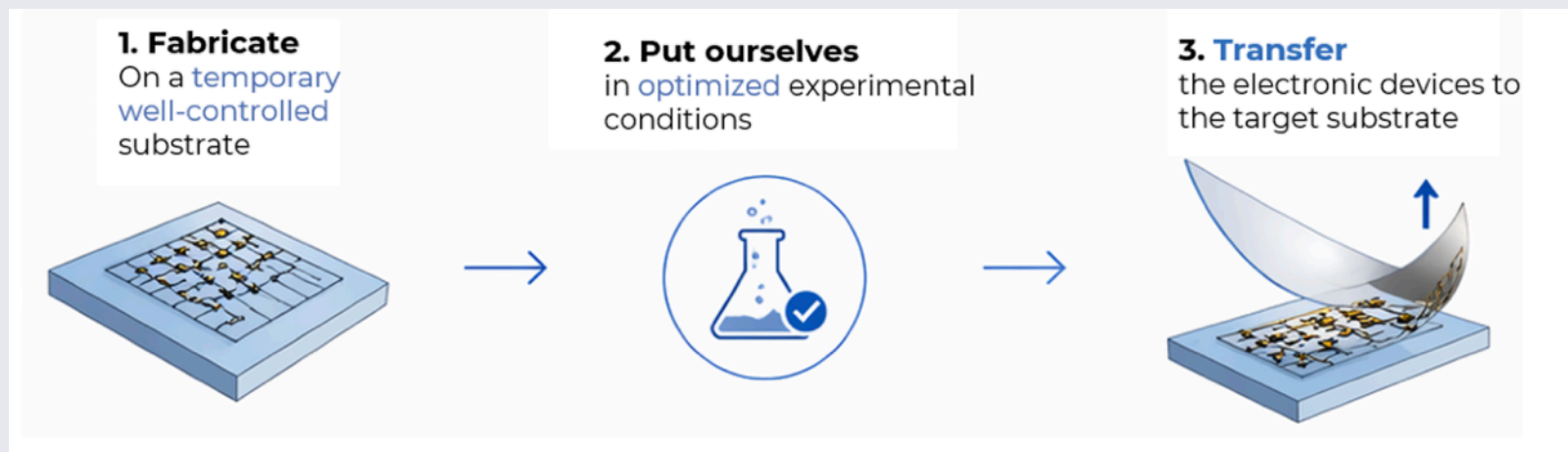




🕒 1:30pm - 2:30pm 📍 Salle Ampère (MTC site)

Printed Electronics for Device Transfer on Complex Surfaces: Sensor Applications



Printed electronics is now a well-established technology for the fabrication of electronic devices, primarily on plastic substrates. This has enabled the emergence of flexible electronics, allowing devices to be integrated in a minimally intrusive manner. These technologies are largely derived from the graphic arts industry, including processes such as screen printing and inkjet printing.

However, these approaches face major limitations when targeting unconventional substrates, such as complex 3D geometries, porous materials like textiles, chemically sensitive surfaces, or substrates with low thermal budgets.

To overcome these barriers, we propose a disruptive paradigm: instead of fabricating electronics directly onto the final substrate, devices are first manufactured on a temporary substrate and then transferred onto the target surface; following a "fabricate once, transfer anywhere" approach. This approach, known as transfer printing, decouples fabrication from integration and unlocks the possibility to deploy high-performance electronics onto virtually any substrate.

This seminar will present the transfer printing approaches developed at IETR over the past decade, with a particular focus on their underlying principles, process variants, and technological capabilities for sensor fabrication.

Upcoming GREMAN seminars:

Tuesday
16
June 11am - Blois Internship presentation (A&P site)