

# **Silica Microspheres Functionalized with Self-assembled Nanomaterials**

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in partial fulfillment of the requirements for the degree of**

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**in**

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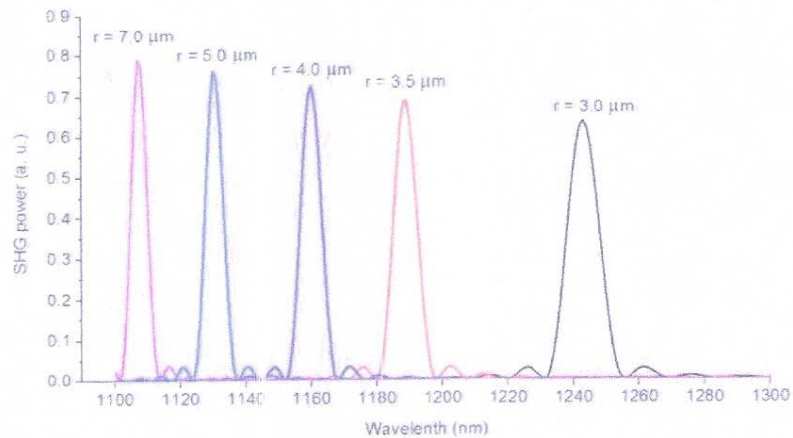
**Keywords: Optical resonator, Microsphere, Fiber taper, Quality factor,  
Polymer, Nanoparticles, Quantum dots, Nonlinearity.**

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