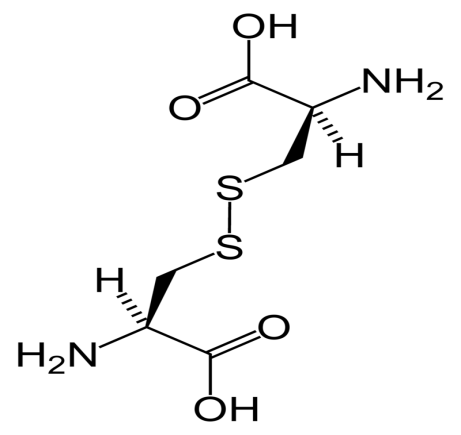
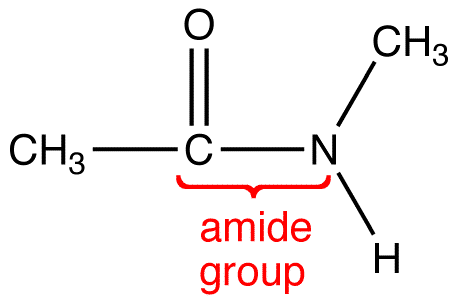
**Cystine** is the oxidized dimer form of the [amino acid](https://en.wikipedia.org/wiki/Amino_acid) [cysteine](https://en.wikipedia.org/wiki/Cysteine" \o "Cysteine) and has [formula](https://en.wikipedia.org/wiki/Chemical_formula) (SCH2CH (NH2) CO2H)2 . It is a white solid that is slightly soluble in water. It serves two biological functions, a site of [redox](https://en.wikipedia.org/wiki/Redox" \o "Redox) reactions and a mechanical linkage that allows proteins to retain their [3-dimensional structure](https://en.wikipedia.org/wiki/Protein_tertiary_structure).

[**Dimer** is](https://en.wikipedia.org/wiki/Dimer_(chemistry)) a chemical structure formed from two similar sub-units.



[**Amide**](https://en.wikipedia.org/wiki/Amide) **group=amide** is an organic functional group characterized by a carbonyl group linked to a nitrogen atom.

**Polar molecule** when the arrangement of the atoms is such that one end of the molecule has a positive electrical charge and the other end has a negative charge. A polar molecule forms when an atom of high electronegativity bonds with a less electronegative atom. A polar molecule has electrical poles.

**Polymerization** any process in which relatively small [molecules](https://www.britannica.com/science/molecule), called [monomers](https://www.britannica.com/science/monomer), combine chemically to produce a very large chain like or network [molecule](https://www.britannica.com/science/molecule), called a [polymer](https://www.britannica.com/science/polymer).

**A biogenic amine**: They are basic [nitrogenous](https://en.wikipedia.org/wiki/Nitrogenous) compounds formed mainly by [decarboxylation](https://en.wikipedia.org/wiki/Decarboxylation" \o "Decarboxylation) of [amino acids](https://en.wikipedia.org/wiki/Amino_acids). **Monoamines** (also known as "biogenic amines") include three classes of neurotransmitters:

* Catecholamines : Dopamine (DA), norepinephrine (NE, also called noradrenaline) and epinephrine (E, also called adrenaline)
* Serotonin and Melatonin.
* Histamine has been recognized as a neurotransmitter in the CNS, as well as a pro-[inflammatory](https://en.wikipedia.org/wiki/Inflammation) signal released from [mast cells](https://en.wikipedia.org/wiki/Mast_cell) in response to [allergic](https://en.wikipedia.org/wiki/Allergy) reactions or tissue damage. Histamine is also an important stimulant of HCl secretion by the stomach through histamine H2 receptors.

A **biopolymer** is a polymer produced by a living organism.

**Bond lengths** have traditionally been expressed in Ångstrom units, but picometers are sometimes preferred (1 Å = 10-10 m = 100 pm). Bonds lengths are typically in the range of 1-2 Å, or 100-200 pm.   
  
(Source: Boundless. “Bond Lengths.” *Boundless Chemistry* Boundless, 02 Jun. 2016. Retrieved 21 Mar. 2017 )