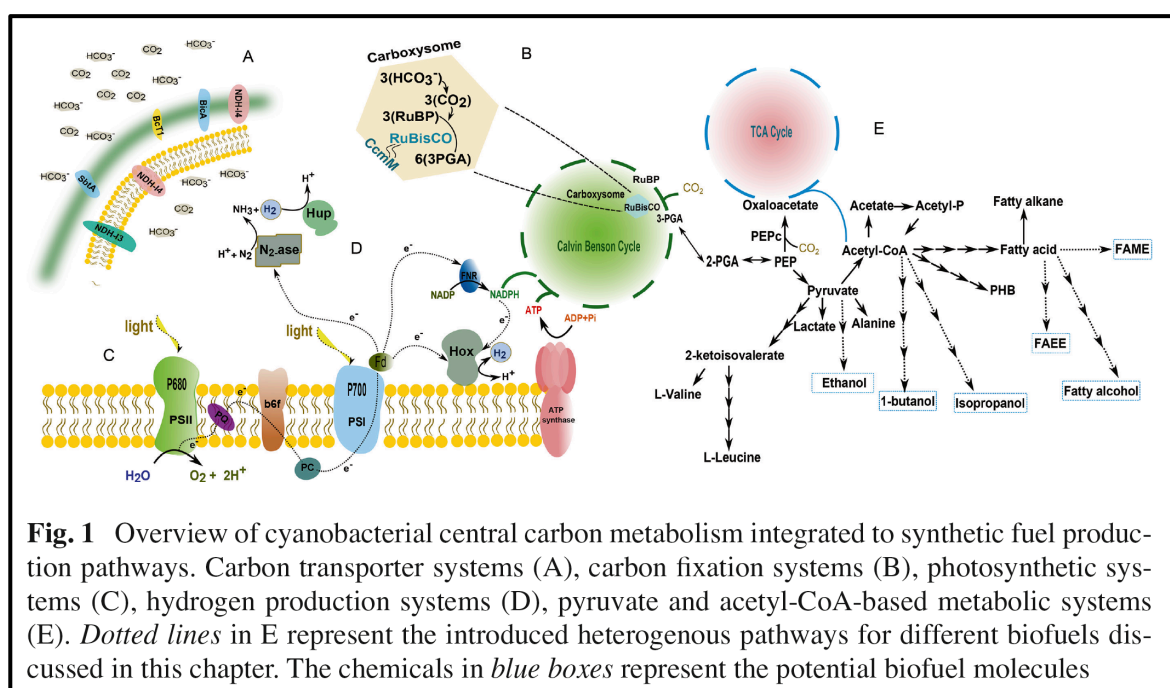


Degree project (*Examensarbete*) or similar at Microbial chemistry, UU

We use cyanobacteria as biocatalysts for renewable and direct production of solar fuels and chemicals. Through advanced genetic engineering we introduce novel capacities, like to produce the alcohol butanol, and delete unwanted functions, like to store energy, with the aim to develop **efficient and direct production of solar chemicals and fuels from CO₂**. We span from basic research through applied projects together with many and diverse partners to projects in direct cooperation with companies. See below for a schematic presentation of core photosynthesis (light reaction, Calvin and TCA Cycles) in cyanobacteria with the introduced capacity to produce selected fuels and chemicals.



Degree projects (*Examensarbeten*) are available in several research areas all aiming to develop cyanobacteria for (i) efficient production of hydrogen and alcohols (butanol etc) in direct processes, (ii) shift between growth and production phases, and (iii) increased CO₂ fixation/growth. Additionally, degree projects are available to set up more applied projects demonstrating efficient solar fuel or chemical production in advanced photobioreactors, some in direct collaboration with private companies.

For more information, see

www.kemi.uu.se/research/molecular-biomimetics/microbial-chemistry/lindblad-group/
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