## Lipids

## **Experiment No.(1) Saponification of Fats and Oils:**

• Saponification of oils means the <u>hydrolysis</u> of **esters** (**triglycerides**) in the oil in presence of an alkaline medium into **glycerol** fatty acids with the production of **sodium salt of fatty** acids or "**soap**".

## **Material:**

- 1. Oil.
- 2. Alcoholic potassium hydroxides (5%).

## **Procedure:**

- 1. Place 5 ml of the provided oil sample in test tube.
- 2. Add 15 ml of Alcoholic KOH solution.
- 3. Place the test tube into a water bath for 30 minutes and watch carefully. Be careful to not let the alcohol burn.
- 4. Remove the test tube form the water bath notice the change of oil into a solid material which is potassium soap.

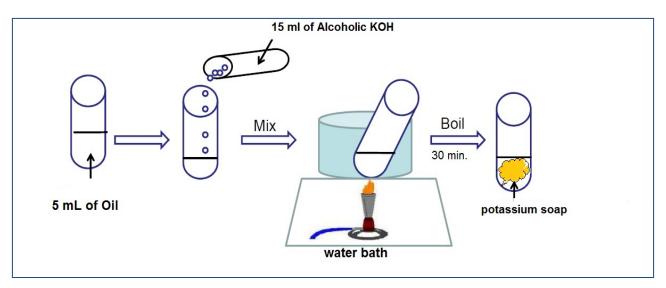


Figure 1. Saponification of Oil.