



**Jai Hind College (Autonomous)**

**IQAC, RUSA, DST-FIST, DBT-STAR**

**and**

**Western Regional Instrumentation**

**Centre, Mumbai**

**(A National Facility Centre of  
University Grants Commission,  
New Delhi)**

**Jointly Announces**

**a**

**Workshop on**

**Maintenance of Analytical  
Laboratory Instruments**

**(20th – 24th June, 2022)**

**• Venue •**

**Jai Hind College (Autonomous)**

**'A' Road, Churchgate,**

**Mumbai – 400 020**

### About Jai Hind College

Jai Hind College (Autonomous) was established in 1948 by the Sind Educationists' Association (professors of D.J. Sind College, Karachi, assisted by a few other educationists, came together under the banner of the Sind Educationists' Association headed by the founder Principal, Prof. T. M. Advani). It is one of the best and most preferred colleges in Mumbai city. The motto of the college, 'I will and I can', is truly inspiring to our more than 5000 current students and alumni.

### About WRIC

Western Regional Instrumentation Centre (WRIC), Mumbai is an autonomous institute established in 1977, fully funded by the University Grants Commission (UGC), Government of India, New Delhi in association with University of Mumbai. WRIC is the only Regional Instrumentation Centre in India which has now been recognized as a National Facility Centre for Instrumentation by UGC.

It aims to be a Resource Centre to create necessary facilities for Instrumentation programmes for Education, Research & Industries as well as facilitates designing & developing of new teaching aids to facilitate effective teaching

### About Programme

Jai Hind College (Autonomous) and Western Regional Instrumentation Centre, Mumbai, is organizing a five days workshop on **"Maintenance of Analytical Laboratory Instruments"** from 20th – 24th June, 2022. The laboratory instruments demand regular calibration, maintenance and repair, however, the faculties/ technicians in colleges may not be adequately trained for the same. Additionally, the repair and maintenance of these equipments is cost incurring. Considering the above issues, this programme has been organized for technical and scientific staff of science departments of all colleges with the following Objectives and Outcomes

#### Objectives

This program aims at

- Briefing working principles of the analytical instruments
- Providing standard operating procedures
- Imparting skills in operation/calibration
- Teaching maintenance protocols and repair of laboratory instruments commonly used in science laboratories
- Coaching to identify the basic problem and to restore the same

### Outcomes

The participants would be able to:

- Operate (know the limits of the instrument, suitability, do's and don'ts, etc.)
- Calibrate (run a standard protocol)
- Clean and maintain the various analytical instruments

### Programme 1

#### Chemistry & Bio-Sciences

- Introduction to the basics of electric and electronics equipment & components.
- Awareness and requirement of general repairs and maintenance of laboratory Instruments
- Repairing of electrical instruments like, hot plate, heating metal, magnetic stirrer & water bath.
- Working, proper handling and repairing of temperature controlled oven, incubator & water bath.
- Working principle of repairing, maintenance and calibration of pH meter, pH electrode, colorimeters, flame photometer, spectrophotometer, & conductivity meter.
- Operation, repairing and maintenance of optical Microscope & analytical balance.

**Maximum number of participants : 25**

### Programme 2

#### Physics

- Introduction to the basics of electrical and electronics equipment & components.
- Awareness and requirement of general repair and maintenance of laboratory instruments.
- Proper use of different types of multimeters and their repairing.
- Working of various types of power supplies and repairs of most commonly used power supplies from the laboratory.
- Fabrication, testing and on load calibration of power supplies.
- Handling of function and signal generator and their repairing.
- Understand the stages of CRO, basic problem of CRO and repairing of it.

