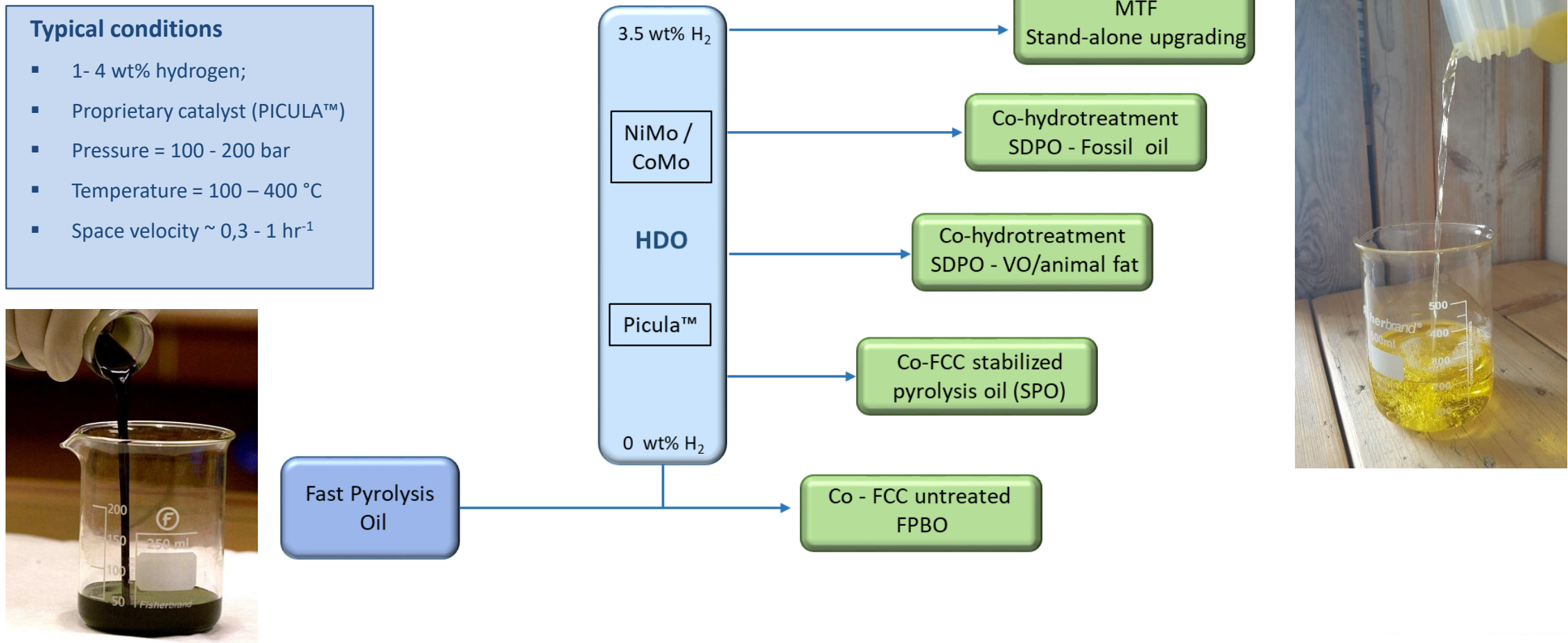




Advanced Biofuels from Pyrolysis Oil

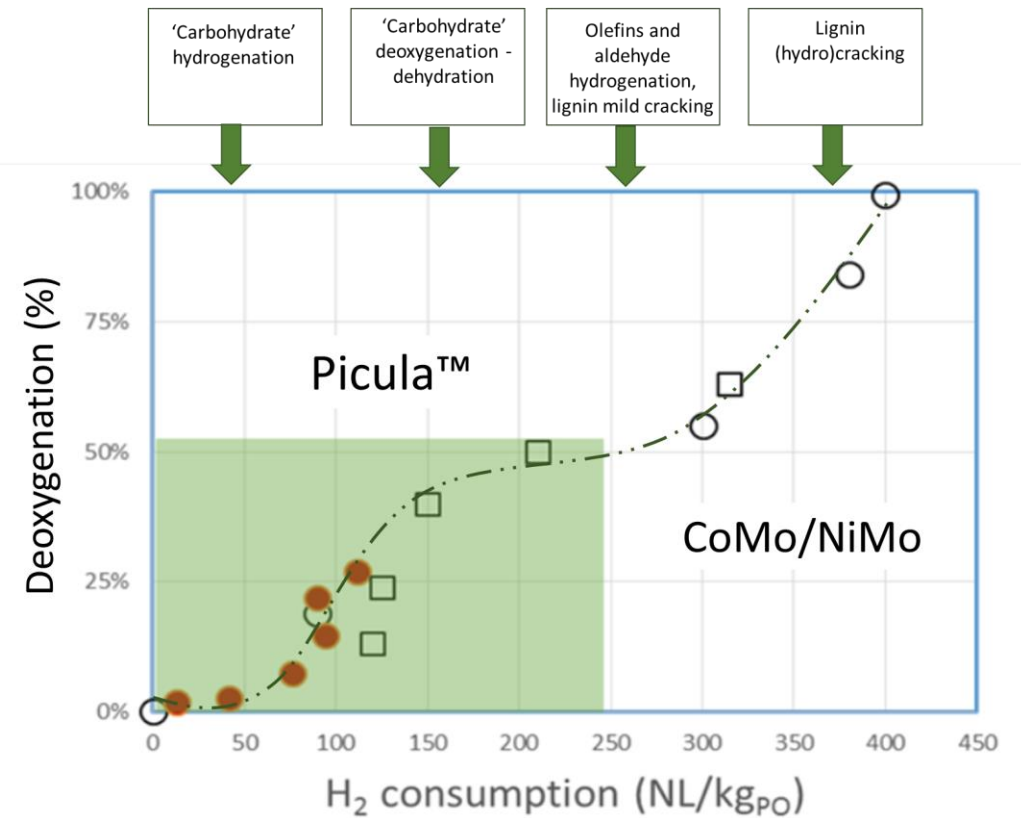
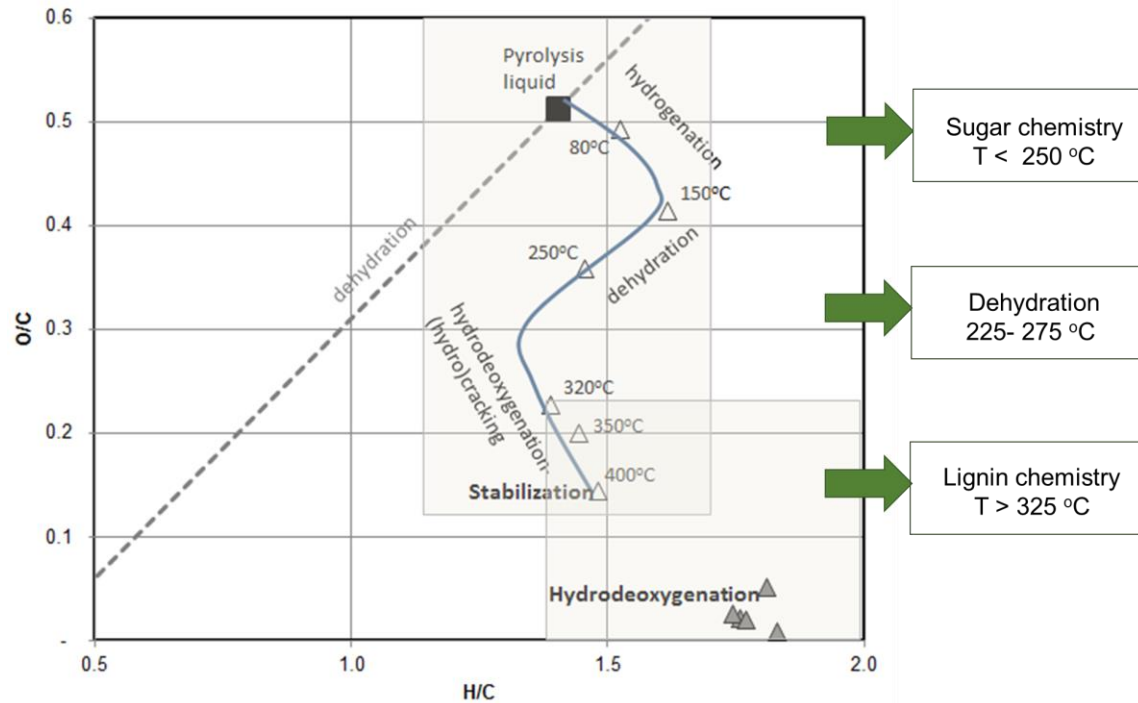
FPBO Application: BioFuels

- FPBO as such not compatible with fossil diesel/gasoline/kerosene;
- Chemical upgrading is required;
- 2-step approach: Step 1: Stabilisation using Picula™ catalysts
Step 2: Further upgrading using commercial catalysts (NiMo/CoMo)

