Title: **Fluorescence resonance energy transfer and its application to the study of biomolecules and biological systems.**

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FRET technique is used when there are 2 fluorophores (donor and acceptor) separated a short distance making possible the energy transfer. Firstly, it has been done a briefly introduction about FRET and the main parameters that affect the rate of energy transfer (distance between fluorophores, overlap of the donor emission spectrum and the acceptor absorption spectrum, quantum yield of the donor and the orientation factor).Secondly, it has been done a research of articles containing recent applications of FRET in proteins. As a result, it has been observed that FRET is commonly used, especially in protein folding, when a ligand is bound. Conformational protein changes can be determined calculating the variation of the distance between fluorophores. FRET is also being used to create biosensors.

Keywords: FRET, proteins, fluorophores, biosensors, biomolecules folding