

SS Enriching Knowledge for the Chemistry and Combined Science
(Chemistry Part) Curricula Series:
Selected Topics in Applications of Chemistry (New)

Programme synopsis

Talk 1 – New Definitions of SI Units

(Speaker: Dr Eric TP SZE)

Metrology is the science of measurement. It underpins the global measurement system (i.e. International System of Units, SI Units) which in turn has tremendous impacts on international trade and economy. On 20 May 2019, new definitions have been implemented for four out of the seven SI base units (i.e. kilogram, ampere, kelvin and mole), which are the most significant revision of the SI units since its inception in 1960s. In this talk, Dr SZE will introduce the International System of Units, original and new definitions of SI base units, practical realisation of the SI base units, and how these are impacting our daily life and international trade.

Talk 2 – Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

(Speaker: Mr AU YEUNG Chi-Yuen)

Chemicals are widely used nowadays and the risk due to chemical exposure is considerable. In this respect, effective safety procedures should be in place to control the hazards arising from the use of chemicals. Hazard communication is an essential tool in the procedures to provide the necessary information which would enable individuals to use and handle chemicals safely with appropriate protective measures and to respond properly in emergency situations.

Users of chemicals have the “right-to-know” of the potential hazards associated with the chemicals. Statutory requirement for implementing hazard communication is a proactive measure to disseminate information to users about the hazards pertaining to the chemicals and the necessary precautionary measures, in particular for employees in workplaces. Many countries adopt the proactive measure respectively in their management of chemicals.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) addresses classification of chemicals by types of hazard and proposes harmonized hazard communication elements, including labels and safety data sheets (SDS). It is an internationally agreed-upon

standard managed by the United Nations. Core elements of the GHS include standardized hazard testing criteria, universal warning pictograms, and harmonized safety data sheets which provide users of chemicals with a host of information. The first edition of the GHS was adopted in December 2002 by the United Nations. In this talk, the goal and main features of GHS will be discussed focusing on the objective to facilitate audience to enhance their familiarization of the GHS hazard communication aspects.