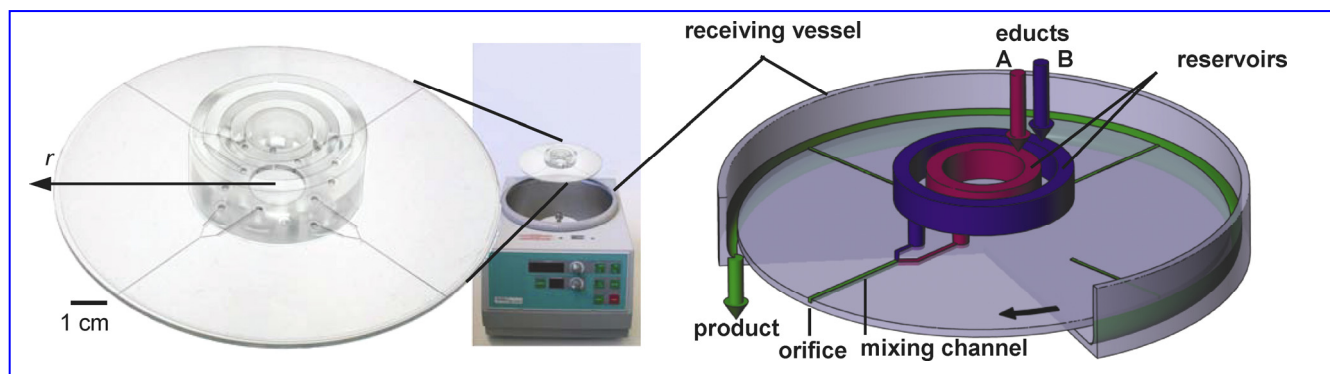


CoMix

Coriolis Microreactor



The mixing module (left) can be operated in a standard lab centrifuge. Liquid educts / reactants are continuously injected into reservoirs mounted on the rotating module where they are contacted and mixed within microfluidic channels. At last, the mixing / reaction product may be expelled in a contact-free fashion towards the stationary receiving vessel (product drainage, shown) or collected on a disk-mounted receiving vessel (not shown).

www.coriolis-microreactor.com

Parameter	Value / Range	Comments
Characteristic <u>mixing time</u>	1 ms	Due to special mixing effect in centrifugal system ("Coriolis stirring")
<u>Throughput</u> per channel <u>Throughput</u> per mixing-module	0 – 60 ml/min 0 – 6 l/min	Numbering-up of several identical microchannels
<u>Residence time</u> in microchannel	< 100 ms	The residence time can be extended by ejection into a conventional stirred tank
<u>Volume</u> for batch-process	0.1 – 15 ml	For testing reactions at minimized reactant consumption
<u>Pre-tempering</u> of liquid reactants	< 70°C	Preheating in continuous operation mode
Channel <u>materials</u>	polymers glass, metals	Basically any material that can be precision machined
Fluidic systems	Liquid-liquid Immiscible liquids Gas-Liquid	Fast reacting Monodisperse emulsions Foams / gas-liquid contacting
Rotational frequencies	< 120 Hz	Limited by maximum spinning frequency of rotary drive unit