



SON

SONCat



Catalysis and Challenges



Market price of Palladium (Pd)

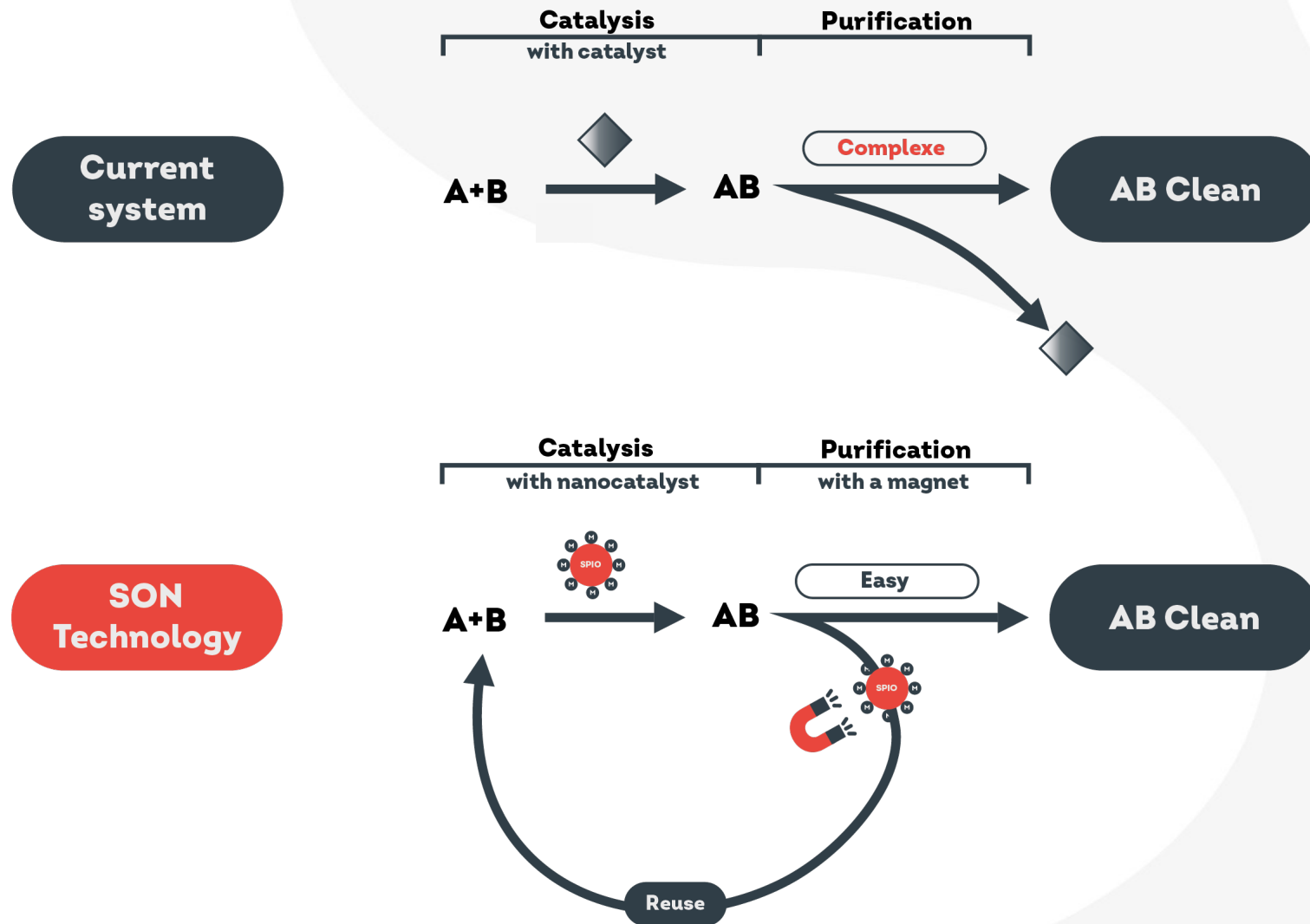
<https://www.cookson-clal.com/cours> - 2004 - 2024 - (euros / kg)

Market issues :

- Costly process
- Rare metals
- supply difficulties
- Non-reusable catalysts
- Polluting chemistry