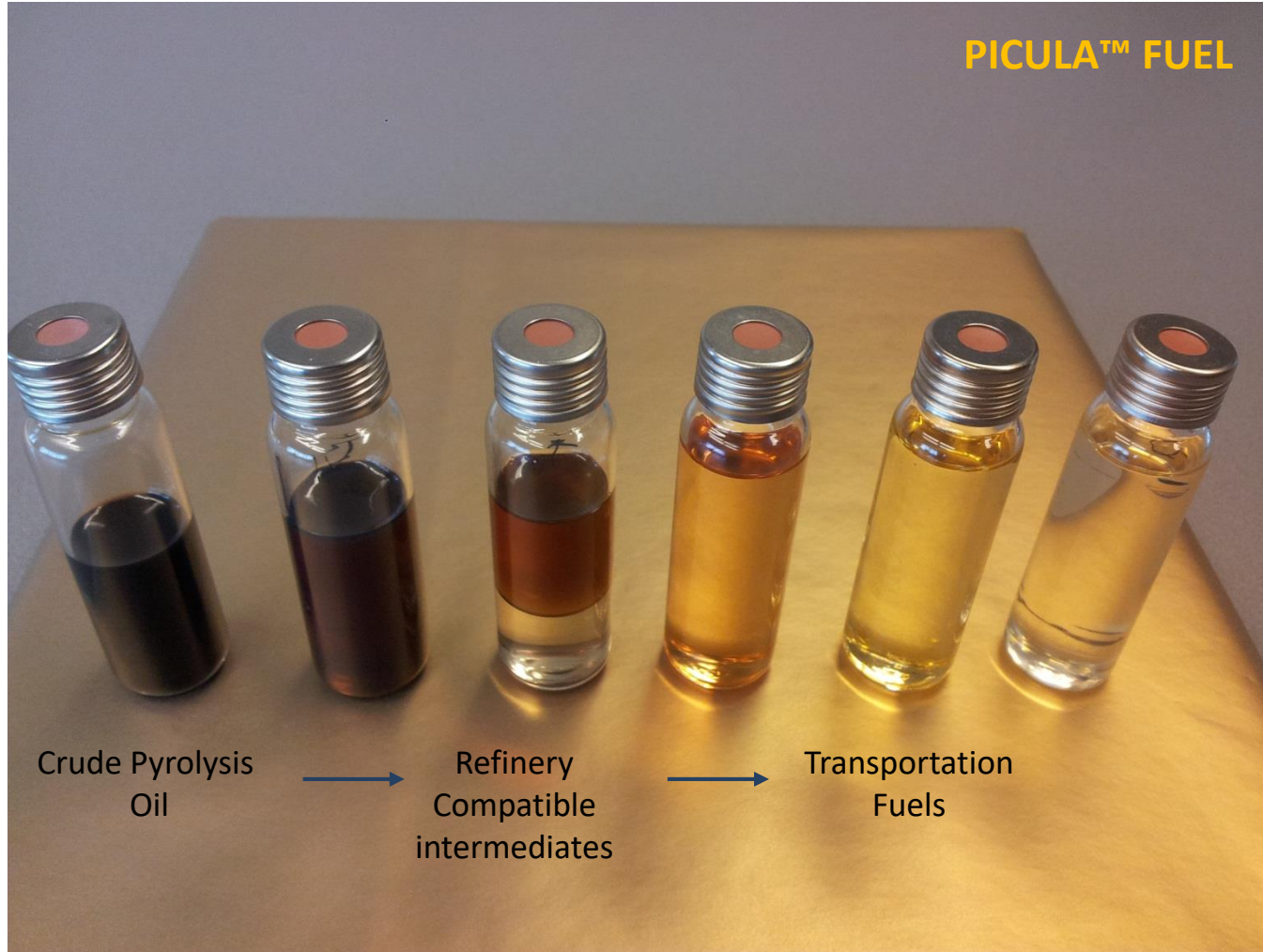


FPBO Application: BioFuels

FPBO upgrading is combination of sugar and lignin chemistry;



FPBO Application: BioFuels



FPBO Application: BioFuels

- ❑ 4 continuous hydrotreaters at lab-scale (~ 1 kg/day)
- ❑ 1 pilot unit (~ 50 kg/day)



50 kg/day catalytic hydrotreater





btg BRF-03 400C

btg MTF Lignin Oil

btg SPO

btg MTF Miscanthus