



## **Position in the “Photonics Research Labs” ITEAM, at Universitat Politècnica de València, Spain**

### **Analysis and synthesis of gratings in SDM fibers**

The combination of specialty fibers with gratings may bring key elements required to develop optical communications that exploit the SDM technology, novel and improved functionalities for signal processing, and the design of new concepts of optical fiber sensors. SDM technologies bring opportunities for processing digital and analog signals, and SDM devices will get key advantages: (1) compactness as compared to a set of parallel single-core single-mode fibers, (2) performance stability against mechanical or environmental conditions, and (3) operation versatility offered by the simultaneous use of the spatial- and wavelength-diversity domains.

We offer the chance to collaborate in a motivated group having many contacts with companies and international research institutions. We have the facilities to fabricate the customized designed devices and apply them in test beds in collaboration with our international partners.

Candidates must have a degree in physics or electrical/telecommunications engineering. Other profiles may be considered. Master studies related to photonics or/and Electromagnetic waves will be very valuable. They must show expertise in designing, analyzing, and synthesis of gratings. Experience in writing gratings and/or optical characterization will also be considered.

**Candidates should send a motivation letter (1 page) and a short CV to Prof. Salvador Sales (ssales@upv.es)**

**Starting date: Autumn 2022.**

**Duration: up to 4 years (renewable yearly)**

**Application deadline: September 1st, 2022**