

### Course Listing (Thai Version)

#### Training courses

##### Calibration and Uncertainty

- Uncertainty of Measurement in Calibration
- Uncertainty of Measurement in Chemistry
- Calibration of pH Meter
- Calibration of Weighing Machine
- Calibration of Temperature Measuring Equipment
- Calibration of Volumetric
- UV-VIS Spectrophotometer Performance Validation
- Verification Result of Equipment Calibration
- Piston Pipette Calibration

##### Quality Control

- Statistics for Testing Laboratory
- Assuring the Quality of Test Results
- Computering Statistics for Testing Laboratory
- ISO/IEC 17025 Requirements
- Method Validation for Testing Laboratory
- Validity of Measurement for Chemical Laboratory
- ISO/IEC 17025 Documentation
- ISO/IEC 17025 Internal Audits
- Measurement Traceability

##### Instrumentation

- AAS technique
- UV-VIS technique
- GC technique
- HPLC technique
- GC/MS technique

### Technical Testing

- BOD and COD Tests in Wastewater
- Analysis of Waste Water in Applications (TS, TDS, SS, Oil and Grease
- Analysis of Waste Water in Applications (Total Kjeldahl Nitrogen, TKN
- Sampling and Sample Preparation Techniques for Soil and Water Analysis

### Basic Chemistry

- Hazardous chemicals control and management
- Laboratory Safety
- Laboratory Disposal of Hazardous Waste
- Designing and Remodeling for Safe Chemical Laboratories
- Use and maintenance of pH meter
- Designing and Remodeling for Safer Chemical Laboratories
- Usage and Maintenance Techniques of Volumetric Glassware
- Control and Management of Hazardous Chemicals
- Solution Preparation Technique

### Microbiology

- General Technique in Food Microbiology
- Culture Media and Guidelines on Performance Testing of Culture Media
- Techniques for Microbiological Testing in Water
- Method Validation for Microbiological Testing
- Reference Culture Preservation Technique
- Uncertainty of Measurement in Microbiology
- The Risk Assessment of Food Microbiological
- Microbiological Examinations for Foodstuffs
- Guidance for Food Microbiological Examinations

### E-learning courses

- Statistics in analysis, testing and research

- Calibration of volumetric glassware
  - Calibration of pH meter
  - Techniques for using volumetric glassware
  - Method validation for testing laboratory
  - Techniques for using pH meter in laboratory
  - Solution preparation technique
  - General technique for microbiologists
  - Calibration of weighing machine
  - Development of earthenware
  - Assuring the quality of test results
  - Microorganism culture and biochemical reactions for testing microorganisms causing food
- ISO/IEC 17025 requirements
  - Flame Atomic Absorption Spectroscopy (FAAS)
  - Uncertainty of Measurement using Weighing Technique
  - Uncertainty of Measurement using Titration Technique
  - Quality Control for Microbiological Laboratory Testing in Water
  - Principle of Uncertainty of Measurement
  - Computing statistics for testing laboratory 1
  - Computing statistics for testing laboratory 2
  - GC technique
  - Sample preparation using Solid Phase Extraction (SPE) Technique
  - Primary GMP for processed food in ready for sale packaging
  - Production of rust filltration substance in water and production of water filter for consumption
- Technique of presentation by package software