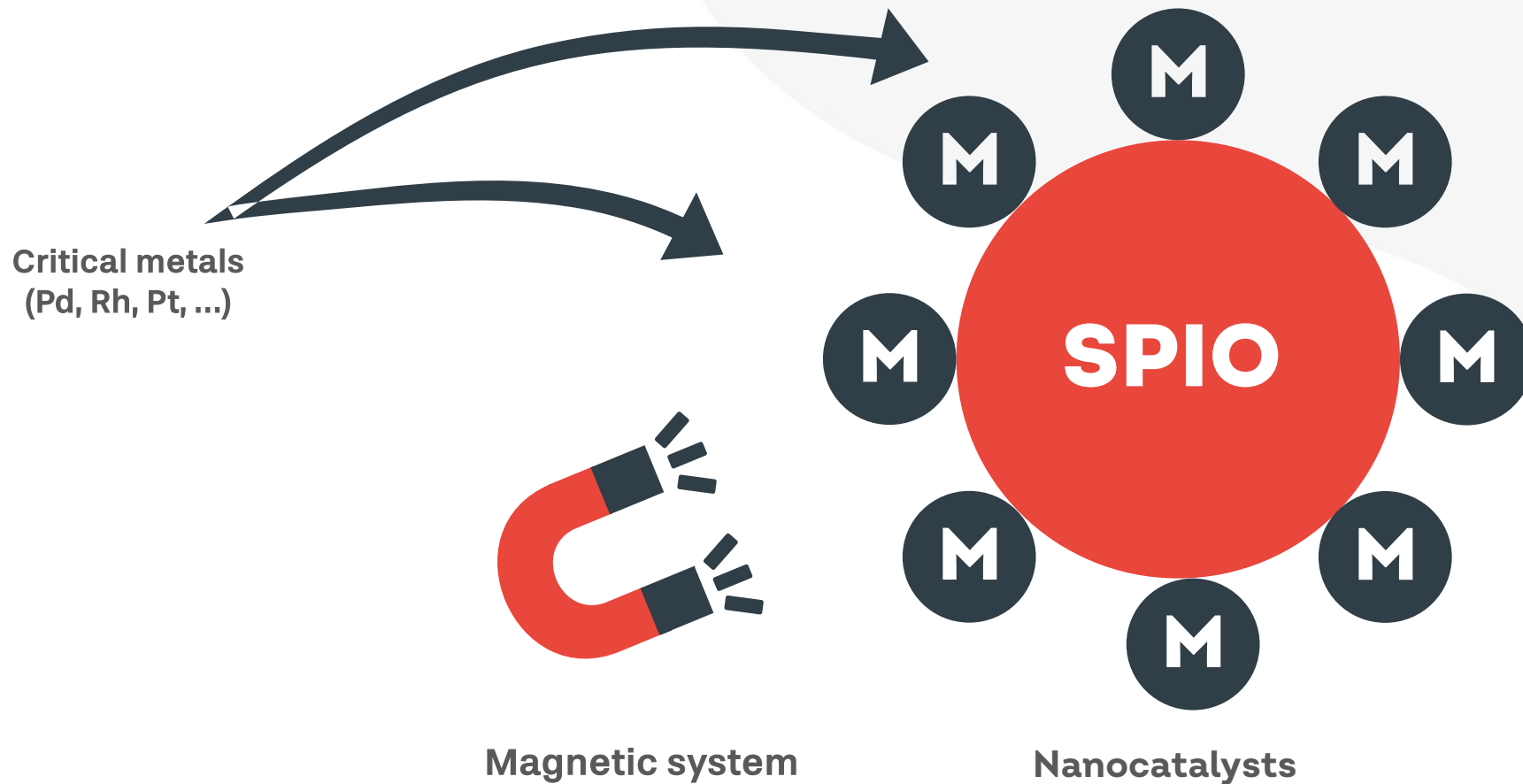


Catalysis and Challenges





Our products: SON nanocatalysts



Magnetic purification





A clear process optimization

100x
Less critical metals

+ 40%
Yield

10
Cycles

