

Graphical Abstract

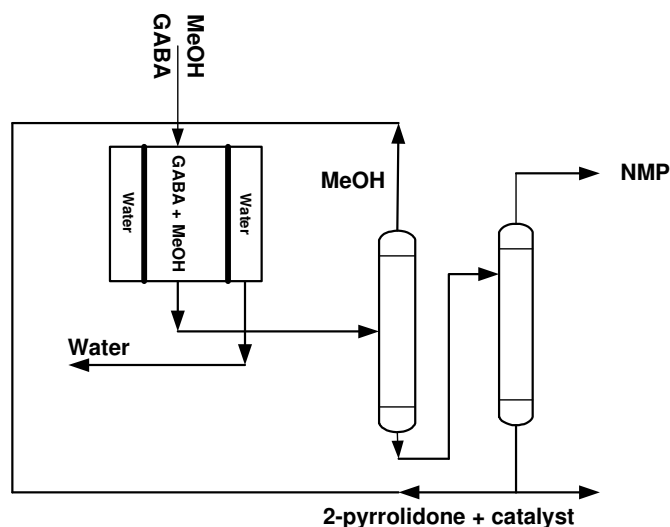
Potential Applications of Zeolite Membranes in Reaction Coupling Separation Processes

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The figure shows an intensified unit involving the use of an inert zeolite catalytic membrane reactor (IZCMR) equipped with water selective membrane as the separation unit during the cyclization and methylation of γ -aminobutyric acid (GABA) with methanol (MeOH) to N-methylpyrrolidone (NMP) .