

Flow Chemistry: Enhancing Safety, Accelerating Processes, and Optimizing Quality & Yield

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Abstract: Green Chemistry aims to minimize the release of chemical pollutants into the environment by promoting sustainable and eco-friendly practices. The Chemistry and Environmental Division of EuChem has recognized Green Chemistry as a key area of interest; however, its precise positioning within the broader context of chemistry and environmental science remains a subject of discussion. Originally conceptualized by Paul Anastas and John Warner, Green Chemistry is commonly defined by its Twelve Principles. While these principles reflect intuitive and practical sustainability approaches, they lack a clear connection between objectives, fundamental concepts, and associated research domains. Addressing these gaps, this article explores twelve unresolved questions that are critical for advancing the framework and application of Green Chemistry.

Keywords: Green Chemistry, sustainability, environmental science, chemical pollution, Twelve Principles, Paul Anastas, John Warner, research challenges, eco-friendly chemistry, sustainable synthesis

