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Albert: A CDT in Autonomous Robotic Systems for Laboratory Experiments

RoboChemist

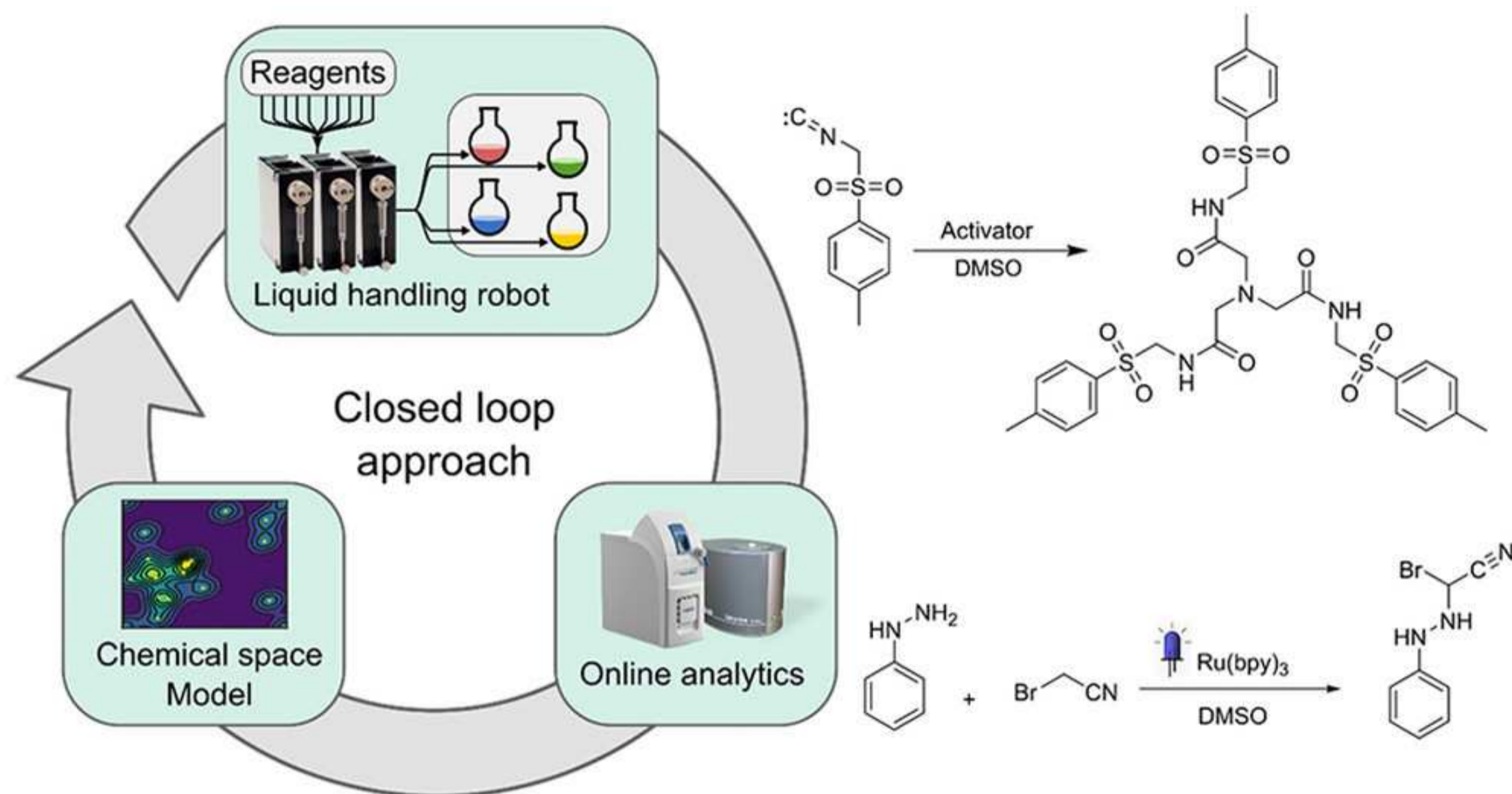
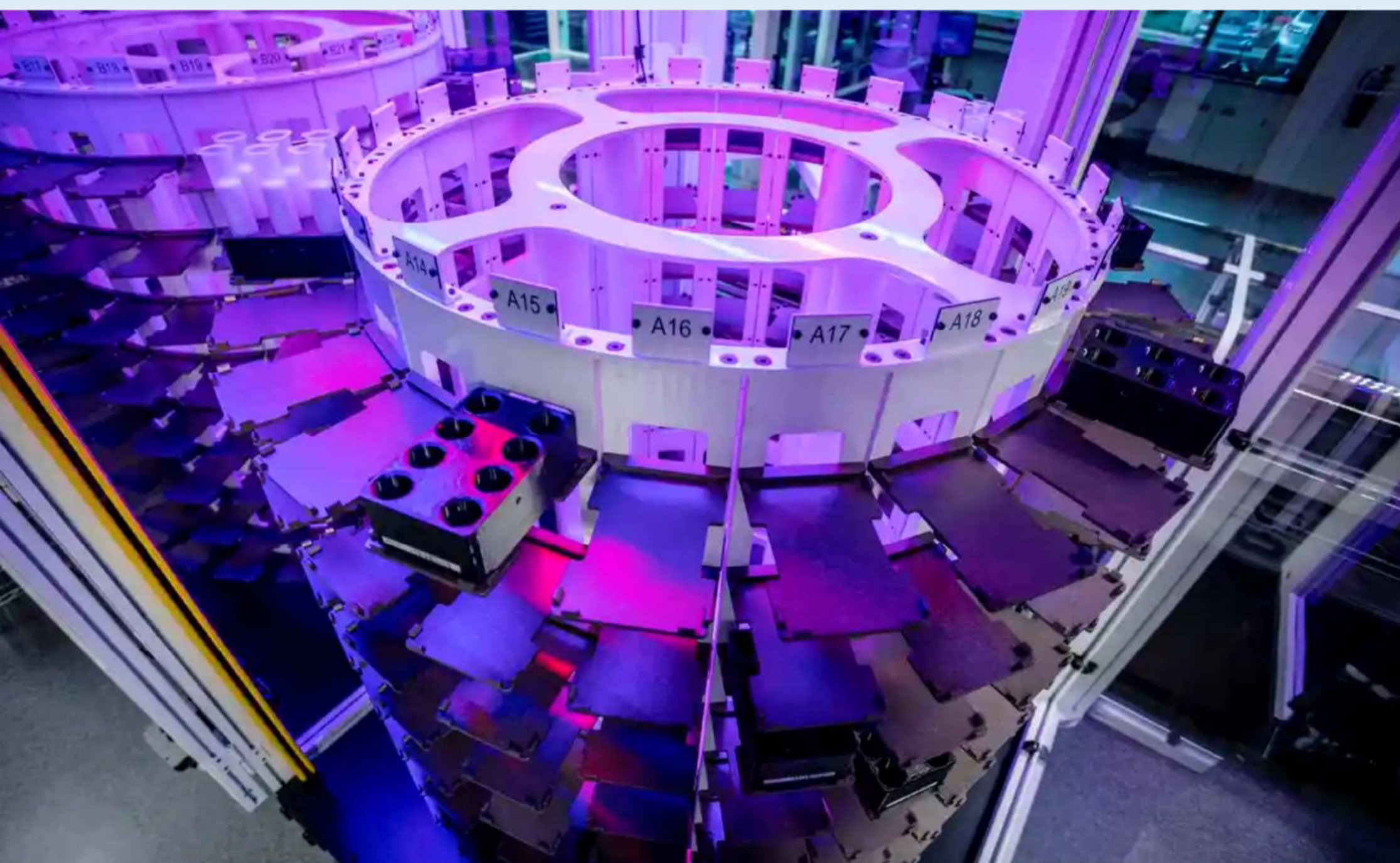
cleaner, greener, cheaper, safer!

