

**Abstract for MARC webpage**

*Magnetic Resonance Imaging* (MRI) is a technique that is widely used to diagnose diseases<sup>1</sup>. For the images to have more resolution, a contrast agent (CA) is introduced into the body. Most common CAs are complexes containing gadolinium which have a high relaxivity rate<sup>1</sup> that will cause an MRI image to have higher contrast on tissues or organs of interest. Gadolinium forms complexes with certain ligands that enhance even more its contrast agent properties. Dithiolates are ligands that will carry out the function of therapy agents. They will be irradiated with near-infrared light and in response they will exhibit heat which will cause the apoptosis (self-destroy) of the cell. The whole complex will serve as a theragnostic agent, in which combines the diagnose and the therapy in one agent<sup>2</sup>.

References:

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2. Jeong, Y.; Hwang, H. S.; Na, K. Theranostics and Contrast Agents for Magnetic Resonance Imaging. *Biomaterials Research* **2018**, 22 (1).