

Design and Optimization of Eco-Friendly Chemical Processes for Sustainable Industrial Applications

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Abstract: *This presentation highlights how environmentally friendly and selective chemical processes and products have been developed as a result of the use of sustainable and green chemistry ideas. Throughout the course of the product's life cycle, this method uses cutting-edge techniques and technology to reduce harmful impacts on the environment, save resources, and advance health and safety. Through the use of catalysis, renewable feedstocks, and efficient reaction pathways, these technologies aim to achieve high yields and selectivity while minimizing energy use and waste creation. In addition, the development of novel products with improved performance and reduced environmental effect demonstrates the chemical manufacturing sector's commitment to sustainability. This abstract embodies the spirit of a progressive trend toward safer, more environmentally friendly chemical processes, which will contribute to the development of a resilient and environmentally conscious future*

Keywords: Eco-efficient, selective chemical processes, sustainable chemistry, green chemistry