



CDD 12 MONTHS - POST-DOCTORATE - NONLINEAR PHOTONICS

CENTRALESUPELEC

CONTACT : marc.sciamanna@centralesupelec.fr

APPLY BEFORE NOVEMBER 6, 2024

Summary of the research project :

The Photonics Chair is a project led by CentraleSupélec and supported by public and private partners over the period 2021-2025. Its missions are to develop and promote photonics, in particular by strengthening the research infrastructures of the LMOPS laboratory, a research unit shared between CentraleSupélec and the University of Lorraine.

The Photonics Chair wishes to recruit a doctor in physics to contribute to the development of research activities in nonlinear photonics. By nonlinear photonics we mean the study of the nonlinear optical properties of materials and the nonlinear dynamics of photonic components, and their application for all-optical information processing. We can list some recent research themes: all-optical guiding of light by photorefractive materials, slowing down of light, dynamics and synchronization of optical frequency combs, optical chaos and its application to cryptography, neuronal computing, etc. The Photonics Chair wishes to develop one or other of these research themes towards higher levels of innovation and possibly a transfer of skills towards an industrial project.

Skills:

The candidate must demonstrate expertise in non-linear photonics, intellectual curiosity, an ability to work in a team, and an ability to synthesize and adapt in both an academic and industrial context.

Conditions for recruitment:

The candidate must hold a doctoral degree in physics
Recruitment planned **from 01/01/2025 for a period of 12 months.**

Keywords:

Applied Physics, Photonics, Signal Processing

About the Photonics Chair:

The Photonics Chair is a unique structure in France created in 2017 at CentraleSupélec on its Metz Campus, within the Optical Materials, Photonics and Systems (LMOPS) laboratory. It responds to both a need and an ambition to promote and develop photonics - science and techniques exploiting light. This Photonics Chair is supported by CentraleSupélec, the CentraleSupélec Foundation, the GDI Simulation company (MBDA group), the European Union, the State, the Grand-Est Region, the Moselle Department and the Metz EuroMétropole. As part of its missions, the Photonics Chair is leading the initiative to create a strong and sustainable network of photonics players in the Grand-Est Region and beyond in France and internationally, including both academic and industrial partners.