

Exploring Catalytic Space

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Organometallic reagents and transition metal catalysts are continuously at the frontier in the search for novel reactivity and synthetic methodology. Controlling chemo- and stereo-selectivity and low E-factor methods offer major challenges while novel approaches toward dynamic functions controlled by catalysis and transformations in aqueous media emerge. In this lecture various approaches to address these challenges will be discussed. Specific topics will be catalytic enantioselective allylation, Murahashi-Feringa cross coupling with organolithium reagents, sustainable low-E-factor transformations and adaptive catalysts.