

## **Molecular Structure**

Molecular structure refers to the three-dimensional arrangement of atoms in a substance. Living systems can produce complex molecules that are not observed in abiotic systems. For example, the presence in a sample of a complex polymer with repeating units (monomers), or with a repeating charge (i.e., polyelectrolyte) could be indicative of biological synthesis. Some monomers are also sufficiently complex that their presence alone could point to a biological source, such as the proteinogenic amino acids tryptophan and phenylalanine, or sugar monomers with five or more carbons in their structure.