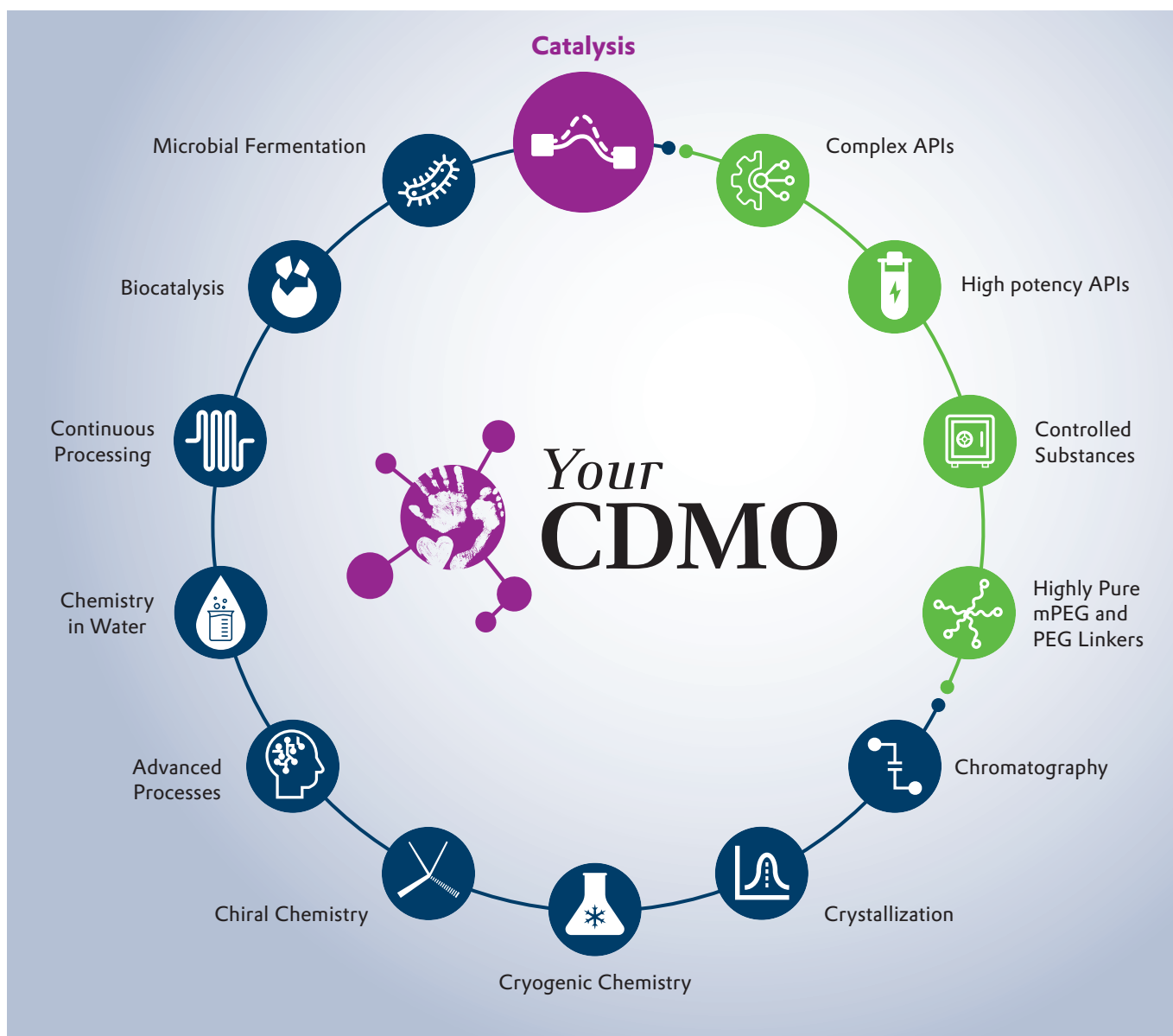


Catalysis

Your experienced partner with a full service offering



- 1 Over 30 years of developing, tailoring and commercializing catalysts
- 2 A complete portfolio of catalyst technology
- 3 Inhouse catalyst production, recycling and refining

CATALYST DEVELOPMENT & PRODUCTION – ALL IN ONE PLACE

From fresh catalyst production to spent catalyst rejuvenation – we cover the full lifecycle.

- 100+ commercial precious metal powder catalysts (Evonik Noblyst®)
- 10+ commercial sponge nickel catalysts (Evonik Metalyst®)
- Custom catalyst design and production
- Catalyst recycling via nanofiltration (Evonik Puramem®)

YOUR COMPETITIVE EDGE

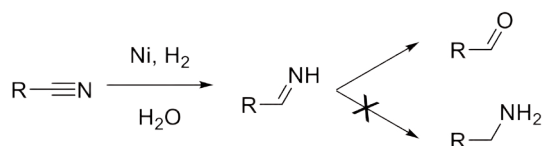
- Superior technology solutions
- Accelerated development timelines
- Reliable, secure supply chain
- Seamless catalyst recovery

FROM DISCOVERY TO SCALABLE PRODUCTION

Our Catalysis Center of Excellence supports the full journey – from lead identification to scalable processes – with advanced screening and scale-up capabilities (HTS well plate to 2.5 L / up to 100 bar).

- Extensive screening library:
 - 1000+ ligands, 200+ metal precursors
- Global cGMP capacity for API & HPAPI:
 - 100 L to 16 m³ (batch, up to 8 bar)
 - Continuous processes up to 100 bar
- Broad reaction expertise:
 - Hydrogenation
 - Reductive amination
 - Cross-coupling
 - Hydroformylation
 - Metathesis
 - Oxidation
 - Dehydrogenation
 - ...and more

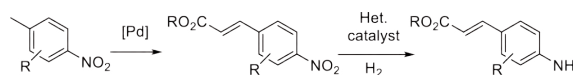
FINE-TUNING SELECTIVITY IN NITRILE REDUCTIONS



Targeting aldehydes via imine intermediates presents a selectivity challenge – over-hydrogenation to primary and secondary amines is a common side reaction.

Through tailored catalyst design and optimized reaction conditions, we achieve high selectivity, purity, and yield.

TAILORED SOLUTIONS FOR COMPLEX AND MULTISTAGE SEQUENCES



Hydrogen starvation can limit reaction efficiency. Maintaining high hydrogen saturation and effective catalyst suspension is critical.

Our solution: an upgraded, on-scale hydrogenator equipped with a two-stage gas-jet agitator – ensuring optimal mixing and performance.

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