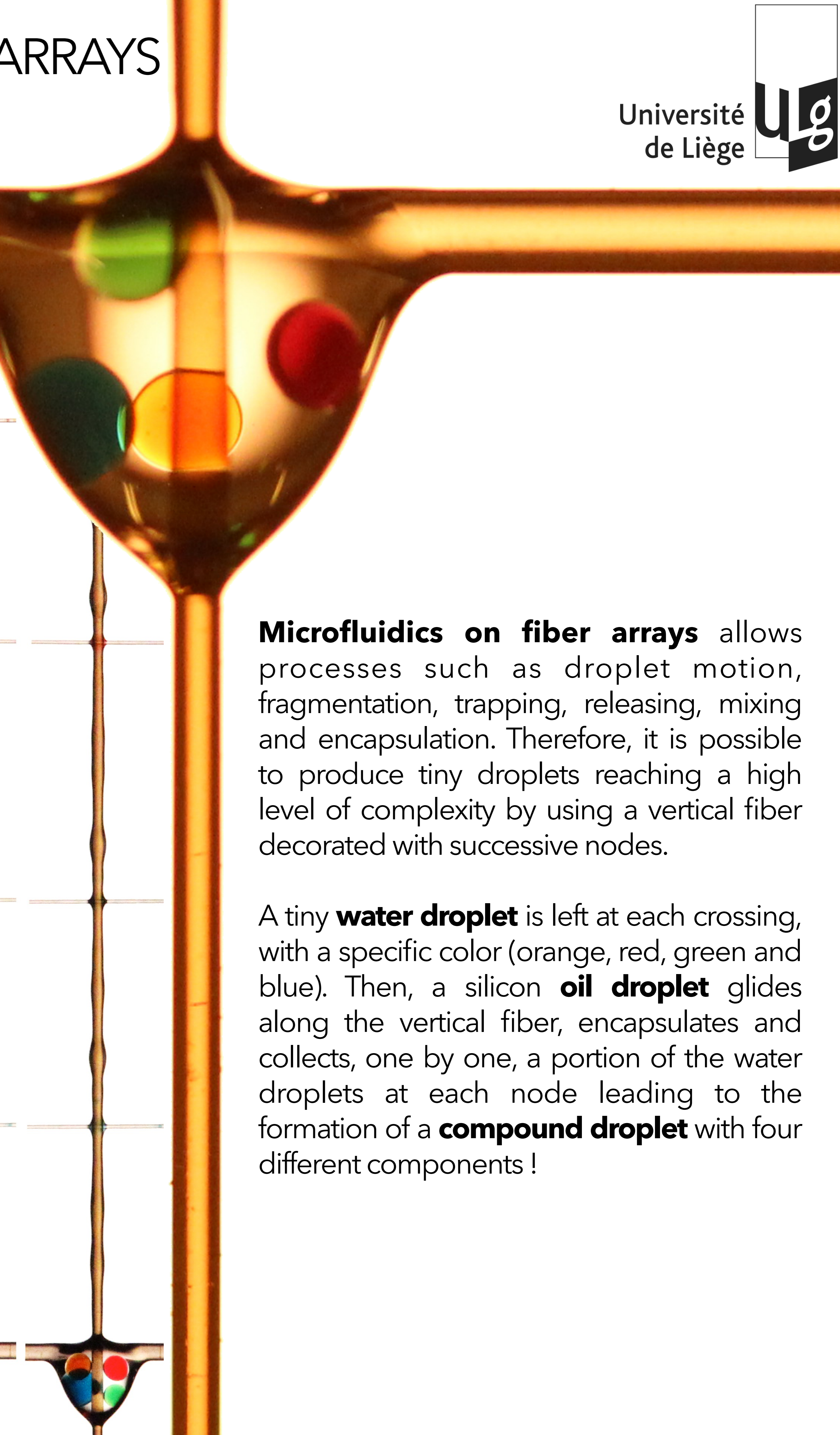
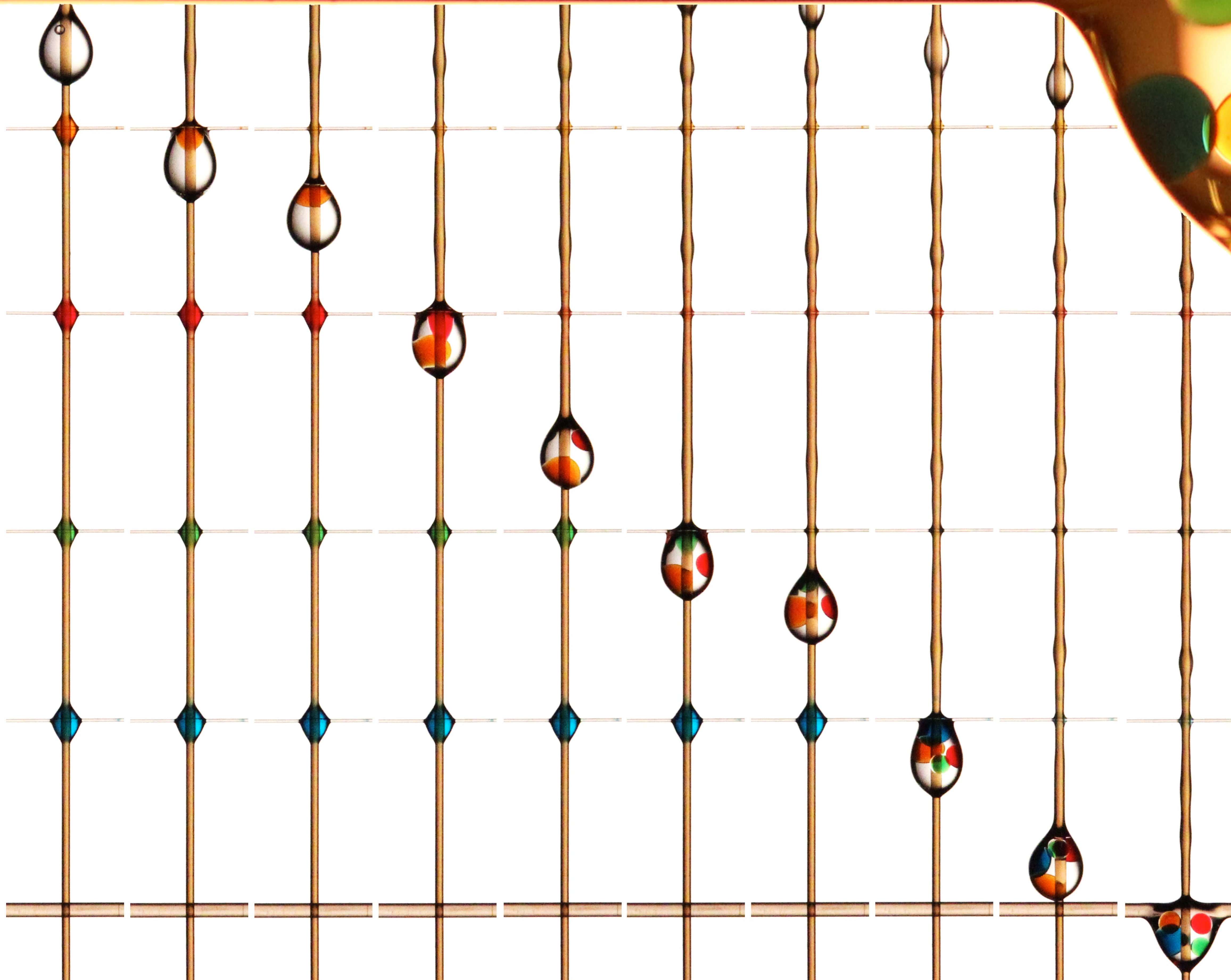


HIGHLY SOPHISTICATED COMPOUND DROPLETS ON FIBER ARRAYS

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Microfluidics on fiber arrays allows processes such as droplet motion, fragmentation, trapping, releasing, mixing and encapsulation. Therefore, it is possible to produce tiny droplets reaching a high level of complexity by using a vertical fiber decorated with successive nodes.

A tiny **water droplet** is left at each crossing, with a specific color (orange, red, green and blue). Then, a silicon **oil droplet** glides along the vertical fiber, encapsulates and collects, one by one, a portion of the water droplets at each node leading to the formation of a **compound droplet** with four different components !