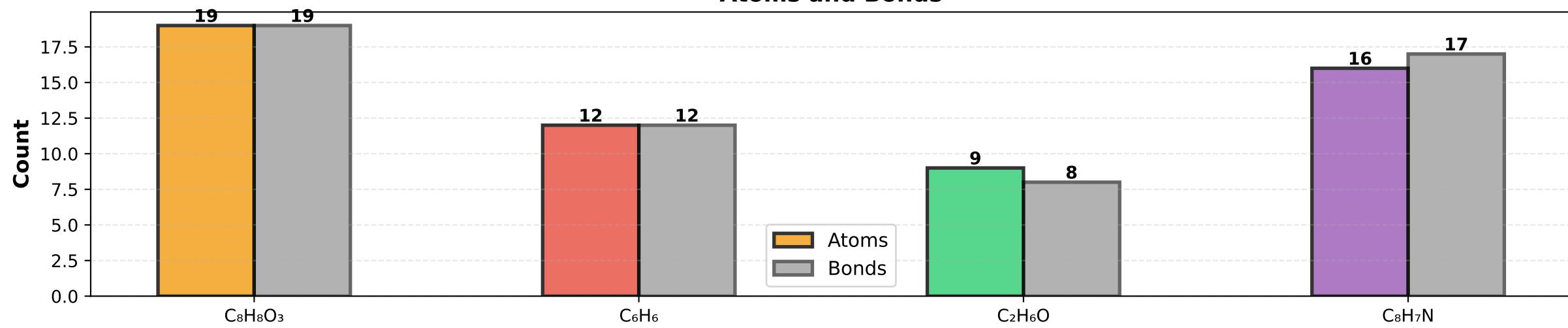


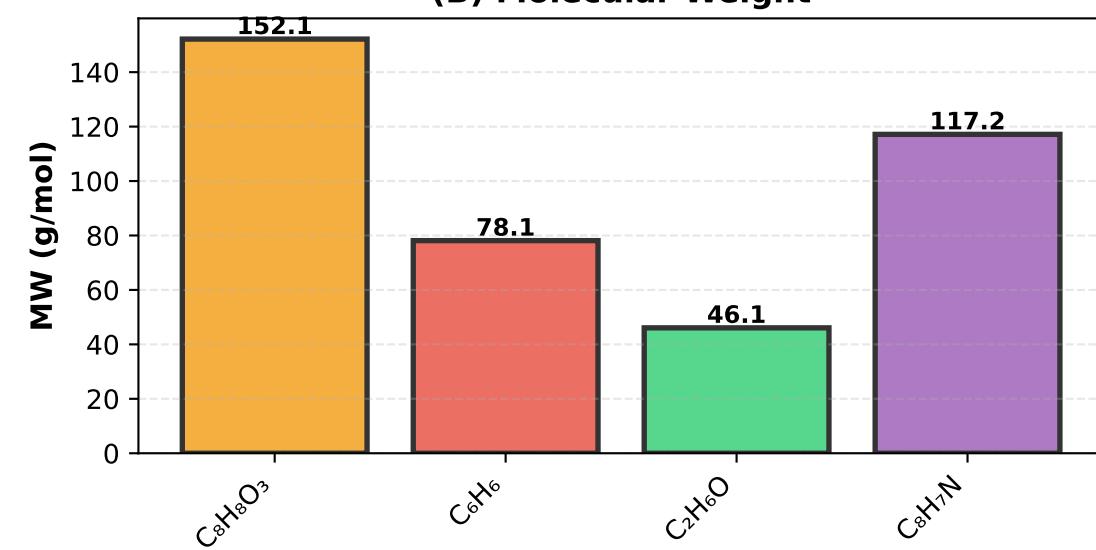
Molecular Structural Features Analysis

Categorical Recognition from Descriptors

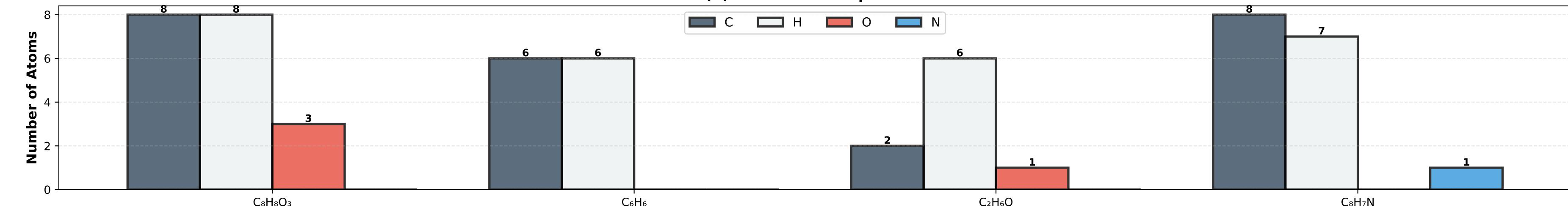
**(A) Molecular Size Comparison
Atoms and Bonds**



