



TRAINING PROGRAM



Laboratory Quality Risk management Tools and Techniques

Course Description:

This course will help motivate dispirited teams of laboratory chemists to accomplish high quality work. It is very important to the lab supervisors and managers to learn how to create the success in their lab. The course is also designed to provide a practical application of quality management in the laboratory according to ISO 17025. It is designed also to understand concepts of personnel specification, job descriptions, how to apply quality standards, how to do quality risk assessments, how to develop the technical, and methods in the lab and how to evaluate the lab results.

The course will also help the candidates overcome the challenges they face in leading their labs and bringing clarity to the confused thinking of their staff. It provides comprehensive leadership and management training which is intended to help ensure job satisfaction and research innovation, productivity and quality, while enhancing the safety and well-being of research subjects and personnel. This highly interactive program allows participants to rehearse behavior that can be effective in dealing with difficult communication, management and ethical situations they may face in their laboratories

Who Should Attend?

Laboratory Managers, Laboratory Supervisors, Chemists, QA/QC managers or auditors, Production personnel who may be responsible for in-process laboratories or testing, Instrumentation Engineers, Chemical Engineers & Industry Personnel

Certificate:

BTS Consultant certificate will be issued to all attendees completing all the total tuition hours of the course.

Course Objectives:

Upon completion of the workshop, you will learn how laboratories are applying current management philosophies to get closer to the business and to streamline operations. Practical details of laboratory management such as cost control, maintaining analysis quality, improving laboratory reputation, effective staffing, capital budget justification, and so forth will be discussed but the emphasis will be on systems rather than daily operational issues. Participants are expected to share experiences and best practices.

Further after completion of this course participants will be able to:

- Get solutions to your management problems from a leading authority.
- Be able to define and focus on the lab mission.
- Know how to organize to meet the requirements of a mission.
- Improve your abilities to listen and communicate.
- Understand how to motivate staff and build teams.
- Understand the manager's job.
- Understand how the business processes of a laboratory can be combined effectively with the requirements of ISO/IEC 17025

- Integrate successfully important aspects that are essential to maximizing gains from the management system
- Provide an understanding of the roles of the quality manager and technical management
- Reflect their own habits and patterns of time structuring in order to detect inefficiencies and determine areas of improvement
- Learn and practice tools that will help them with time and priority management
- Learn and train to structure their daily tasks and goals according to their diverse professional roles
- Recognize and expand their own style of dealing with conflict,
- Recognize and analyze conflicts to understand how to manage them
- Negotiate with research partners and suppliers
- Manage authorship conflicts
- Ask questions that increase people awareness of and responsibility for a topic
- Help staff to solve their own scientific, technical and general lab problems
- Show staff new techniques so that they can use them themselves afterwards
- Guide scientific discussions and debates to be productive and satisfying
- Use a variety of problem-solving tools to improve their own and their lab productivity

Course Outline:

- Introduction
- Chemical Laboratory, Historical and review
 - ❖ Laboratory Building & Design Considerations
 - ❖ Building Design and Site Selection
 - ❖ Laboratory Configuration
 - ❖ Building Services and Structure,
 - ❖ Laboratory Utility
- Effective Budgeting in the Laboratory
- Planning to Work in the Laboratory
- Validation and development of Analytical Methods and Procedures
- Laboratory in Operation
- Laboratory Management and Operation
 - ❖ Principle of Leadership
 - ❖ Management Functions

- ❖ Managerial problem Solving and Decision Making
- ❖ Human resource Management (HRM)
- ❖ Interactive Communication Skills
- ❖ Fundamentals of Financial Management
- ❖ Budgeting and financial management
- Job Responsibilities
 - ❖ Responsibilities of laboratory manager
 - ❖ Responsibilities of supervisor
 - ❖ Responsibilities of the staff
- Training
- Reports
- Dead files and old samples
- Paperwork Reduction
- Laboratory Housekeeping
- Equipment, Apparatus, Reagents, Chemicals and Glassware
- Quality Risk management in Laboratory
 - ❖ Responsibilities and Requirement
 - ❖ Laboratory operation
 - ❖ Personnel evaluation
 - ❖ Laboratory equipment
 - ❖ Handling and management equipments
- Laboratory Records
- Laboratory Certification
- The use of computers in the laboratory
- Laboratory Information Management System LIMS
- Quality Control and Quality Assurance
- Evaluation of analytical data
- Correction of errors and improving accuracy
- Laboratory Data Analysis
- Laboratory Accreditation Requirement
- Quality Audit (Internal and External)
- Laboratory Audits (ISO 17025, GLP)
- Overview of ISO/IEC 17025:2005 Requirements
- Management of Audit Programs
- Quality Audit Planning and Preparation
- Performing the Audit