



GREEN CHEMISTRY/ENGINEERING – PRACTICAL IMPLEMENTATION

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Industrial application of the principles of green chemistry and green engineering are fundamental to our path to a sustainable future. The ACS Green Chemistry Institute (ACS GCI) has as its mission to advance the implementation of green chemistry and engineering principles into all aspects of the chemical enterprise. To achieve this mission, ACS GCI works in several strategic areas: research, education, industrial implementation, international collaboration, communication and policy advocacy. In this presentation, the new Director of the Institute will present a brief overview of the ACS GCI and its activities. The focus will then shift to new technologies that have been reduced to practice, economic benefits that help drive decision making at the corporate level as well as opportunities for IUPAC members to become engaged and benefit from the ACS GCI programs currently undergoing expansion.

Since the green chemistry movement began in the early 1990's, there are a growing number of real world examples of green chemistry, such as: new adhesives that mimic nature while eliminating hazardous chemicals like VOCs, redesigned pathways to important pharmaceuticals that significantly reduce the use of hazardous chemicals, solvents and generation of waste, and other consumer products that feature greener components and production. A number of these examples will be presented, with an interactive discussion of factors that will facilitate the ability of industries to utilize new green technologies or products. In addition, the evolution of more sophisticated environmental standards will be discussed and a specific example will be presented.