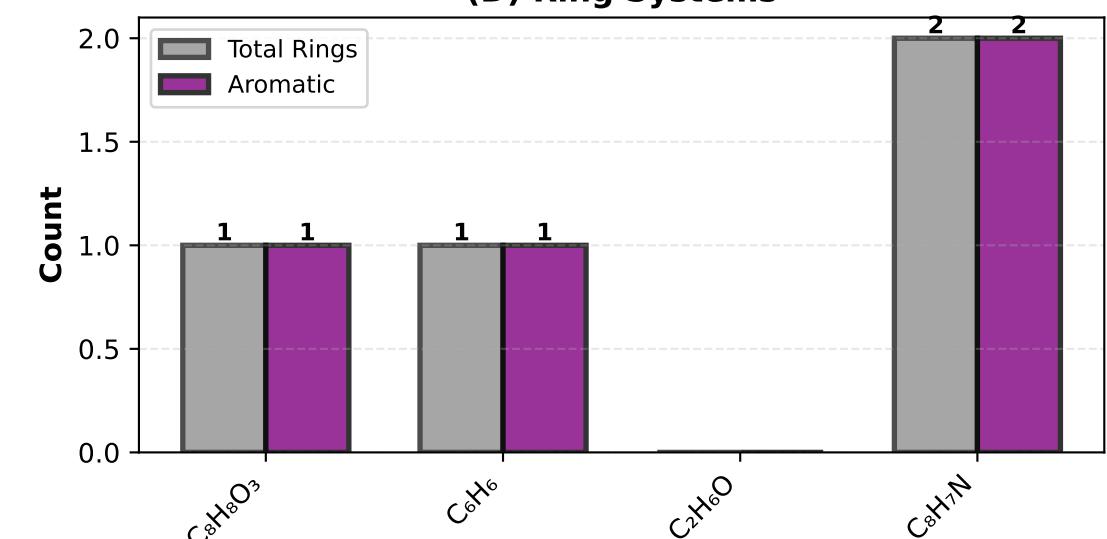
(B) Molecular Weight



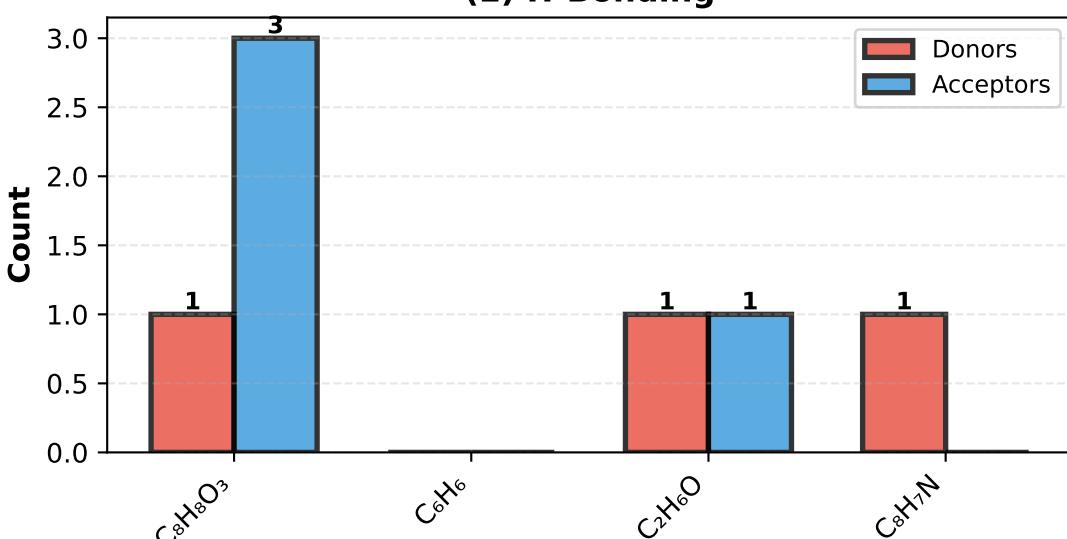
(C) Elemental Composition



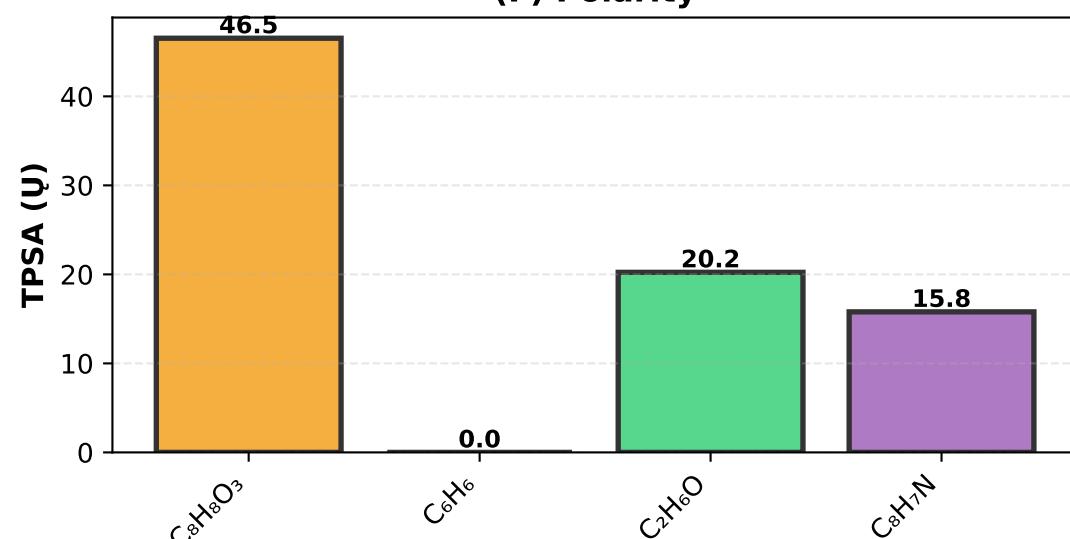
(D) Ring Systems



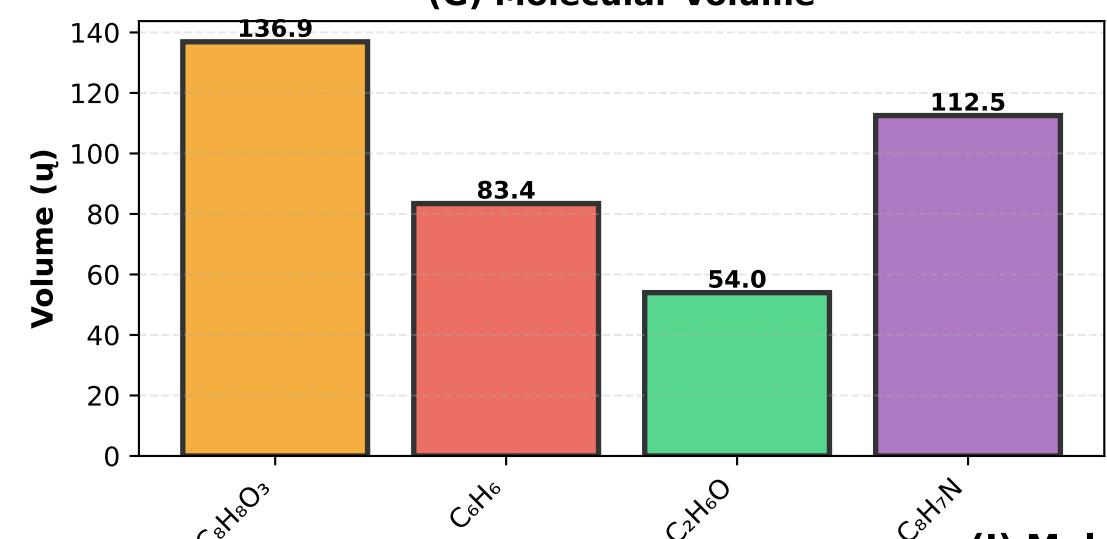
(E) H-Bonding



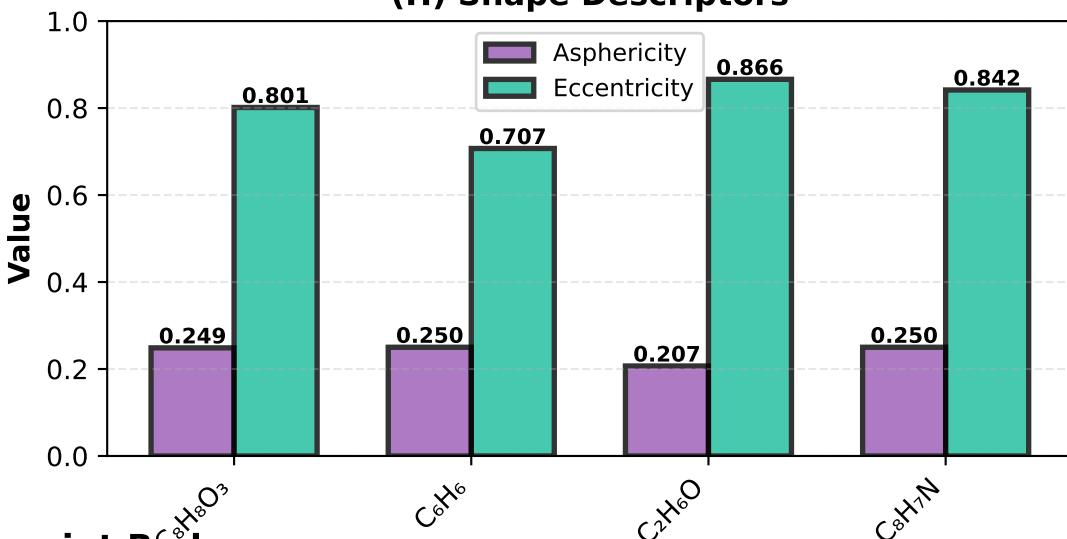
(F) Polarity



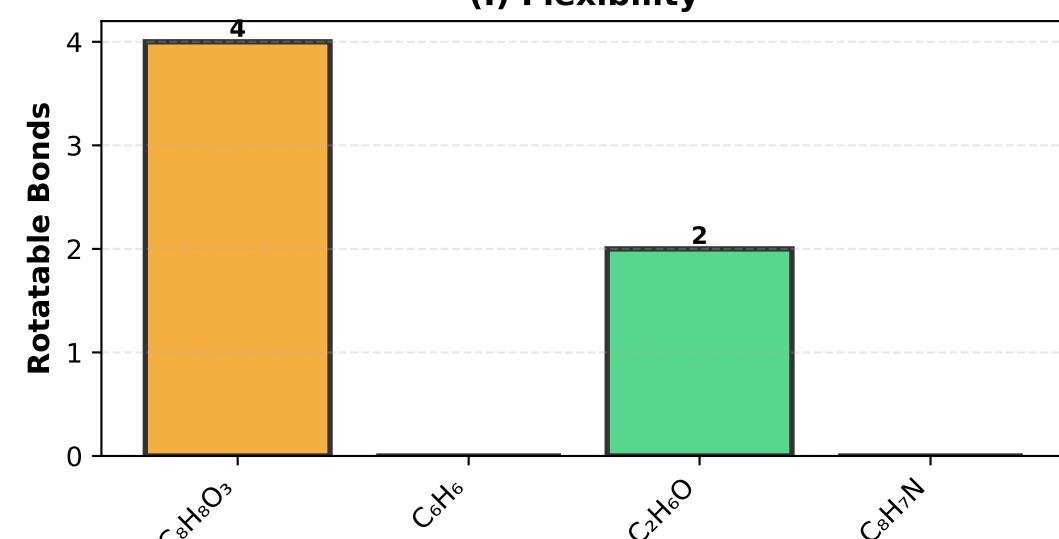
