

## LIST OF ABBREVIATIONS

|   |   |  |
|---|---|--|
| AM 1  | = | Austin Model 1   |
| $\text{CH}_3\text{O}^-$   | = | Methoxide  |
| $\text{CH}_3\text{OH}$  | = | Methanol   |
| $\text{C}_{17}\text{H}_{33}\text{COOH}$                         | = | Oleic Acid   |
| E   | = | Energy   |
| FAME  | = | Fatty acid methyl ester                                      |
| GAUSSIAN 03W  | = | GAUSSIAN software for Windows                                |
| GaussViewW  | = | GaussView software for window                                |
| H   | = | Hamiltonian operator   |
| HF  | = | Hartree-Fock theory  |
| NaOR  | = | Sodium alkoxide  |
| $\text{OH}^-$   | = | Hydroxide ion  |
| OH  | = | Hydroxyl Group   |
| PM3   | = | MNDO parameter Method number 3                               |
| $\text{R}-, \text{R}_1-, \text{R}_2-, \text{R}_3-, \text{R}^1-$ | = | Alkyl group of alcohol ( $\text{CH}_3-$ )                    |
| $\text{R}'-$  | = | Carbon chain of fatty acid ( $\text{C}_{17}\text{H}_{33}-$ ) |
| $\text{R}''-$   | = | $\text{CH}_2 -$  |
|   |   |  |
|   |   | $\text{CH} - \text{OCOR}'$                                   |
|   |   |  |
|   |   | $\text{CH}_2 - \text{OCOR}'$                                 |
| $\text{RO}^-$   | = | Alkoxide group   |
| ROH   | = | Alcohol  |
| $\Psi$  | = | Wave Function  |