)	Theory & practical
9	Calcium, mag, phos	Theory & practical
10	SIEP & FLC	Theory & practical
11	Lipid profile	Theory & practical
12	Immunoassay & CRP	Theory & practical
13	Tumour markers	Theory & practical
14	Drug assay	Theory & practical
15	Quality control aspects of Biochemistry	Controls and Calibration, L-J chart, Westgard's rule, %CV
16	Document Control	

Microbiology		
S.no	**TOPICS**	
1	General - Microbiology laboratory practice	Theory
2	Sample collection, handling & transport	Theory & practical
3	Instruments and laboratory techniques	Theory & practical
4	Clinical bacteriology- a) Culturing of microorganisms b) Staining methods in bacteriology (Gram stain) c) Media preparation d) Identification of Microorganisms e) Antibiotic susceptibility testing f) Staining methods in mycobacteriology (Ziehl-Neelson's stain)	Theory & practical
6	Clinical Mycology: a) Microscopic methods b) Culture methods c) Identification of fungi d) Antifungal susceptibility testing	Theory & practical
6	Clinical Microbiology: a) Urine routine examination b) Stool routine examination	Theory & practical
7	Quality control in Bacteriology	Theory & practical
8	Automation in Bacteriology (Automated blood culture systems, Automated ID & susceptibility systems; Automated Biofire Multiplex PCR system)	Theory & practical

Histopathology		
Sr. No.	**Topics**	
1	Introduction and Orientation	Onsite visit of lab
2	Specimen receiving and accession	Theory & practical
3	Fixation of specimen, Grossing and Decalcification	Theory & practical
4	Processing	Theory & practical
5	Embedding	Theory & practical
6	Trimming and cutting of blocks	Theory & practical
7	Routine H-E staining and mounting	Theory & practical
8	Special stains	Theory & practical
9	Immunohistochemistry	Theory & practical
10	Quality control in histopathology	Theory & practical

Transfusion Medicine		
Sr. No.	**Topics**	
1	Introduction and Orientation	Onsite visit of blood bank
2	Red Cell Serology	Theory & practical
3	Component preparation	Theory & practical
4	TTI testing	Theory & practical
5	Apheresis Technique	Theory & practical
6	Quality Control in Transfusion Medicine	Theory & practical
7	Blood Donation Camps	Practical