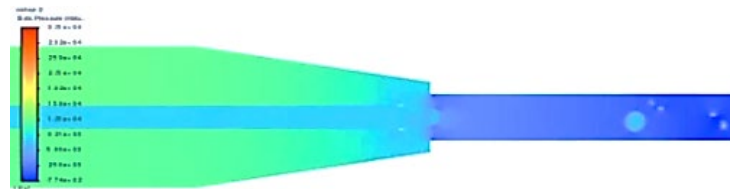
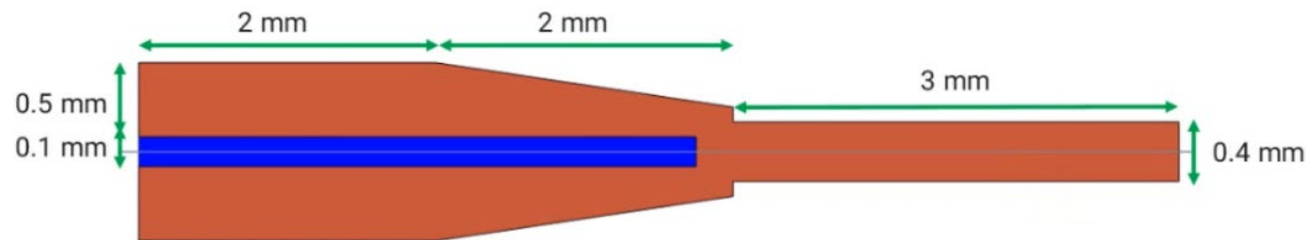


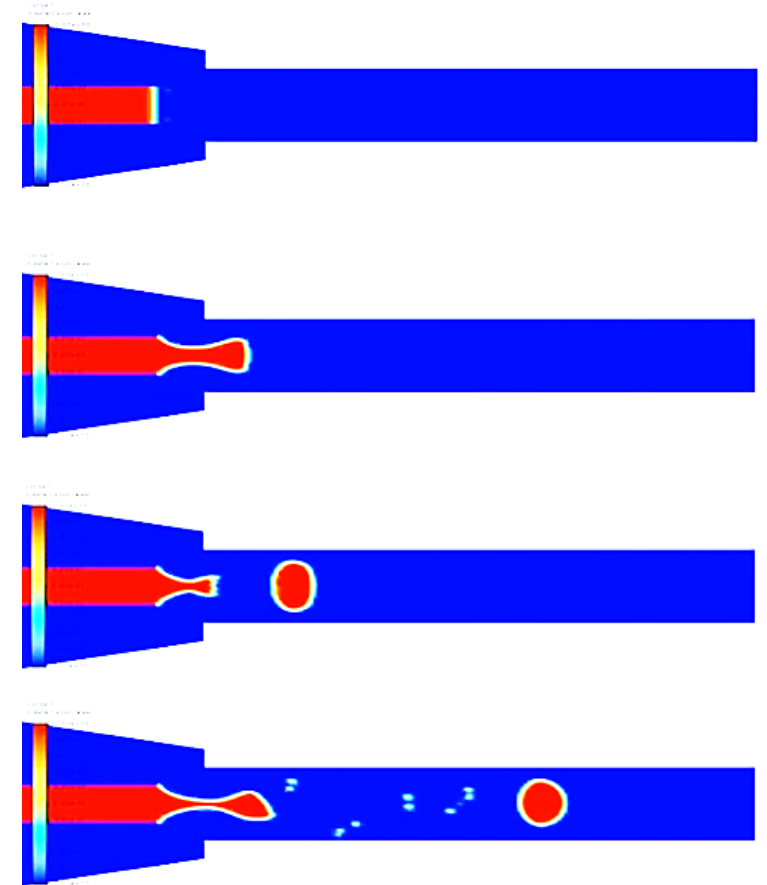
VOF-Based Simulation of Droplet Generation in a Microchannel

- Droplet generation is a field within microfluidics. One of its applications in biology is cell separation.
- For this simulation, a co-flow geometry was considered. Water was introduced through the middle channel, while oil was introduced through the top and bottom channels, leading to the formation of water droplets at the outlet.



Pressure contour

Results



Water volume fraction contours and droplet formation