BASIC GAS CHROMATOGRAPHY

(with LabSolutions GC Workstation)
March 14-15, 2019
June 20-21, 2019

Course Highlights:
An introductory course on Gas Chromatography (GC) which includes lecture and practical sessions

Prerequisite:
Familiarity with Windows software operation

Day 1
1. Lecture on basic principles and instrumentation of GC
2. Operation of GC with liquid and headspace autosampler using LabSolutions GC software:
   2.1) System start-up
   2.2) Parameter set-up and data acquisition

Day 2
1. Post-run analysis: qualitative and quantitative analysis
2. Report generation
3. Simple maintenance and troubleshooting

BASIC HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

(with LabSolutions LC Workstation)
March 7-8, 2019
August 8-9, 2019

Course Highlights:
An introductory course on High Performance Liquid Chromatograph (HPLC) which includes lecture and practical sessions.

Prerequisite:
Familiarity with Windows software operation

Day 1
1. Lecture on basic principles and instrument of HPLC
2. Hands-on operation of HPLC including:
   2.1 Mobile phase preparation
   2.2 Method set-up and data acquisition.

Day 2
1. Post run analysis: quantitative and qualitative analysis
2. Report generation
3. Simple maintenance and troubleshooting

LABSOLUTIONS DB SOFTWARE (21 CFR PART 11 COMPLIANCE)

April 23, 2019 / September 20, 2019

Course Highlights:
A one-day introductory course on 21 CFR Part 11 compliance using Shimadzu's LabSolutions DB Software

Intended for chemists and instrument users in pharmaceutical and other laboratories where electronic records are now regulated by FDA Philippines

Prerequisite:
Familiarity with HPLC or GC operation and Windows software operation

Day 1
1. Lecture on the requirement for 21 CFR Part 11 compliance
2. Actual software demonstration on how to set parameters in LabSolutions DB workstation for guideline compliance

FUNDAMENTAL OF LIQUID CHROMATOGRAPHY - MASS SPECTROMETRY

(with LabSolutions LCMS workstation)
September 5-6, 2019

Course Highlights:
An introductory course on Liquid Chromatography - Mass Spectrometry (LCMS-SQ/TQ) which includes lecture and practical sessions.

Prerequisite:
Familiarity with HPLC and Windows software operation

Day 1
1. Lecture on principles and instrumentation of LCMS
2. Hands-on operation of LCMS including:
   2.1 Instrument and method set-up
   2.2 SCAN/SIM/MRM Modes
   2.3 Optimization and data acquisition

Day 2
1. Data processing using LabSolutions LCMS software
   1.1 Data analysis and interpretation
   1.2 Quantitative analysis and report generation
2. Simple maintenance and troubleshooting.

BASIC ATOMIC ABSORPTION SPECTROPHOTOMETRY

(with WizAArd Workstation)
June 6-7, 2019
October 3-4, 2019

Course Highlights:
An introductory course on Atomic Absorption Spectrophotometry (AAS) which includes lecture and pratical sessions

Prerequisite:
Familiarity with Windows software operation

Day 1
1. Lecture on principles and instrumentation of AAS
2. Hands-on operation of AAS using WizAArd software

Day 2
1. Data analysis, quantitation and report generation
2. Simple maintenance and troubleshooting.

FUNDAMENTALS OF GAS CHROMATOGRAPH - MASS SPECTROMETRY

(with GCMSsolution Workstation)
July 11-12, 2019

Course Highlights:
An introductory course on Gas Chromatography - Mass Spectrometry (GCMS) which includes lecture and practical sessions.

Prerequisite:
Familiarity with GC and Windows software operation

Day 1
1. Lecture on principles and instrumentation of GCMS
2. Hands-on operation of GCMS including:
   2.1 Instrument and method set-up
   2.2 Data acquisition
   2.3 SIM/SCAN Modes / Qualitative analysis

Day 2
1. Data processing using GCMSsolution software
   1.1 Data analysis and peak integration
   1.2 Quantitative analysis and report generation
2. Simple maintenance and troubleshooting

BASIC FOURIER-TRANSFORM INFRARED SPECTROPHOTOMETRY

(with LabSolutions IR workstation)
July 5, 2019
November 8, 2019

Course Highlights:
An introductory course on Fourier Transform Infrared Spectrophotometry (FTIR) which includes lecture and practical sessions

Prerequisite:
Familiarity with Windows software operation

Day 1
1. Lecture on basic principles and instrumentation of FTIR
2. Discussion on the parts of the FTIR instrument and accessories (DRS, ATR, and Liquid Cell)
3. Hands-on operation using LabSolutions IR workstation
   3.1 Sample preparation (DRS, ATR, Liquid Cell)
   3.2 Data acquisition and processing: Kubelka-Munk and ATR correction, library search, etc.
4. Simple maintenance and troubleshooting.

*** Request for other dates and on-site trainings may be accommodated upon request.**