**Maximum number of participants :15**

## Programme Schedule

Day & Date	10.00 a.m. - 11.30 a.m.	11.30 a.m. - 5.00 p.m.
Monday 20-06-2022	Inauguration and inaugural lecture on basic electronic components and Introduction to Analytical Instruments	Lab session
	For Chemistry & Bio-Sciences	For Physics
Tuesday 21-06-2022	Lecture on pH Meter & Conductivity Meter	Lab session
Wednesday 22-06-2022	Lecture on Colorimeters & Spectrophotometers	Lab session
Thursday 23-06-2022	Lecture on Electrical Instruments	Lab session
Friday 24-06-2022	Lecture on Microscopes	Assembling & Fabrication of Power supply

### Note:

- First day will be common for both the Programmes.
- Everyday from 1.00 p.m. to 2.00 p.m. there will be a break.
- Colleges must send their Instruments for repairing with their participant.

### Who can apply:

The Teaching staff/ Laboratory staff/ Technical staff/ Assistants/ Attendants working in University departments or colleges of University of Mumbai (Physics / Chemistry / Bio-Sciences) with some instrument servicing experience.

### Registration fees:

Rs. 1000/- (Rupees One Thousand only)

\*Lunch, Tea and snacks will be served to all participants.

### Certificate:

The Participants will be given certificate at valedictory function on last day subject to fulfillment of attendance and Active participation.

### Registration:

- Kindly register using the Link or by scanning QR code given below.
- You will be directed to **QFix** form.
- In Select form type section - choose **MISC Fees**.
- Fill your details in the form.
- In the section "Purpose of Amount" kindly mention **WRIC**
- Select Seminar name as **MISC** and Click Submit.
- Applicant ID will be generated.
- Click on **Make a payment** and Submit.
- <https://forms.eduqfix.com/sindseminarform/add>



**Note:** The total number of participants is limited to 40 (25- Chemistry & Bio-Sciences and 15- Physics). Those who wish to participate may register their names well in advance to avoid last minute disappointment.

### Co-chair

Dr. Shivram Garje  
I/C Director  
WRIC  
University of Mumbai  
Vidyanagari, Kalina, Santacruz  
(E)  
Mumbai - 400 098  
Telefax. :022-2653 0248  
E-mail:  
director@wric.mu.ac.in

Dr. Ashok Wadia  
Principal,  
Jai Hind College  
(Autonomous)  
'A' Road, Churchgate,  
Mumbai - 400020  
Tel: 022-22040256  
022-22839630  
E-mail:  
contactus@jaihindcollege.com

### Course Coordinator

Mr. N.N. Rao  
Technical officer I,  
WRIC  
University of Mumbai  
Vidyanagari  
Kalina, Santacruz (E)  
Mumbai - 400 098  
E-mail:  
nr Rao@wric.mu.ac.in  
Tel: 9869128248

### Course Convenor

Dr. Sangeeta A. Parab.  
Associate Professor  
Department of Chemistry,  
Jai Hind College  
Mumbai - 400020  
E-mail:  
jhc.wric.2022.23@gmail.com

### Faculty

- Sunita Batra
- Sarita Thopte
- Minal Tamhankar
- Milind Shidruk
- Sudhir Kumar Bhagat
- Govind Chitte
- Devendra Gunde

### Organising committee

- Dr. Hiral Pandya
- Dr. Bharati Bist
- Abhilasha Upadhyay

**APPLICATION PROFORMA**

**Joint Workshop on**

**Maintenance of Analytical Laboratory Instruments**

**(20th – 24th June 2022)**

Name of Applicant : \_\_\_\_\_

Designation: \_\_\_\_\_

Sponsoring Department / College :

\_\_\_\_\_

Correspondence Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Years of Service: \_\_\_\_\_

Professional Qualification :

\_\_\_\_\_

Nature of Present Job :

\_\_\_\_\_

Mobile Number: \_\_\_\_\_

E-mail ID: \_\_\_\_\_

Transaction ID (NEFT/UPI):

\_\_\_\_\_

Signature of the Candidate:

\_\_\_\_\_

***If selected Mr./Ms. \_\_\_\_\_***

***will be relived to join the training program***

***Recommendation of Principal/Director of  
Institute***

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