(G) Molecular Volume



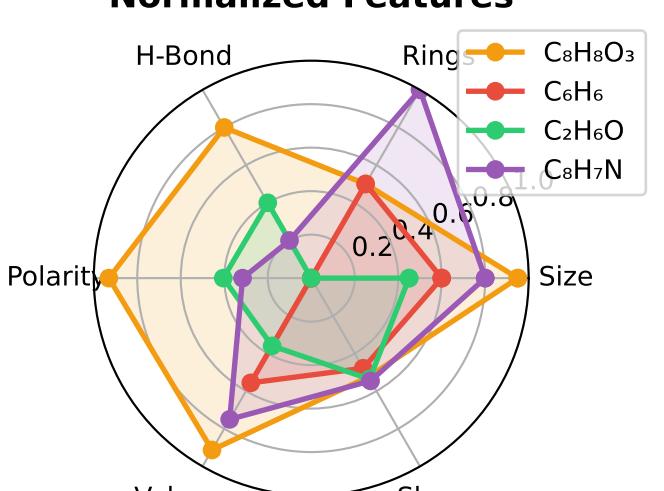
(H) Shape Descriptors



(I) Flexibility



**(J) Molecular Fingerprint Radar
Normalized Features**



MOLECULAR SUMMARY

VANILLIN:
Formula: C₆H₈O₃
MW: 152.1 g/mol
Type: Aromatic aldehyde
Rings: 1 aromatic
H-bond: 1D, 3A
TPSA: 46.5 Å²

BENZENE:
Formula: C₆H₆
MW: 78.1 g/mol
Type: Simple aromatic
Rings: 1 aromatic
H-bond: None
TPSA: 0.0 Å²

ETHANOL:
Formula: C₂H₆O
MW: 46.1 g/mol
Type: Simple alcohol
Rings: 0
H-bond: 1D, 1A
TPSA: 20.2 Å²

INDOLE:
Formula: C₈H₇N
MW: 117.2 g/mol
Type: Bicyclic aromatic
Rings: 2 aromatic
H-bond: 1D, 0A
TPSA: 15.8 Å²

KEY FEATURES:
✓ 4 diverse molecules
✓ 30+ descriptors
✓ Categorical signatures
✓ Zero backaction ID