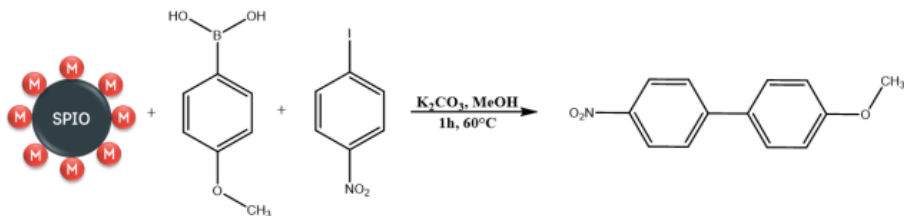
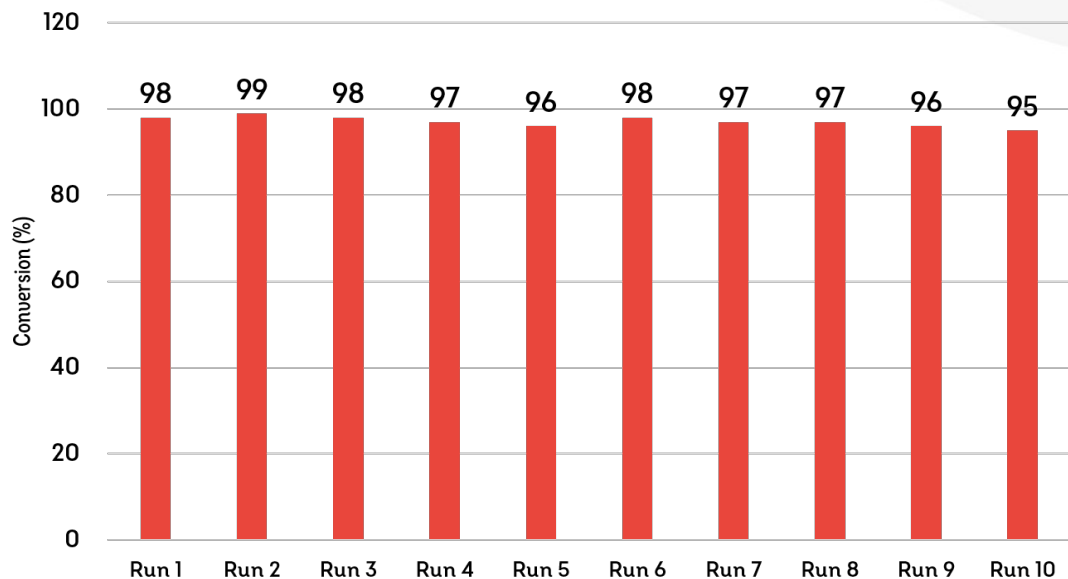
- 90%
Production costs



Exciting results

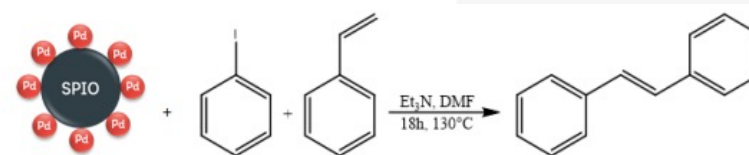
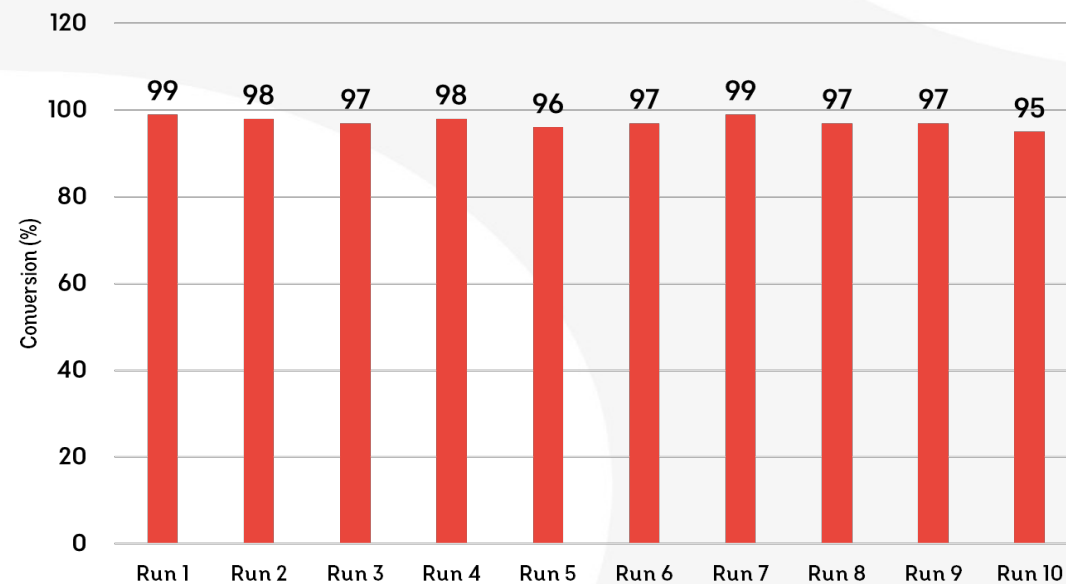
Coupling Palladium - Suzuki

