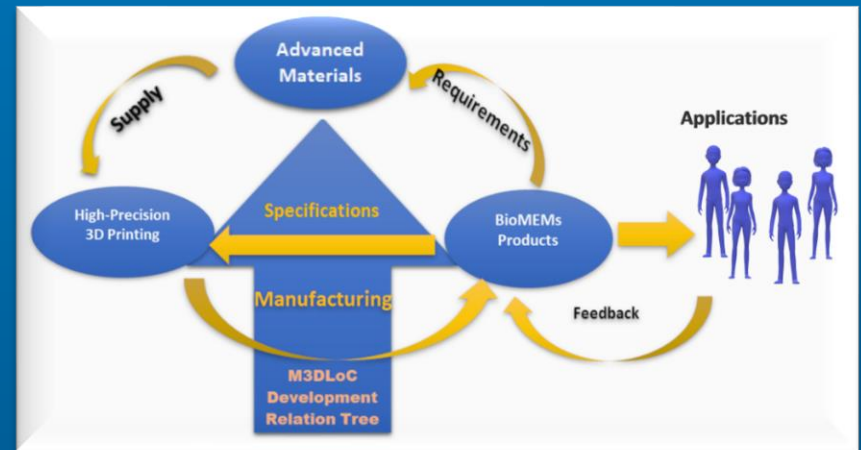


Partners



Additive Manufacturing of 3D Microfluidic MEMS for Lab-on-a-Chip applications.



Contact

Project Coordination
National Technical University of Athens – NTUA, Greece
Email: coordinator@m3dloc.eu

Exploitation and Dissemination Management
Cambridge Nanomaterials Technology Ltd., UK
Email: info@m3dloc.eu



twitter.com/m3dloc

www.M3DLoC.eu

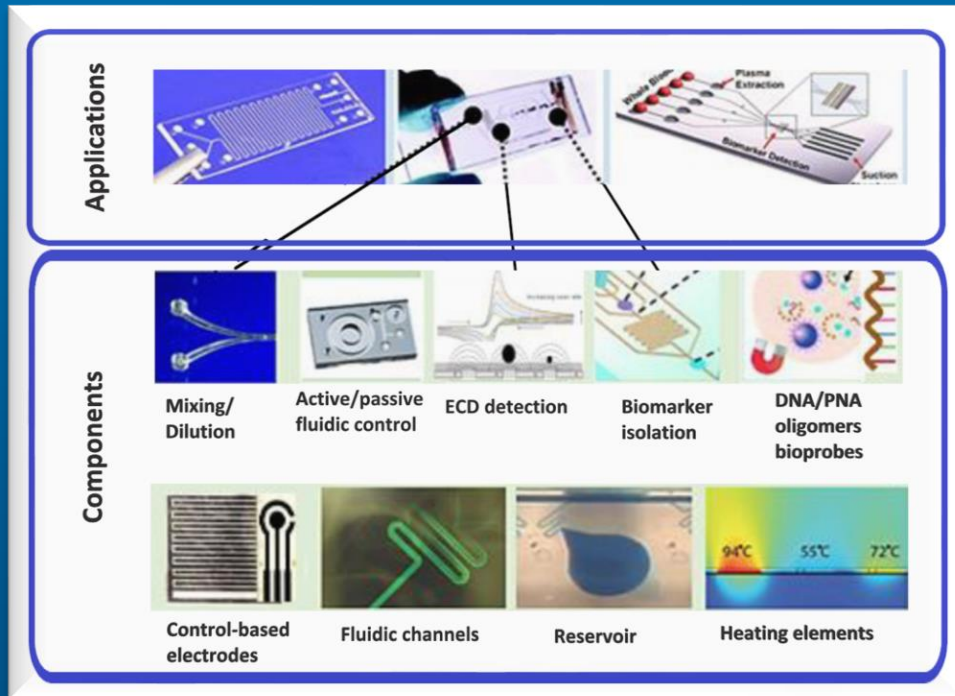
info@m3dloc.eu

This project is supported by the European Union under the HORIZON2020 Framework Programme Grant Agreement no. 760662. The contents of this leaflet are the sole responsibility of the parties and cannot be considered as reflecting the position of the European Union



M3DLoC Project

M3DLoC aims at the employment of multi-material 3D printing technologies for the large-scale fabrication of microfluidic MEMS for lab-on-a-chip and sensing applications. The concept is based on the combination of multimaterial direct-ink-writing method and an extrusion-based 3D printing pilot line, in order to fabricate microstructured detection devices with the ability to perform all steps of chemical analysis in an automated fashion.



Products & Solutions



In M3DLoC, affinity-based assays are targeted for identification of highly selective biomarkers in liquid biopsy:

- + Detection of viral infections (HIV)
- + Detection of bacterial infection and drug resistance (Tuberculosis) from DNA variations in bacterial strains.
- + Detection of oncogene mutations (lung cancer) on tumor-derived DNA.

The functionality of produced devices will be evaluated based on their ability to obtain mobility and binding-based identity information

Pilot Line

The open access pilot line under development aims to perform multi-length scales manufacturing of macro-size products with micro-patterned features and functionalised sensing elements

