



Sharda
Pasricha(Sharda
Jaspal)

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Deep Eutectic Solvents (DESS): Emerging viable solvent systems for transition-metal-catalyzed cross-coupling reactions

Authors Sharda Pasricha, Pragya Gahlot, TM Rangarajan, Harsh Pahuja, Divya Yadav, Khushboo Pilonia, Sachid Anand

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Description The worth of solvents in organic synthesis is often underestimated and misunderstood. The utilization and introduction of newer solvents are encouraged over traditional solvents. Thanks to green chemistry regulations, they are becoming increasingly reported for cross-coupling reactions and all other organic reactions. Deep eutectic solvents (DESS) have become a trend in the current green millennium and are worth exploring for their role in cross-coupling reactions. A brief overview of the history, classification, methods of preparation, and applications of DESS towards cross-coupling reactions are deliberated; the appropriate explanations from the Hole theory are used to explain the efficiency of these esoteric media and the catalysts in cross-coupling reactions. The crucial accomplishments relating to the multiple roles of DESS, like a catalyst, solvent, nucleophile, substrate, or ligand, are highlighted through the ...

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