



**INDIAN STATISTICAL INSTITUTE**  
**SQC & OR Unit**  
**HYDERABAD**



Announces

**Open house training program**

on

**STATISTICAL TECHNIQUES**  
for  
**INTEGRATED MANAGEMENT SYSTEMS**  
(ISO 9001:2008 QMS, ISO 14001:2004 EMS & OHSAS 18001:2007)

*(ISO 9001:2008 Clause 8.1- “.....This shall include determination of applicable methods, including **Statistical Techniques** and the extent of their use.”)*

**05 - 07 October 2010**

Venue:

Seminar Hall  
**Indian Statistical Institute**  
Road No.8, Habsiguda  
Hyderabad – 500 007

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### **ISO 9001:2008 Clause 8.1 –**

The organization shall plan and implement the monitoring, measurement, analysis and improvement processes needed .....

This shall include determination of applicable methods, including **Statistical Techniques**, and the extent of their use.

### **ISO 9004:2000 Clause 8.1.2 j) –**

The use of appropriate **Statistical** or other techniques can help in the understanding both process and measured variation and can there by improve process and product performance by controlling variation.

### **ISO 9000:2005 Clause 0.2 g) –**

Effective decisions are based on the analysis of data and information.

### **ISO 14001:2004 Clause 4.5.1**

The organization shall establish, implement and maintain a procedure(s) to monitor, on a regular basis the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organization's environmental objectives and targets.

*(Statistical Techniques are applicable here, since ISO 9001 is the basic platform for ISO 14001:2004 and the above clause corresponds to ISO 9001:2008 Clause 8.1)*

### **OHSAS 18001:2007 Clause 4.5.1**

The organization shall establish, implement and maintain a procedure(s) to Monitor and measure Occupational Health & Safety performance on a regular basis.

- a) Both qualitative and quantitative measures, appropriate to the needs of the organization;
- b) Monitoring of the extent to which the organization's OH&S objectives are met;
- c) Monitoring the effectiveness of controls (for health as well as safety);

*(Statistical Techniques are applicable here, since ISO 9001 is the basic platform for OHSAS 18001:2007 and the above clause corresponds to ISO 9001:2008 Clause 8.1)*

## **What is Integrated Management System(IMS)**

Integrated Management System(IMS) is integrating or merging of the three generic management systems requirements - ISO 9001:2008 Quality Management Systems, ISO 14001:2004 Environmental Management Systems and OHSAS 18001:2007 Occupational Health and Safety Assessment Series.

These three generic standards are based on the methodology of PDCA(Plan-Do-Check-Act) Cycle aimed at continual Improvement. ISO 9001 specifies requirements for a QMS to consistently provide product/service that meets customer. ISO 14001 specifies requirements for Environmental protection to mitigate the five types of environmental pollutions. OHSAS 18001 specifies requirements for occupational Health and Safety of the Interested Parties.

### **TOPICS**

*Types of Data, Statistical distributions – Binomial, Poisson, Normal. Minitab statistical software package will be used during the training. Seven Tools of QC. Understanding variation – Special causes vs. Common causes. Evaluation of Process Capability and Process Capability Indices. Monitoring of results through SPC- Control Charts for Variables and Attributes. Sigma Rating and Yield concepts. Brief coverage of MSA, Sampling Schemes, Design of Experiments etc.*

*Coverage of ISO 9000:2005, ISO 9004:2000, ISO 9001:2008 and ISO/TR 10017-Guidance on Statistical Techniques for ISO 9001:2000. Correspondence between ISO 9001, ISO 14001 and OHSAS 18001 clauses. Gap analysis, IMS Policy and QESH Objectives, Documentation, Road map to IMS, IMS Benefits, Environmental Aspect/Impact studies, Identification of significant Aspects, HIRA-C, Legal Register, MSDS, EMP, OCP etc.*

### **VENUE & TIMINGS**

Lecture sessions and exercise sessions shall be conducted during 05–07 October 2010 at the Seminar Hall, at Indian Statistical Institute, Hyderabad during 09.30 a.m to 05.30 p.m.

### **FACULTY**

Specialists from Hyderabad and Delhi branches of Indian Statistical Institute

### **PARTICIPANTS' PROFILE**

Management personnel/Executives from functions– R&D, Production, Marketing & Distribution, Purchase, QA/QC, Calibration & Testing, SCM, HR, SHE etc.

Personnel or CMRs/MRs/DMRs associated with ISO 9000, ISO 14001, OHSAS 18001, TS 16949, HACCP, ISO 22001, ISO 26001, ISO 27001 or CMM related activities.

## **PARTICIPATION FEE**

- **Rs. 6,000/-** plus Service Charges at Govt. Rates (currently @ 10.30%) per head. ( i.e., **Rs. 6,618/-** )
- For Group Participation (3 or more participants from the same Orgn.), Special Discount of 10% for organization-sponsored participants only
- To be paid in the form of Demand Draft drawn in favour of **INDIAN STATISTICAL INSTITUTE** payable at Hyderabad.

*Note : Participation Fee includes Course kit, Lunch & Refreshments.*

## **LAST DATE**

Last date for submission of Registration form - **29 September 2010**

### **Programme Director:**

**Prof. S M Subhani**  
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### **Program Facilitator**

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## ***INDIAN STATISTICAL INSTITUTE***

*The INDIAN STATISTICAL INSTITUTE founded by late Prof. PC Mahalanobis, FRS, is an institution of National Importance, declared by Act of Parliament and funded by Government of India. It is an Institute of academic excellence offering educational courses at Graduate, Post graduate and Research levels. The scientific activities of the Institute are carried out through different Divisions.*

### **Role of SQC & OR Division**

- *The Pioneer and Leader in blending Statistical Theory with practice.*
- *To disseminate the basic concepts and techniques of Quality Improvement through Training programs, Workshops and In-house programs.*
- *To render training and consultancy services to industries in Six Sigma, SQC, ISO 9000, ISO 14000, TS 16949 and related areas.*
- *To provide solutions to the problems pertaining to Business Decision Processes with the aid of Statistics and Operations Research.*