

## Introduction to Organic Functional Groups

- alkanes – hydrocarbons with only  $sp^3$ -hybridized carbons (all single bonds). All (except the cycloalkanes) have the molecular formula  $C_nH_{2n+2}$ .
- alkenes – hydrocarbons that contain a carbon-carbon double bond ( $sp^2$ -hybridized C).
- alkynes – hydrocarbons that contain a carbon-carbon triple bond ( $sp$ -hybridized C).
- amines – “relative” of  $NH_3$  where there is at least one carbon-nitrogen single bond ( $sp^3$ -hybridized C and N).
- alcohols – “relative” of  $H_2O$  where *only one* H is replaced with a C.
- ethers – “relative” of  $H_2O$  in which *both* H's are replaced by C's.
- epoxides (also called oxiranes) – contain a CCO 3-membered ring.

