

## **CHE402XS2: Industrial Organic Chemistry**

(30 Hours of lectures and tutorials)

### **Objectives:**

- Discuss the issues related to synthesis and degradation
- Perceive environmental impact of industrial polymers
- Explain the processing and quality control of palmyrah products and essential oils.

### **Syllabus:**

- Palmyrah products:Chemical reactions involved in processing, quality control of raw materials in processing, quality control of palmyrah food products: fat profile analysis, vitamin analysis, anti oxidant activity, proximate analysis, analysis for impurities, etc.
- Industrial polymers:Classification, synthesis, properties and applications of polymers.
- Essential oils:Essential oil industries in Sri Lanka, methods of extraction, analysis and quality standards, quality control of essential oils, industrial application of other organic materials such as, fats, phospholipids, waxes, etc.

### **Evaluation:**

- In-course Assessments            30%
- End-of-course Examination    70%

### **Recommended Readings:**

- Moolchand Gupta, “Polymer Composite”, New Age International Publishers, First Edition, 2007.
- G. Hundiwale, V. D. Athawale, U. R. Kapadi and V.V. Gite, “Experiments in Polymer Science”, New Age International Publishers, First Edition, 2008.