

hypothetical coal macromolecule. The various features of bridges and side chains are indicated in the figure.

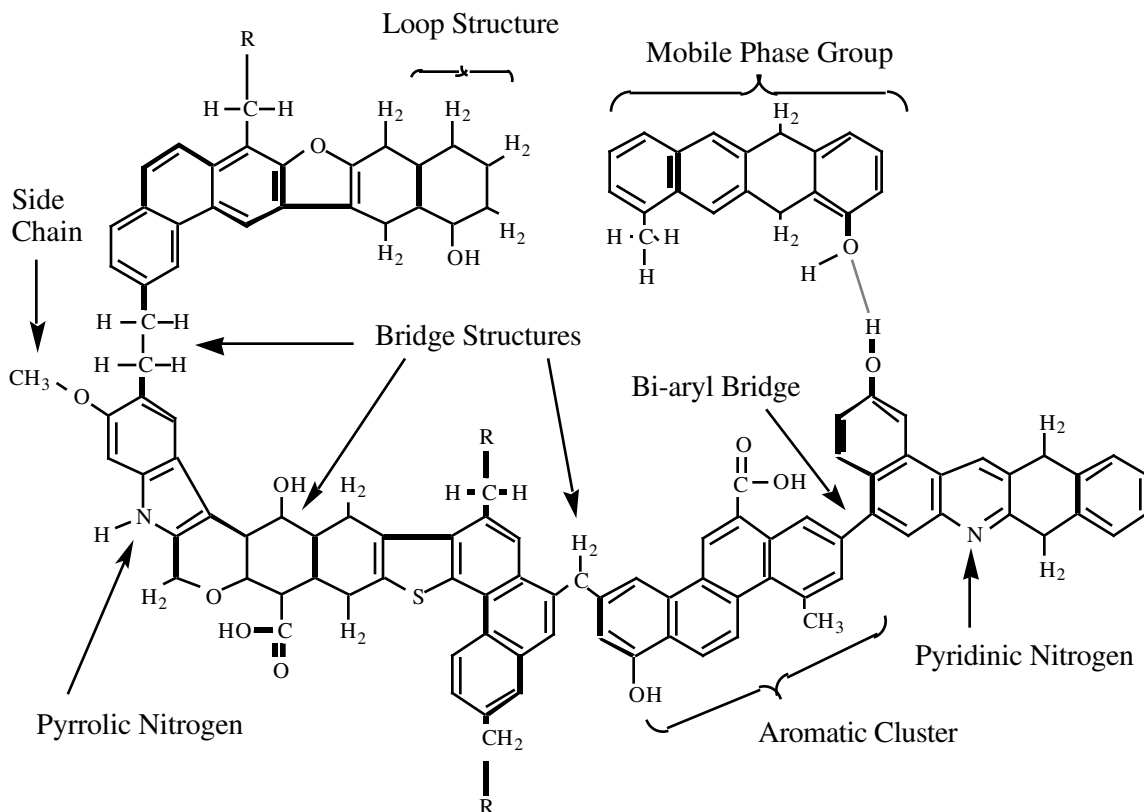


Figure 2.1. A Hypothetical Coal Macromolecule. Modified from Solomon et al.¹⁰

There is also evidence that a mobile phase exists in coal. This mobile phase is interspersed with the coal macromolecule. This mobile phase is thought to consist of smaller molecular structures that are not strongly bonded to the macromolecule.^{11, 12} The mobile phase is considered to be either (a) trapped in the molecular structure of the coal or (b) weakly bonded to the coal macromolecule with hydrogen bonds or van der Waals type interactions. Figure 2.1 contains a mobile phase group as it is theorized to exist in the coal.