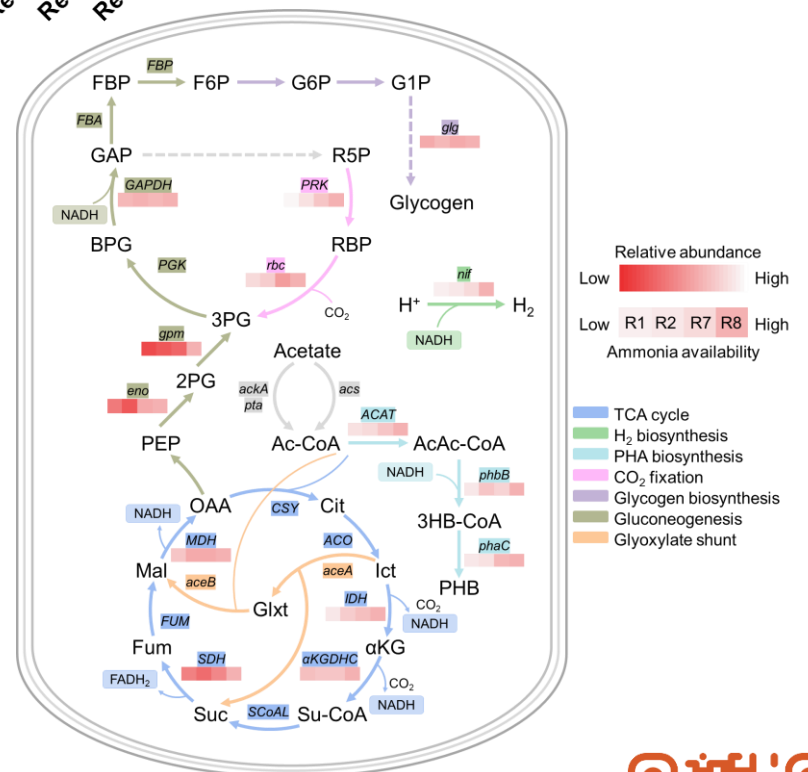
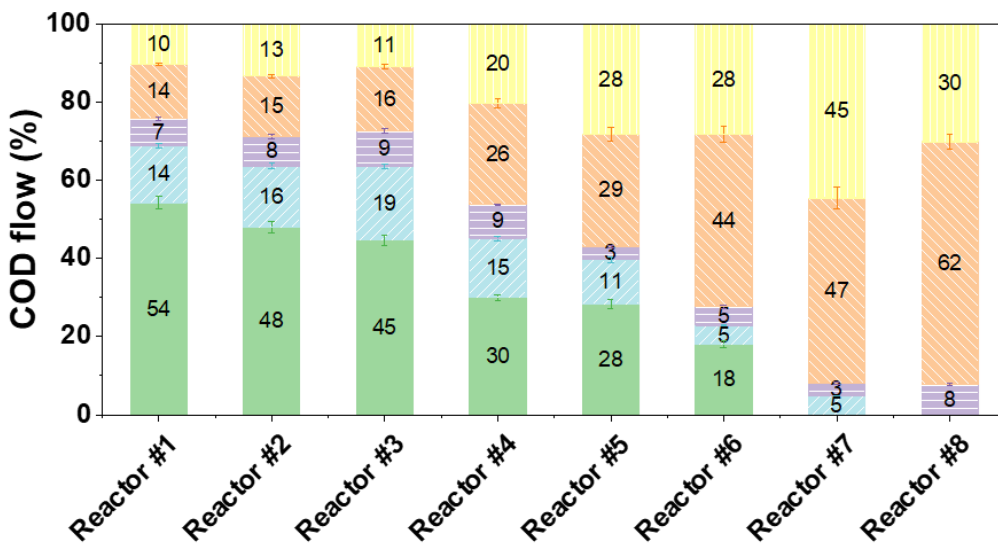
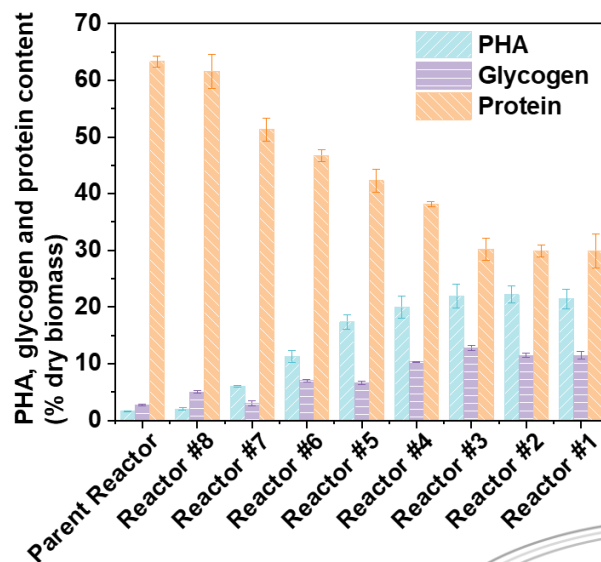
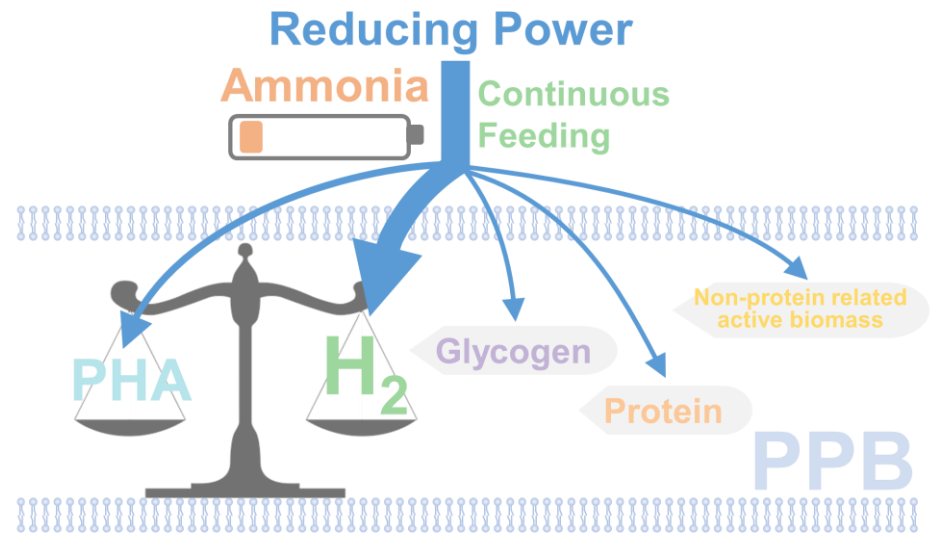


NEWRI INNOVATION

# SUSTAINABLE BIOHYDROGEN PRODUCTION FROM WASTEWATER USING PURPLE PHOTOTROPHIC BACTERIA (PPB)

Transforming waste materials into clean energy

- Low-cost hydrogen production has the potential to replace fossil fuels.
- High hydrogen yield and substrate conversion efficiency (approximately 50%) are achieved.
- Sustainable and stable hydrogen production is maintained through continuous-feeding mode (tested for 80 days).
- Revealing the competing mechanisms of reducing power distribution among H<sub>2</sub>, PHA, glycogen, protein and non-protein related active biomass in PPB aims to enhance hydrogen productivity.



Presented by

Biotechnology and Bioprocesses  
Nanyang Environment and Water Research Institute