Build a machine to synthesise any organic compound

Transform Chemistry

Free Chemistry from its artisanal roots

Replace with high-throughput autonomous
 continuous-flow robotics



Albert Doctoral training centre

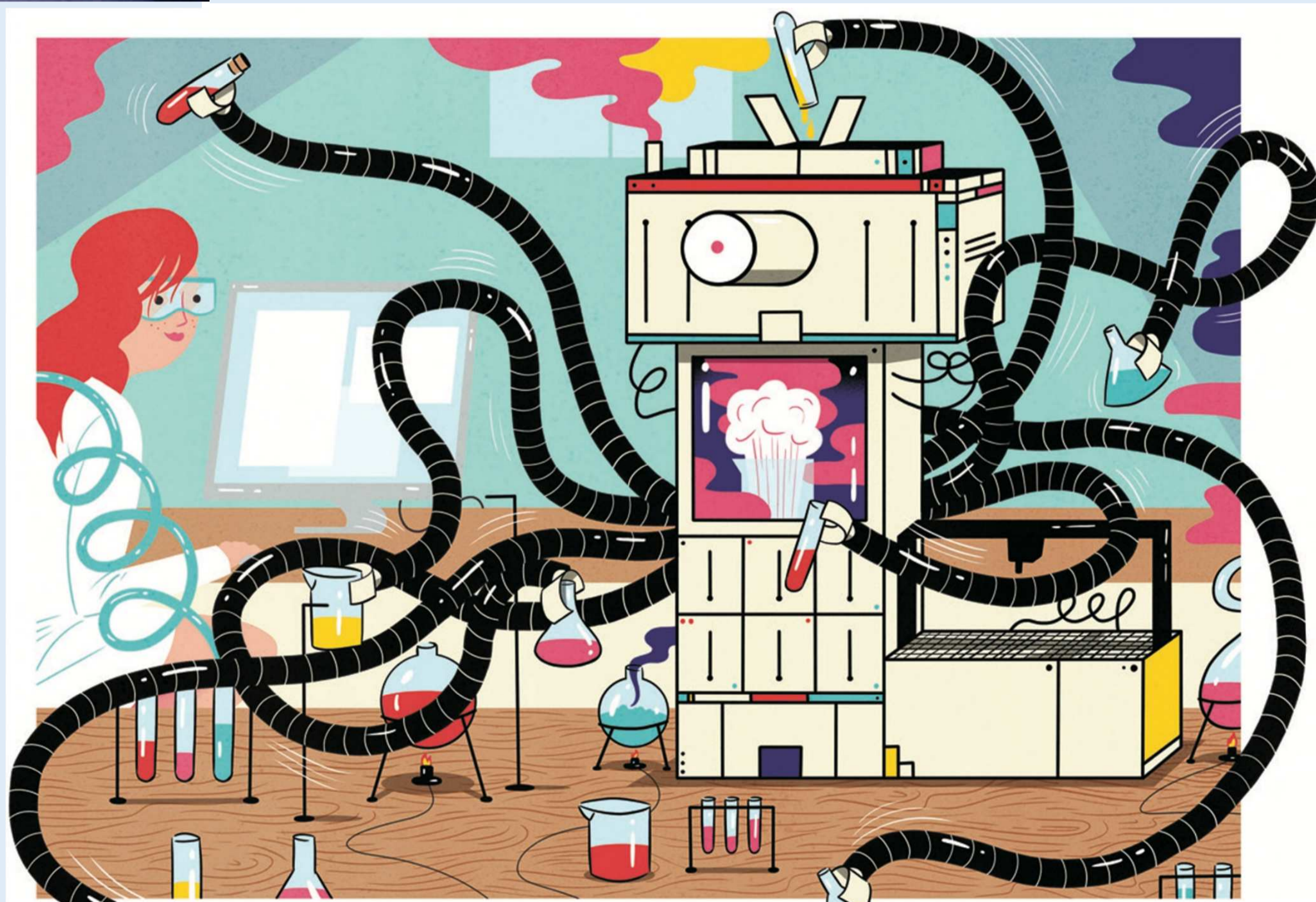
- Great advance in grand challenge for Chemistry
- YorRobots + ISA + 9 departments + 1 School
- Enhance understanding of chemical reactions
- Move liquids, mix them up, hold them for some time, heat them up
- Autonomous experiments

Robo-Chemistry

- Chemistry as a Service: enable the Global South
- Access database of existing molecule synthesis
- Map out synthesis steps
- Autonomously execute steps
- Real reagents in robotic reactors

How to engage?

- Expand industrial involvement
- Not just university chemistry
- Support needed for studentships
- Collaboration for future research



THE ROBO-CHEMIST

