

Short Term Course
on
Musculoskeletal Disorders
and
Workplace Stress Management

(May 09-11, 2014)

at

**IIT Kharagpur Extension Centre
Salt Lake City, Kolkata 700 091**



Organized by
Department of Industrial and
Systems Engineering
(Formerly Department of Industrial
Engineering and Management)
Indian Institute of Technology
Kharagpur 721 302 India
&
Confederation of Indian
Industry Eastern Region
(CII ER)

Introduction

In today's highly labour/physical stress/technology-intensive manufacturing environment, management of work-related musculoskeletal disorders (MSDs) and workplace stress plays a key role in determining occupational health status of working personnel for ensuring long-term and sustainable operational performance. For a large number of organizations, the problems related to MSDs and workplace job stress have assumed serious proportion. There is a particular interest in the application of principles related to job and workplace design as well as human factors principles to the management of any organization or its worksystems in such a way that these two important aspects are appropriately addressed at different levels of an organization.

MSDs include a wide range of inflammatory and degenerative conditions affecting the muscles, tendons, ligaments, joints, peripheral nerves and supporting blood vessels of human body, and are widespread in many countries being the single largest category of work-related illness. MSDs represent around 40% of compensated injuries and with almost one among seven workers complain about low back pain with large proportion of workers having to work in painful and tiring postures. In many professions like in construction, MSDs may account for more than 50% of total non-fatal injuries. Many studies highlight environmental, workplace, psychological and psychosocial and personal factors as the causes of MSDs which directly or indirectly result in human errors, reduced productivity, safety incidents and non-quality performance.

Workplace job stress is a common problem prevailing in almost all types of jobs and categories of workmen in India and affecting their health, safety and performance. Such effects are in the form of deterioration of health, increased cost, decreased productivity, accidents and cognitive impairment. The measurement of job stress, its assessment, causation and management have become important issues for the top management of any organization to consider.

It is essential that industries across India, many organizations of which being MSDs- and workplace stress-intensive, promote a consistent approach to their systems and methods in design and manufacturing to develop their own methods, standards and framework for achieving excellence in stress management and minimization or elimination of MSDs.

Although industries, in general, are aware of the potential of MSDs and Work Stress Management for achieving excellent and all-out organizational performance, a well-trained group of personnel cutting across different functions and departments of any organization is a prime necessity in order to achieve the goal of MSDs and Work Stress Management. IIT Kharagpur, being an internationally recognized technical institution of India with its Department of Industrial and Systems Engineering having a number of experts with proven knowledge, expertise, and research capabilities in the broad field of engineering ergonomics, workplace stress modeling and worksystem design, plans to organize a Short Term Course on 'Musculoskeletal Disorders and Workplace Stress Management' to provide industry professionals and researchers with valuable insights into several pertinent issues

required for successful implementation of Musculoskeletal Disorders and Workplace Stress Management framework at an organizational level.

Internationally acclaimed academics, researchers and practitioners with proven knowledge, experience, and demonstrable ability in teaching, consultancy, research, and training in the field of MSDs and Workplace Stress Management will deliver lectures and discuss cases in the course.

Objectives of the Course

The primary objectives of the course are as follows:

- i) Exposing participants to the fundamentals of MSDs and Workplace Stress management practices,
- ii) Building in confidence and capability amongst the participants in the application of tools and techniques for measurement and evaluation of MSDs and Workplace Stress and mapping the organizational activities and problems in terms of MSDs and Workplace Stress Management framework,
- iii) Providing exposure to practical problems and their solutions, through case studies and live projects in MSDs and Workplace Stress Management,
- iv) Enhancing the capability of the participants to identify, control and remove problems related to MSDs and Work Stress.

Course Contents

The course will address the following **main issues**:

- i) Present industrial situations and relevance of MSDs and assessment of Workplace Stress.
- ii) Theory and principles of MSDs and Workplace Stress Management
- iii) Measurement and Evaluation of MSDs Measurement and Evaluation of Workplace Stress
- iv) Tools and Techniques for MSDs and Workplace Stress Management
- v) Implementation Framework for Preventive and Corrective measures for control/minimization of MSDs and Workplace Stress in an organization.

The following specific **topics** will be covered in the course:

Risks of Musculoskeletal Disorders and their measurement and evaluation

Preventive Measures for MSDs and Workplace Stress

Effect of Technology, Design and Job Characteristics on MSDs and Workplace Stress

Modelling and Measurement of Job Stress and MSDs

Task/Job Analysis for Job Stress Control

Relationship between MSDs, Job Stress and Organizational Performance

Course Schedule and Methods

10 am to 5 pm with 1-hour lunch break in each day.

The methods consist of lecture sessions, hands-on-exercises, discussions on cases, and live problems.

Eligibility

Executives, engineers and researchers from manufacturing, service and government organizations including SMEs, R&D units, research laboratories, and technical institutions.

Course Coordinators

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Address for Communication

All queries regarding the course may be addressed to the Principal Coordinator or the Coordinator

Application and Fee

The course is designed to be offered for a duration of **three days**. Number of participants for the course will be limited to **thirty five**. The participants will be selected on 'first-come-first-served' basis out of the eligible applicants.

The course fee is **Rs 18,000 per participant** for non-SMEs and **Rs 12,000 per participant** for SMEs. Payment is to be made through bank draft drawn in favor of '**CEP-STC, IIT Kharagpur**' payable at Kharagpur. The course fee includes course materials, working lunch, and tea/coffee during lecture schedules only.

The interested applicants are requested to apply to one of the coordinators by filling in the **Registration Form** provided with this brochure.

ACCOMMODATION

Participants have to arrange their accommodation on their own. Expenses towards travel and local hospitality are to be borne by them separately.

SHORT-TERM COURSE on

MUSCULOSKELETAL DISORDERS and WORKPLACE STRESS MANAGEMENT

(May 09-11, 2014)

1. Name: _____
2. Affiliation: _____
3. Educational Qualification:

4. Address for Correspondence:

5. Telephone: _____
6. Mobile: _____
7. E-mail: _____
8. Bank Draft Details:
Draft No. _____
Date: _____
Amount Rs. _____
Bank: _____
Branch: _____

Signature of the participant

Signature of the Sponsoring
Authority (with Seal)

REGISTRATION FORM