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Ses Sequestration of Carbon Dioxide with Simultaneous Production of Succinic Acid by Metabolically Engineering Escherichia coli





Prof. Mark A. Eiteman

What characteristics should a biological proce to "sequester" CO₂ have?

- 1. have a high rate of CO_2 utilization.
- 2. generate a co-product.
- 3. be able to use readily available sources of CC

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Sequestration of Carbon Dioxide with Simultaneous Production of Succinic Acid by Metabolically Engineering *Escherichia coli*





- How fast can CO_2 be utilized?
- What conditions are necessary for cell growth/CO₂ utilization?
- How long can succinate production/CO₂ utilization be extended?
 - Can gases with a lower concentration of CO₂ including flue gas (containing about 15% CO₂ but also CO, O₂, NO_X and SO_X) be used directly for this process?