

TECHNOLOGY PLATFORM FOR THE BIOMEDICAL SECTOR BIOTECH C2N

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The BIOTECH C2N platform offers support services for researchers, engineers, and industry professionals, assisting them at every stage of the development of biomedical micro-devices.

9 specialized laboratories

10 microfabrication techniques
for biomedical applications

15 bio-characterization techniques

TECHNICAL AND TECHNOLOGICAL EXPERTISE

The BIOTECH C2N platform provides state-of-the-art equipment along with technical and scientific expertise to :

Offer services in the design, fabrication, and characterization of bio-microfluidic systems for medical applications,

Provide expertise in nanobiotechnologies for the development, integration, and characterization of biomaterials,

Train users on the platform's specialized equipment and techniques,

Support biotech start-ups in the development of their prototypes,

Offer training internships for students, technicians, and researchers.

TECHNOLOGY TRANSFER AND PARTNERSHIP

Academic laboratories

(IGPS, INSERM, AP-HP, SATIE,
AGROPARISTECH, CECS - ISTEM),

Companies (MISTIC, ELVESYS)

Centre for Nanoscience and Nanotechnology
10 boulevard Thomas Gobert - 91120 Palaiseau
France  



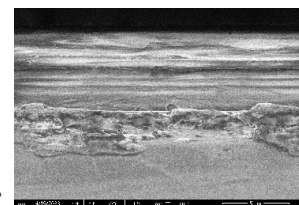
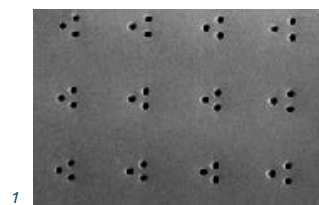
EXPERTISE

Development and Prototyping Unit

Microfabrication of PDMS, PMMA, parylene, polyimide, and biocompatible & biodegradable polymers (chitosan, POC, etc.)

Synthesis of nanoparticles and colloids; Biochemical surface functionalization (SAM) on Si/Au/Ti/PDMS/Parylene; Biocompatible activation and bonding

Micro-nano printing; 3D printing; Microelectrodes on polymers; Assembly and integration in micro-nanofluidic



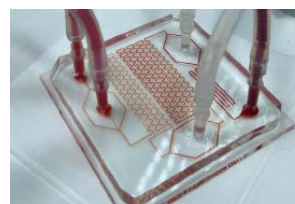
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Physical and Biochemical Characterization Unit

Characterization of biomaterials and surface physico-chemistry

Characterization of microfluidic devices (multiplexed, ionic transport,...)



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Biomedical Applications Unit

Cell and bacterial culture (retinal cells, epithelial cells, E. coli, Staphylococcus bacteria, etc.)



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¹ Microstructured membrane for retinal implants

² Membrane structure PDMS / Parylene

³ Microfluidic platform for blood cell lysis

⁴ BIOMEMS microfluidics for bioanalysis

⁵ Cell culture room

⁶ Fluorescent immunocomplexes in microfluidics