

Accelerate your catalyst R&D

Broad range of gas and vapor phase applications

- Platforms starting from fossil and biomass feedstocks, CO/CO₂ and methanol conversion to chemicals and fuels
- Hydrogen carrier/transport

Our offering to your challenges & needs

- Best-in-class high throughput technology with up to 64-reactors
- Reduce your R&D timelines
- Obtain timely results on catalyst & process screening
- Extend your in-house testing capacity

Benefits of using Avantium for Contract R&D

- Tap in our extensive experience in these applications
- Suitable for entire R&D development phases – early screening to catalyst selection for commercial operation
- Validated by leading catalyst suppliers and research institutes
- Full integrated online and offline analytics for products

Feedstocks

CO, CO₂



CH₄



Light Alkanes, Olefins



Alcohols like MeOH, EtOH.



NH₃, LOHC



Target Products

Alcohols (MeOH, EtOH)
Hydrocarbons (light olefins, liquid fuels)

Syngas
Light olefins

Olefins, Reforming,
Isom, Transalkylation,
Oligomerization

Hydrocarbons
(light olefins,
aromatics, liquid fuels)

H₂ storage, transport

- Ammonia synthesis
- Amination
- Dry Reforming
- Fischer Tropsch
- Hydrogenation
- Isomerization
- Oligomerization
- Reforming
- Reverse Water Gas Shift
- Transalkylation