

Rosalind Franklin, Still Guiding the Development of Carbon Based Materials

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In 1951, Rosalind Franklin wrote one of the seminal papers describing the structural evolution of carbonaceous materials as a function of temperature. In her description of the carbonization of graphitizing and non-graphitizing carbons, she developed a pictorial model of the graphitic grain growth that still guides the research and development of new carbon materials today. In this session I will describe the Franklin model of non-graphitizing carbons and how it has been modified in subsequent years by researchers such as Jenkins and Harris. I will then conclude with a brief discussion on how the ideas put forth by Rosalind Franklin in 1951 provide insight into the structural motifs present in carbonaceous gas separation membranes formed from the carbonization of polymeric precursors.