

Frank D. Guffey, Ph.D.
Vice President
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Dr. Guffey received his Ph.D. in chemistry from the University of Wyoming in 1977 and has been employed by Western Research Institute (WRI) since its formation in 1983. During this time he has conducted independent research and has been an active member of several team efforts involved in research and process development projects. His major area of expertise is the chemistry and application of thermal conversion processes for upgrading a variety of resources. His work as a process chemist has addressed issues in technology development for resources including; heavy oil/bitumen, alternate fossil fuels, biomass and municipal wastes.

Prior to the formation of WRI, he was employed by its predecessor organizations including the Bureau of Mines and Department of Energy as a mass spectroscopist. His work in this field included analysis of fossil fuel related samples, instrument maintenance, and instrument modification. He has applied mass spectrometry to the analysis and evaluation of hydrocarbon based fuels, alternate fossil fuel resources, pyrolysis products from fossil conversion, trace components in fuels, organic contaminants in process waters, and real time analysis of thermal processes.

He now directs the research and development efforts of the Sustainable Emerging Technologies business unit with the goal to advance technologies from proof of concept bench scale experiments through reducing the technology to practice with pilot scale studies.