LC-MS results



Coupling Palladium - Heck

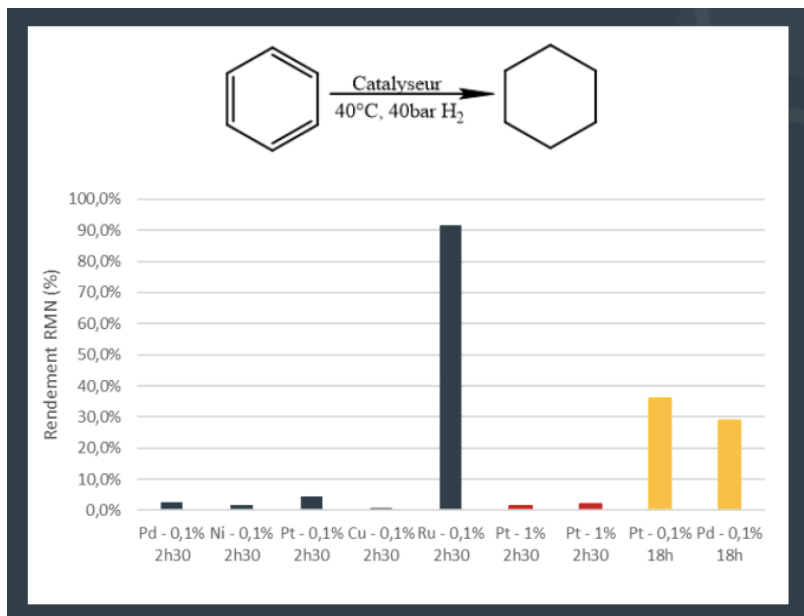
LC-MS results



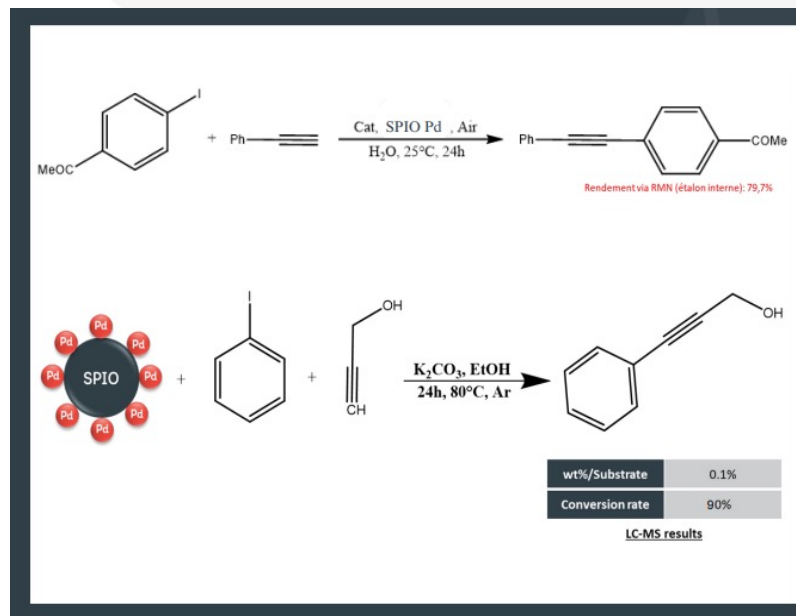


Exciting results

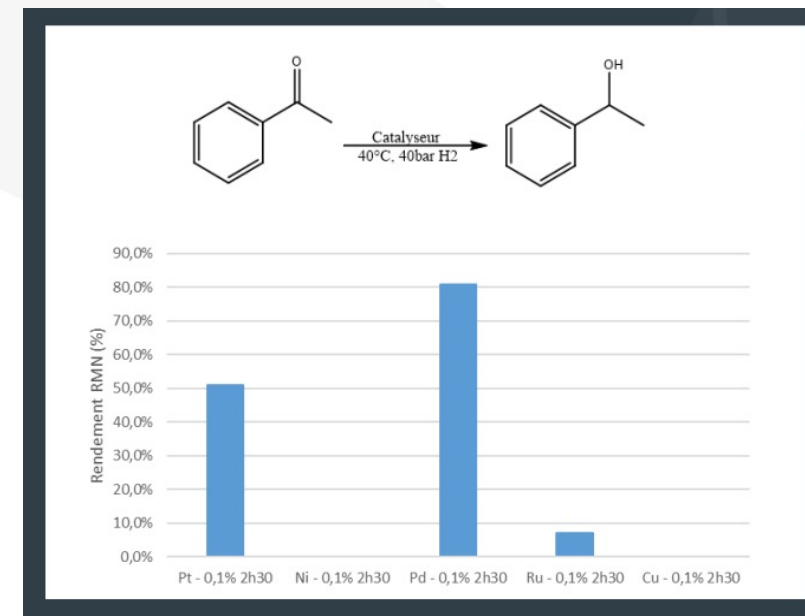
Hydrogenation of benzene



Sonogashira (copper-free)



Reduction of ketones





How can we work together?

On what?

- **Catalysis** (testing phase on the choice of catalysis and metal)
- **Possible reuse** of nanoparticles
- **Recycling** of nanoparticles

And how?

By jointly developing a pilot-program, tailored to your needs, to validate the feasibility of your project.



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