

# Spectrophotometry

#### Introduction

Spectrophotometry is a powerful analytical method for the determination of many chemical compounds and elements. The method is based on the interaction of light with material in visible and ultraviolet range, 190-800 nm. All samples are pre-treated to aqueous or organic solvent solutions. Spectrophotometry can be used for the analysis of many kinds of materials like soil, sediment, oil and oil products, seawater, drinking water, process water, metals, ceramics etc. The positive features are: easy to operate, robust, simple experimental set up, not expensive, versatile, fast, qualitative and quantitative analysis, less service and maintenance cost.

#### **Contents and Aims**

Beside the fundamental of light interaction with material we also introduce you in operating spectrophotometers. You will be trained in optimisation of all relevant experimental variables to attain the best analytical result. It makes you possible to develop analytical methods according to the demands in your laboratory. We also deal with automated methods. Additionally, trouble shooting is a major part of the course.

## Organisation

The session of introduction in the theory of spectrophotometry is followed by a practical part. You operate several types of spectrophotometer

## **Participants**

Chemists, engineers, lab-technicians, head of laboratories, managers of department of testing

DurationTime5 daysNovember 2007

## Authors

Prof. Dr. Heinz-Martin Kuss, analytical chemist with many years experience in theory and practice in analytical chemistry and in education and teaching MSc Nabil Badr, analytical chemist

## Language

English and Arabic

## Certificate

After successful participation a certificate will be provided.

## Local organisation

ITA International Training Agency

## **Partner organisation**

Talecon is official partner of ITA International Training Agency, Beirut, with branch in Tripoli, Libya