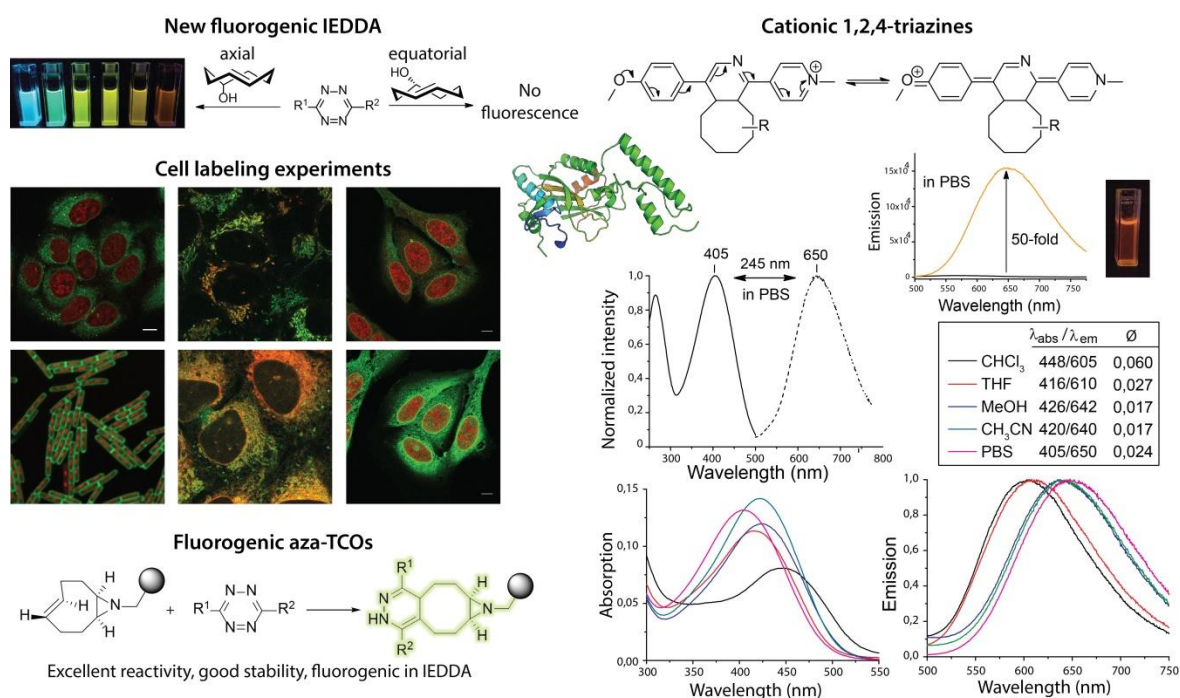


# Bioorthogonal Chemistry of Heterodienes: Applications for Bioimaging and Beyond

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Bioorthogonal reactions became an invaluable tool in modern chemical biology. These reactions proceed selectively under strict biological conditions enabling modification and study of biomolecules in their native environment. Heterodienes represent unique class of bioorthogonal reagents providing excellent reactivity and versatility for use on biological systems. We have discovered that cycloadditions of various heterodienes can lead to formation of a new type of fluorescent products directly upon reaction with specific dienophiles. The developed fluorogenic reactions can be successfully applied for bioimaging.



## Literature:

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