



## **Employment Offer: Researcher position at Multitel - Applied Photonics Department**

**Position:** Researcher

**Location:** Multitel, Mons, Belgium

**Group:** Biophotonics

We offer a position of Researcher within the Biophotonics Group at Multitel. We are looking for one or two dynamic and talented individuals to join our team, focusing on research and development projects in the fields of **visible and infrared hyperspectral imaging** and/or **digital holography**, specifically within the health and agriculture domains. Your role will be central to our mission of advancing biophotonic technologies for pathogen or biomarker detection and developing label-free spectroscopy solutions for soil and crop health monitoring.

### **Responsibilities**

As an Researcher in our biophotonics group, you will:

- Lead and manage research projects focused on multichannel spectroscopy and hyperspectral imaging solutions for healthcare and agriculture.
- Design and develop optical systems tailored for hyperspectral imaging and digital holography applications.
- Engage in CAD design for opto-mechanical systems, ensuring efficient integration of components.
- Collaborate with multidisciplinary teams to innovate and implement embedded systems for device control and data acquisition.
- Collaborate with our artificial intelligence department to apply chemometric techniques and AI algorithms for signal processing, enhancing device functionality and performance.
- Communicate effectively with project stakeholders, ensuring timely and high-quality delivery of research outputs.

### **Candidate Profile**

We are open to considering candidates with diverse profiles, and this position may be filled by one or two individuals depending on the skill sets and experience of the applicants. If you possess expertise in both optical design and AI for spectroscopy, this role could be perfectly suited for you. We are looking for individuals who meet a maximum of the following criteria

- **Education and Experience:**
  - Master's or PhD degree in photonics, optical engineering, applied physics, or a related field.
  - Proven experience in optical system design, specifically related to spectroscopy and digital holography.
  - Hands-on experience with CAD design for opto-mechanical systems.
- **Technical Skills:**
  - Experience in optical design software (e.g., Zemax, Code V) and CAD tools (e.g., SolidWorks, FreeCad).



- o Familiarity with embedded systems and their integration into photonic devices.
- o Knowledge in chemometrics and experience in applying AI techniques for data analysis and device control.
- **Soft Skills:**
  - o Project management capabilities, with the ability to lead and coordinate a work package in multidisciplinary research projects.
  - o Effective communication skills, both written and verbal, for interaction with internal and external stakeholders.
  - o Problem-solving mindset with the ability to work independently and as part of a collaborative team.

### **Benefits**

- Competitive salary and benefits package.
- Opportunity to work on cutting-edge photonic technologies within a leading research group at European level (EU-Horizon, Eurostars, Interreg, ...).
- Professional development opportunities through training and collaboration with experts in the field.