

Who should attend

- Machinery and Mechanical Plant Maintenance Engineers.
- Instrumentation and Electrical Maintenance Engineers.
- Maintenance Planners, Supervisors and Managers.



Registration Fee of L.E. 2950 must accompany this registration form.

REGISTRATION FORM

Basic Machinery Vibrations

March 5 - 8, 2012

Name:-----

Title:-----

Employer:-----

Address:-----

Telephone:----- Fax:-----

e-mail:-----

RITEC is an engineering, vibrations and maintenance consultancy company.

RITEC conducts vibration surveys and engineering studies to remedy vibration problems.

RITEC provides technical and managerial consultancy, assisting clients to define maintenance policies, systems and programs.

RITEC provides the technical training and on site back up to build up the experience of field plant engineers.

RITEC conducts engineering studies to modify plant design, and in order to support clients to overcome commissioning problems and to verify any new design proposals.

RITEC provides training and consultancy services in the field of predictive maintenance and maintenance management.

RITEC is the sole representative of the Vibration Institute in the Middle East.

The **Vibration Institute** is a not-for-profit organization incorporated in the USA to spread the knowledge among the specialists working in the field of vibrations through conferences, seminars, meetings and publications. The Vibration Institute publishes **Vibrations** and holds an annual meeting in the USA in June.

For further information, please call

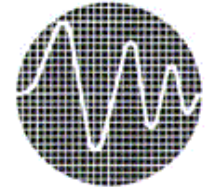
RITEC

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RITEC and VIBRATION INSTITUTE

Invite you to attend the

short course

Basic Machinery Vibrations

Lecturer

Dr. Aly El-Shafei

Faculty of Engineering, Cairo University

General Manager, RITEC

March 5 – 8, 2012
Ramses Hilton Hotel, Cairo

ABOUT THE COURSE

The most widely accepted measure of machine condition is its vibration signature. This course is designed to expose the techniques of vibration analysis of machinery, with the aim of using these analysis techniques for machinery monitoring and diagnosis.

This course provides an overview of techniques used to measure machinery vibration and assess machinery condition. The emphasis is on techniques to verify the existence and the extent of faults and means to evaluate the current condition of a machine, including machine testing.

The course provides a unique format in which an abundance of case studies are presented as application of machine condition analysis. Workshop sessions are conducted daily to illustrate the latest technologies in instrumentation, and the measurement techniques for machinery monitoring and diagnosis.

The objective of all of the **Vibration Institute** and **RITEC** courses is to prepare people to be better analysts. This course will enable the attendees to gain understanding of vibration principles and techniques and add to their practical knowledge of machines. With these tools people will be better able to think through vibration problems. Experts have learned that "cook book" vibration analysis is of limited value because vibration problems seldom follow fixed patterns.

Vibration Institute and **RITEC** courses are designed to provide the attendees with theory, techniques, and procedures as well as practical case histories that illustrate ways to analyze various types of equipment. In-class demonstrations and workshops will help in learning the methods used to solve vibration problems. In addition to field experience, this course should be sufficient to prepare the attendees for the Vibration Institute Vibration Analyst Certification Category II.

PROGRAM

Each day in this four day course will be divided into four sessions as follows:

Session I from 09:30 to 11:00
Coffee Break
Session II from 11:30 to 01:00
Lunch
Session III from 14:00 to 15:30
Coffee Break
Session IV from 16:00 to 17:30

The course content will be covered as follows:

Monday, March 5th, 2012

Basic Machinery Vibration Analysis. Physical concepts of Vibration of Machinery. Vibration Measurement. Data Acquisition. Vibration Transducers. Data Display. Data Processing. Measuring and Analysis Instruments. Signal Conditioning and Data Analysis.

Tuesday, March 6th, 2012

Fault Diagnosis. Frequency Analysis. Basic Machinery Fault Analysis: Rolling Element Bearings, Gearboxes, Motors, Pumps, Compressors, and Fans.

Wednesday, March 7th, 2012

Detection of Faults from Vibration Data. Machine Condition Analysis. Machine Testing. Acceptance Testing. Periodic Monitoring. Measures and Measurement Points. Trending and Reporting.

Thursday, March 8th, 2012

Basic Balancing of Rotating Machinery. Balancing Pitfalls. Vector Diagrams. Resonance Testing. Interference Diagrams. Impact Tests. Determination of Natural frequencies.

HOTEL AND REGISTRATION

The course will be held at Ramses Hilton Hotel, Cairo in the period March 5th - March 8th, 2012.

The course fee of L.E. 2950 covers the cost of all sessions, luncheons, beverage breaks and notes on selected topics. A group discount is offered for groups of five or more. The group fee is L.E. 2655 per person.

Please register in advance. Use the registration form and mail it to **RITEC** at the following address:

RITEC

13, Road 286 New Maadi, 11435
Tel: +20 2 2753-7447 Fax: +20 2 2516-6918
E-mail: ritec@ritec-eg.com

Participants will receive confirmation of registration by mail. If you must process a company check, enclose a copy of the registration form with the check. Make check payable to **RITEC**.

The course will be taught by Vibration Specialists associated with **RITEC** and the Vibration Institute. The team of Lecturers will be led by **Dr. Aly El-Shafei**, General Manager of **RITEC**.

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