



CHAPTER II

OBJECTIVE

The foregoing chapter summarized the major points concerning petroleum formation and occurrence. The importance and significance of biomarkers as indicators of source material, depositional environment, maturation, migration and alteration will be described in the following chapter. In particular, correlation studies (oil/oil, oil/source, source/source) using organic geochemical techniques are powerful methods for aiding in the solution of various types of exploration prospects.

The project in this thesis will focus upon a biomarker studies to characterize the information about source, depositional environment, maturity and probable alteration reactions of the oil in reservoirs of the Sirikit Oilfield in Phitsanulok Basin, Northern Thailand. In addition, geochemical correlation will be performed in an attempt to compare the origin of the oil samples from different sub-reservoirs of this field. This oilfield was selected since it is one of the most significant producers in Thailand (the largest reservoir explored so far), and many papers have been published on its geological setting.