

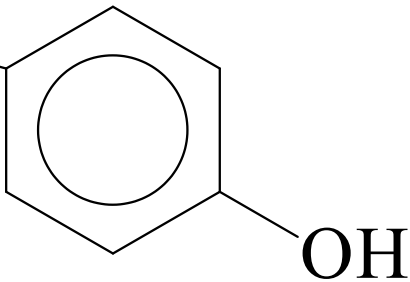
# Polar R-groups

serine  $-\text{CH}_2-\text{OH}$

asparagine  $-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{NH}_2$

threonine  $-\underset{\text{OH}}{\text{CH}}-\text{CH}_3$

glutamine  $-\text{CH}_2-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{NH}_2$

tyrosine  $-\text{CH}_2-$    $-\text{OH}$

cysteine  $-\text{CH}_2-\text{SH}$

tryptophan

