

Title: Enhancing Process Yield of a Continuous Stir Tank Reactor for a reaction with Low-Single-Pass conversion in a fixed volume system

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Abstract (250-300 words)

Using a novel reactor network arrangement, the process yield of a polyvalent granular solid particles conversion reaction was improved multi-folds to increase revenue while minimizing time to market, cost (both CapEx and OpEx), volume and space when compared to the traditional use of recycling streams in an industrial application. This novel arrangement integrated the use of a decoupled three stage solid-liquid contact reaction steps involving Plug Flow and Column Tray reactors embedded in a CSTR freeboard volume.

Biography(100-150 words)

After 16 years of postgraduate work experience and a Master degree, Michael won the prestigious Australian Postgraduate Scholarship Award in 2008 for his Chemical Engineering PhD during which he pioneered a novel system for controlled synthesis of Nanoparticles. He is a Chartered and a Professionally Registered Engineer, a Senior Member of the AIChE and a Member of the AusIMM. He currently serves as expert Reviewer for several journals; authored 16 research articles, two book chapters and one book.

Michael is the Group CEO of MKPro group of companies focusing on Process— Technologies, Development and Innovations, Design, Management, and Operational Optimisations.

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