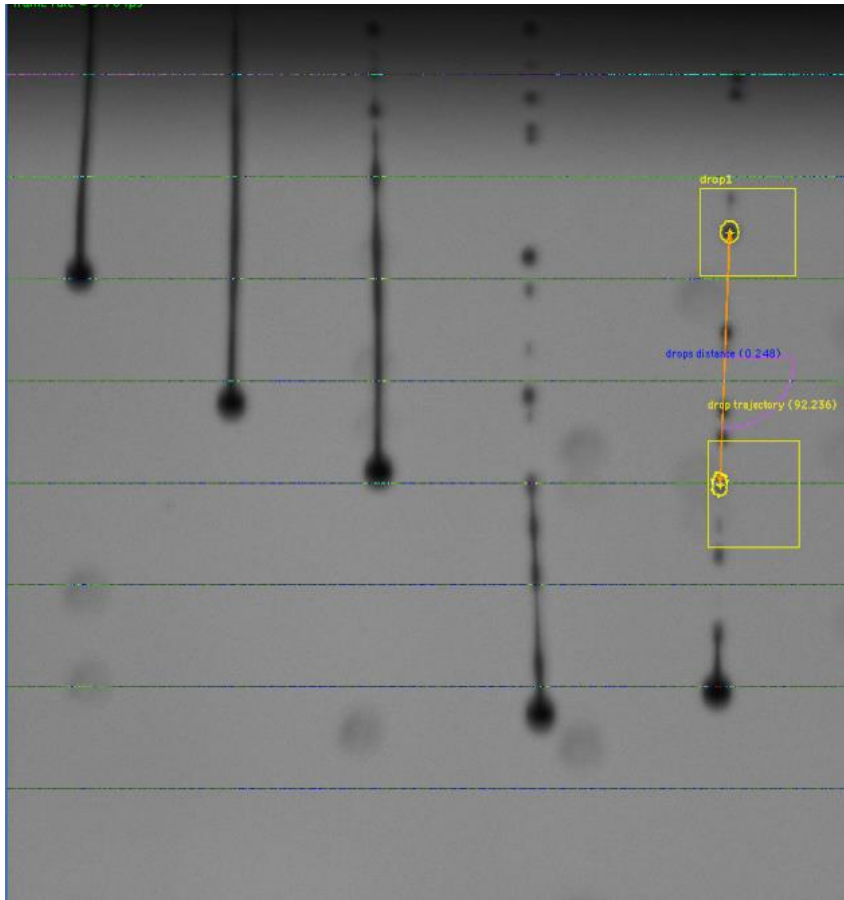


MEMS Microfluidic – Use Cases

A technology adaptable to different markets



Home Care

Beauty Care

Smart Farming

Medical Dosing



Jetting Oil based perfumes

No phase change of ejected fluid

Each nozzle can eject up to 10kHz

10-100 nozzles = up to 1M drops per second

Tiny Drops – A New User Experience

MEMS technology for tiny droplets

10-15um size drops

Rapid evaporation

Micro, Mini, and Macro
cycles of ejection





Opte – Precision Dispensing

MEMS based Microfluidics enabling innovative Beauty Care Products



<https://www.opteskin.com/>



Smart Farming

MEMS based Microfluidics for Precision Dispensing



Pheromone Mating Disruption

- Confusing male insects around crops

Aeroponics

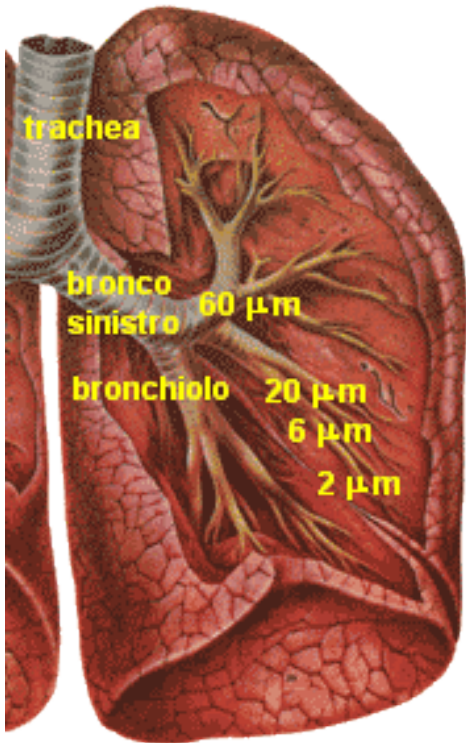
- Growth of plants in little or no soil

Fertilizer/Pesticide application

- Targeted application using drones and microfluidics

Smart Dosing in Medical

MEMS based Microfluidics enabling controlled, precision dosing



Anatomical targets
for Inhalation Therapy

Micro Delivery of Fluids to
targeted locations

- Consistent Drop
- Homogenous Drop
- 'Neat' Drop

Drop size range: 2-40 μm ,
~0.01pL-33.5pL

Particle size: (MMAD): = 4.0
 μm , measured

Geometric St. Dev. (GSD):
1.4 μm

