# Development of Silicon Photonics Packaging Technologies

Record number : OPR-431

## Overview

**RESEARCH DIRECTION**

Julien Sylvestre, Professeur - Department of Mechanical Engineering

**INFORMATION**

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**ADMINISTRATIVE UNIT(S)**

Faculté de génie
Département de génie électrique et de génie informatique
Département de génie mécanique
Institut interdisciplinaire d'innovation technologique (3IT)

**LEVEL(S)**

2e cycle
3e cycle
Stage postdoctoral

**LOCATION(S)**

3IT - Institut interdisciplinaire d'innovation technologique

## Project Description

Silicon Photonics (SiPh) technologies have the potential to greatly improve photonic integration into microelectronics by allowing reliable and scalable optical chip manufacturing. Yet, the full economical benefits of SiPh technologies still appear to be out of the reach of hardware manufacturers, because of the complexity, high cost and lack of demonstrated reliability of the packaging of SiPh technologies.

We are looking for creative and enthusiastic candidates who are interested in microfabrication in clean room environments, innovative packaging process development, material science, optical systems and prototype reliability testing. They will also have the chance to work closely with our industrial partner on technical matters and strategic orientations. This position thus offers a great opportunity for both avenues of typical research profiles for candidates who are looking to pursue careers either in academia or industrial research.

## Discipline(s) by sector

### Sciences naturelles et génie

Génie électrique et génie électronique,
Génie mécanique

## Funding offered

Yes

## Partner(s)

IBM Bromont

The last update was on 12 March 2024. The University reserves the right to modify its projects without notice.