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Tesis: **"DESIGN, FABRICATION AND CHARACTERIZATION OF NONLINEAR PHOTONIC CRYSTAL FIBERS FOR NEAR INFRARED WAVELENGTH SUPERCONTINUUM LIGHT SOURCES"**

Resumen:

In this work, all the stages at fabrication of HNL PCFs are carried out, starting from PCF design at using of special relations and finishing to HNL PCF fabrication. Once the fiber is made, it is necessary to characterize it. Some of the most important parameters are dispersion, attenuation, beam divergence and numerical aperture. We present the appropriate way to compute the parameters and then to fabricate of the calculated HNL PCFs. Finally we expose the relevance of the design and fabrication of HNL for specific applications such as supercontinuum generation.