

## **Fast prototyping of Nitride Electro-photonic Sensors (FANES project)**

Femtorays Technologies, an Italian biomedical startup, is developing a Point-Of-Care diagnostic system based on a silicon photonics lab-on-chip. The ability to quickly explore design and process options is crucial for accelerating the time to market for its products. However, using foundry Multi-Process-Wafers (MPWs) during the learning phase is both prohibitively slow and expensive, especially for technology-intensive, cutting-edge applications in relatively low-volume silicon technologies. In this talk, we will discuss an R&D program (FANES) that FTH has initiated in collaboration with Fondazione Bruno Kessler (FBK) and the local healthcare provider APSS. This program aims to implement and validate a rapid prototyping process and streamline the transfer to production for its advanced lab-on-chips using Si<sub>3</sub>N<sub>4</sub> waveguide photonics.