



# 5-Day Training Course on Vibration Analysis Level-II (VCAT-II) February 17-21, 2025



Centre for Vibration Analysis & Condition Monitoring (CVCM) is the Center of Excellence of Pakistan Atomic Energy Commission (PAEC) which aims to provide machine condition monitoring services and holding regular training in core area of Machine Condition Monitoring (MCM) for Researchers, Engineers, Students and Technical personals of Process Industries in Pakistan.

## INTRODUCTION

This Vibration Analysis Level-II (VA-II) course provides unique opportunities to study vibration analysis principles' in a way that goes beyond the textbook and provides real-world applications. In addition to understanding theories and techniques, the training course provides procedures to add to your practical knowledge of machines. As a vibration analyst you are expected to know how to test machines correctly, to diagnose faults accurately (and perform additional tests to verify your diagnosis), to set vibration alarm limits, and how to correct certain types of faults. We are offering you the opportunity to truly understand the analyzer and machine so that you feel confident in the decisions you make. If you have any of the following machines, this training is for you.

- Gear Boxes
- Hydraulic Systems
- Electric Motor
- Compressors
- Pulley Drives
- Diesel Engines
- Process Pumps
- Steam Turbines
- Blowers/Fans
- Roller Bearings
- Belts & Pulley

## LEARNING OUTCOMES

- Vibration data collection
- Instrumentation
- Pre-assigned routes
- Vibration measurements
- Correct data collection
- Results evaluation
- Reporting results
- Assessment criteria.
- Signal recognition
- Vibration alert settings

## TOPICS

The course gives comprehensive and detailed coverage on the principles and applications of vibration analysis and its role in investigating machinery defects and their associated time waveforms & spectra. Some aspects of signal processing and data collection are also covered. Case histories are considered in a participative manner.

- Review of maintenance practices
- Condition monitoring technologies
- Principles of vibration
- Data acquisition
- Signal processing
- Fault analysis
- Successful condition monitoring
- Acceptance testing
- Review of ISO standards
- Practical Hand's on Training
- Review of the balancing process

## REGISTRATION

Reserve your seat through e-mail, fax or on postal address:

Name: -----

Job Title/Design.: -----

Office Address: -----

-----

Cell: -----

Fax: -----

CNIC: -----

### For registration

**Muhammad Haroon**

(Manager, CVCM)

Ph.: 051-9246021

Cell: 0331-5864054

Fax: 051-9246052, 9321131

Email: cvcm@paec.gov.pk

## COURSE FEE

### Professionals:

Rs. 40,000/-per participant.

### Students:

Rs. 20,000/-per participant.

### Course fee includes:

- Course manual
- Executive Bag
- Light Refreshments
- Daily Lunch

### Preferable mode of payment

is through crossed cheque drawn in favor of **Center for Vibration Analysis and Condition Monitoring – Pakistan Atomic Energy Commission.**

### IBAN:

PK59ABPA0010002084620114

## COURSE ORGANIZER

**M. Salman K. Durrani**

Cell: 03139987637

Ph.: 051-9246021

## COORDINATION

Contact for any query:

**Ayesha Ashraf**

Ph.: 051-9246021

Cell: 03245972095

## WHO SHOULD ATTEND

- ✓ Vibration Engineers
- ✓ Maint. Professionals
- ✓ Operation Managers
- ✓ Plant Supervisors
- ✓ QA/QC Supervisors
- ✓ HVAC Engineers
- ✓ Plant Technicians
- ✓ Inst. Technicians
- ✓ Plant Operators
- ✓ Industrial Engineers
- ✓ Reliability Engineers

## RESOURCE PERSON

**Muhammad Haroon**

Certified Maintenance and Reliability Professional

SMRP | CMRP

Engine & Compressor Certified Analyst

WINDROCK INSTITUTE (USA)

VIBRATION ANALYST: VCAT-III

MOBIUS INSTITUTE (AUSTRALIA)

**Hamid Raza Khan**

VIBRATION ANALYST: VCAT-III

MOBIUS INSTITUTE (AUSTRALIA)

MLA-II

ICML (USA)

## VENUE

CHASHNUP HOSTEL  
Street 3, H-8/1, Islamabad.



**CENTER FOR VIBRATION ANALYSIS & CONDITION MONITORING  
DIRECTORATE OF SPECIALIZED MEASUREMENT & ASSET MANAGEMENT**

P. O. Box 3140, Islamabad

Phone: +92-51-9246021 Fax: +92-51-9246052