

# TUNING pKa IN NEW MOLECULES BASED ON INDOLINES FOR TWO-PHOTON ABSORPTION BIOIMAGING APPLICATIONS

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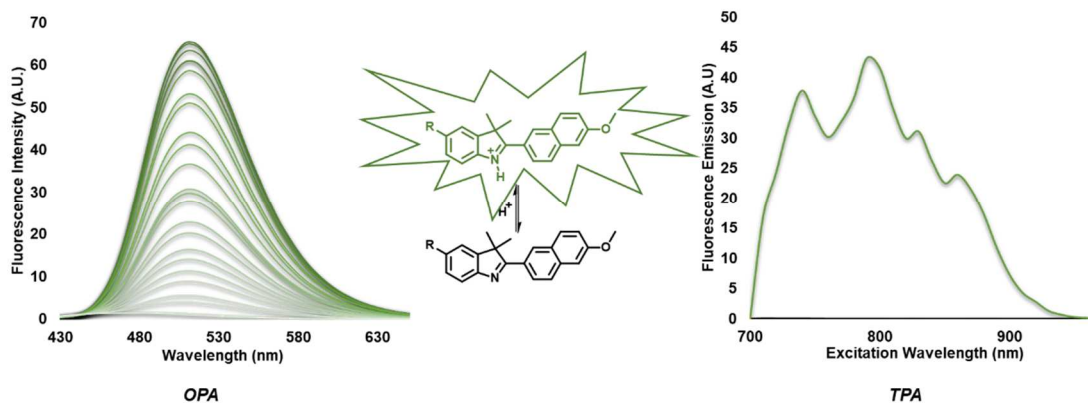
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Fluorescence-based biosensors have become essential tools for modern biology, allowing real-time monitoring of biological processes within living cells. The differences between pH play a significant role in multiple biological process such as proliferation, apoptosis, endocytic process and defense.<sup>[1]</sup> Therefore, intracellular fluorescent pH probes comprise one of the most widely used families of biosensors in microscopy.<sup>[2]</sup>

In this work, we present the design, synthesis and characterization of new one and two photon pH activatable fluorescent probes based on naphthalene-indoline derivatives with an off-on response to different pH environments. These compounds are easy to achieve with good yields and have good photophysical properties.<sup>[3]</sup> Simple modifications in the structure of these compounds allow tuning their pKa easily and cover a width range of pH in their applications.

The preliminary results obtained with these fluorescent probes indicate that they have promising properties to be use in bioimaging applications in living cells.



## References

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