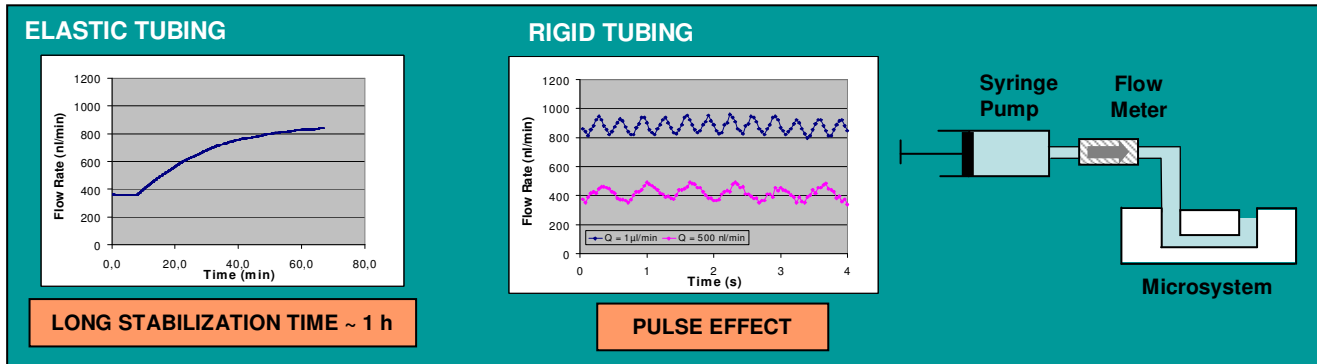


PRESSURE CONTROL VERSUS SYRINGE PUMP

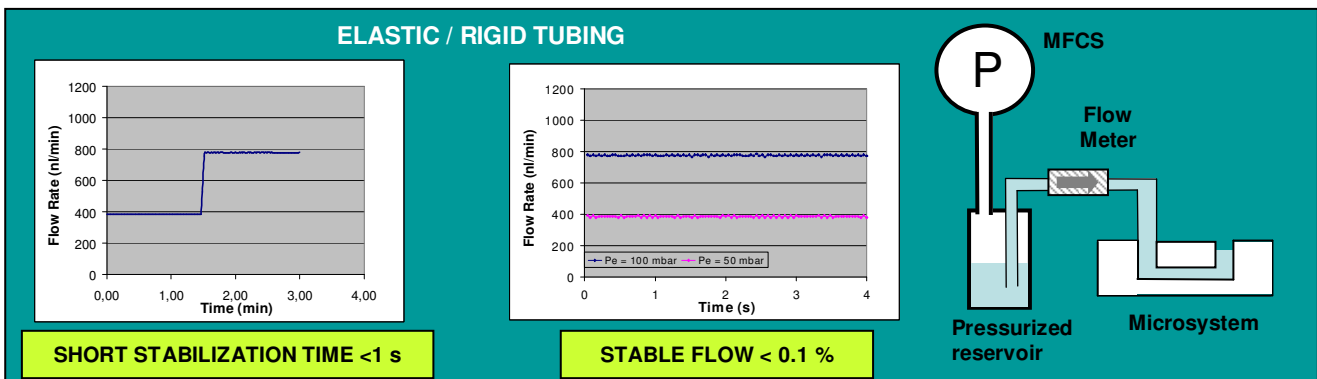
THE MFCS: A PULSE FREE AND HIGHLY REACTIVE MICROFLUIDICS CONTROL SYSTEM

Current fluid manipulation systems such as syringe, peristaltic or piston pump are poorly adapted to the manipulation of fluid volumes in the nanoliter range, leading to hysteresis, long equilibration times, irreproducibility and pulsing. The MFCS (Microfluidic Control System) that accurately controls the pressure is a solution to these problems.

SYRINGE-PUMP

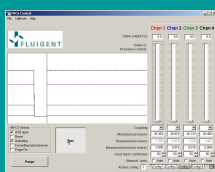


PRESSURE CONTROL (MFCS)



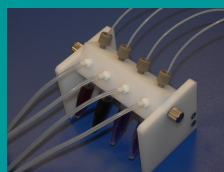
MFCS DEVICE

- Smallest pressure step: 25 μ Bar
- Very Accurate (<1% FSS) and Stable (<0.1% FSS)
- 4 to 8 channels device,
- Pressure Range available: 0 to 25 mBar, 69 mBar, 345 mBar, 1000 mBar,
- Response/Stabilization time : 40 ms / <1s,
- Dedicated Software, LabView® vi, C++ drivers
- Easy Fluidic Connection: Fluiwell

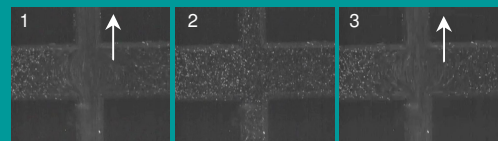


MFCS

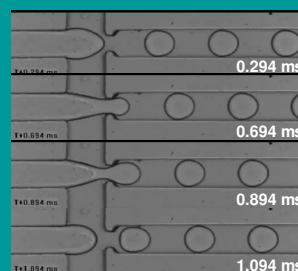
Dedicated Software
Fluiwell



STOP FLOW (1 image per second)



DROPLETS GENERATION



J.-C. Baret (ISIS-ULP Strasbourg)

Futterer, C.; Minc, N. *et al. Lab Chip* 2004, 4, 351-356.