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Supplementary Materials to “Learn-To-Design: Reinforcement Learning-Assisted Chemical Process Optimization”

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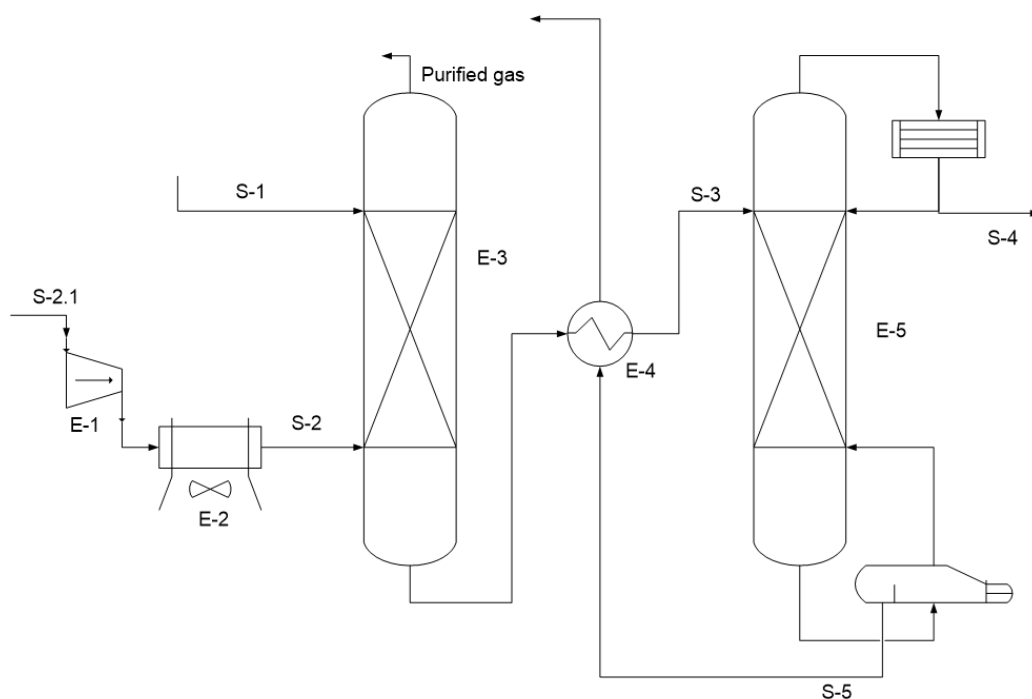
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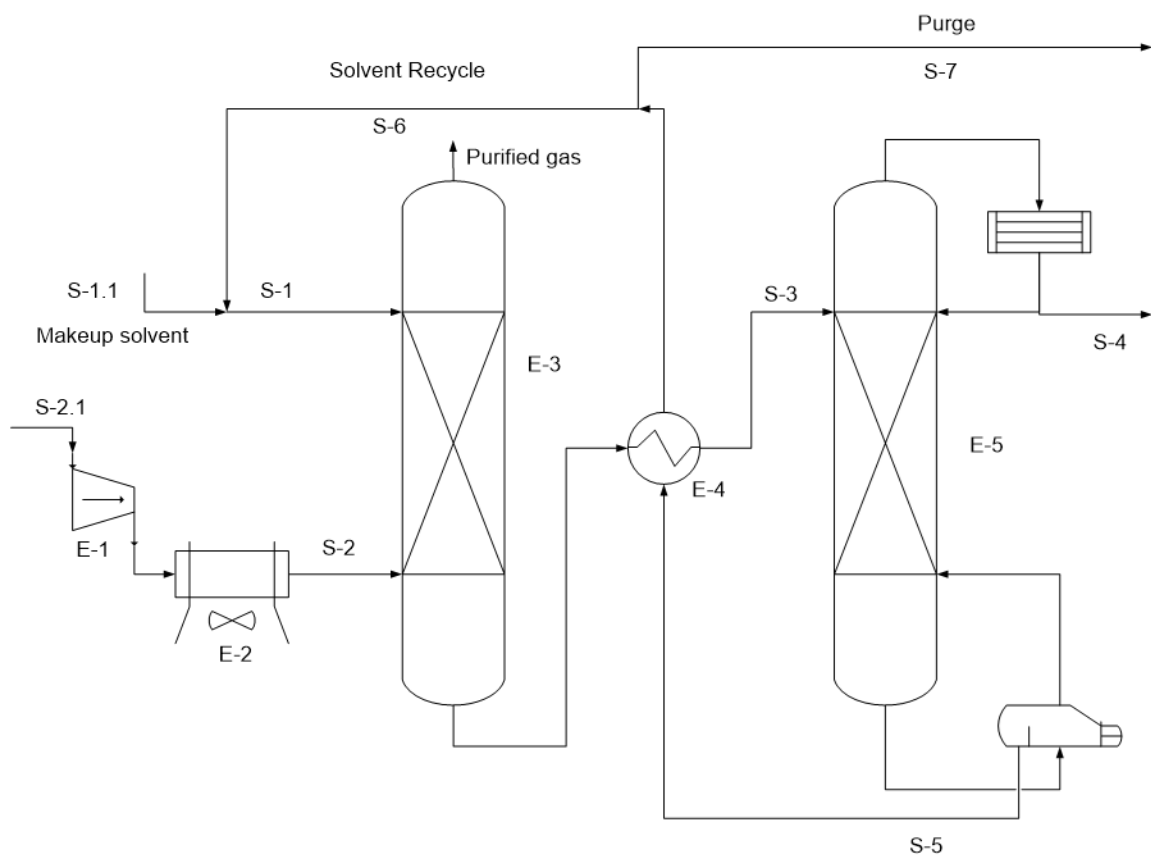
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Code	Equipment
E-1	Compressor
E-2	Air Cooler
E-3	Absorption Column
E-4	Heat Exchanger
E-5	Stripping Column

Figure S1: Process flow diagram (ammonia-water system)



Code	Equipment
E-1	Compressor
E-2	Air Cooler
E-3	Absorption Column
E-4	Heat Exchanger
E-5	Stripping Column

Figure S2: Process flow diagram (MEA-based CO₂ Capture system)

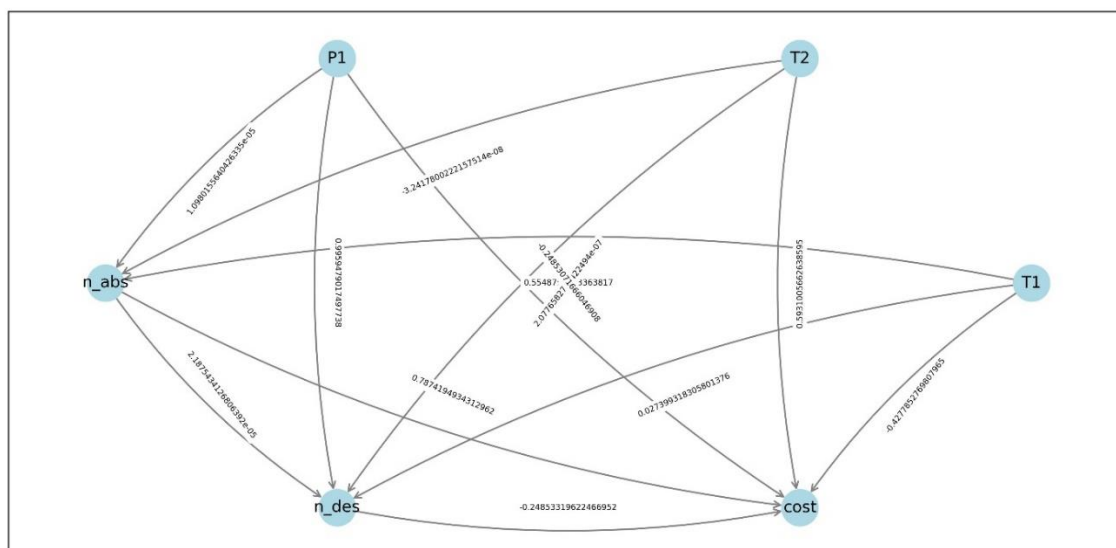


Figure S3: Causal graph based on Bayesian causal discovery and inference (ammonia-water system)

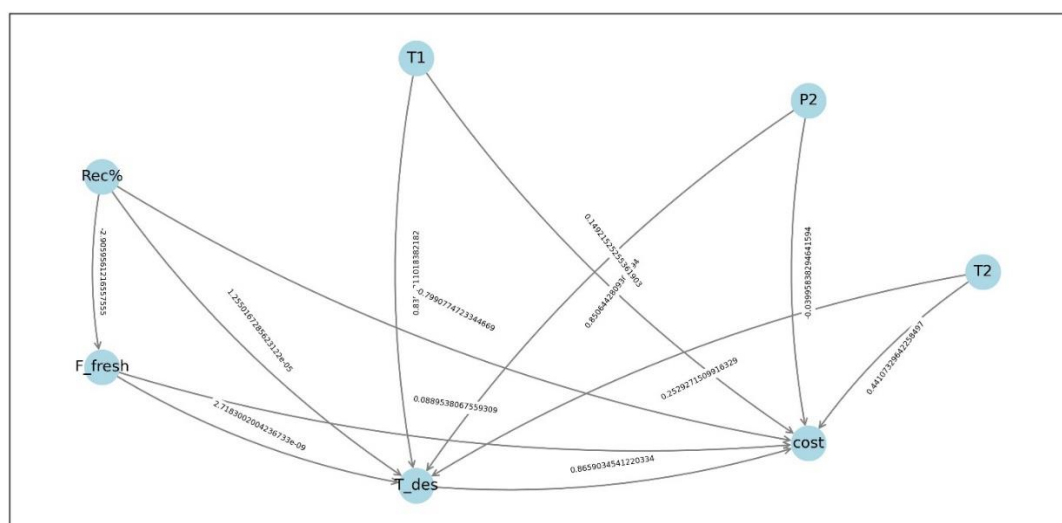


Figure S4: Causal graph based on Bayesian causal discovery and inference (MEA-based CO₂ Capture system)