

Preface

In view of the rarity of the radiation dosimeters, the domination of few companies on the sales and exportation of such tools and the high cost of those tools, the importance of finding a glass substance to be used as gamma ray dosimeter is derived.

The human species has always been exposed to ionizing radiation. Such radiations originate in the sun and outer space; in the radioactive materials present in the crust of earth, in building materials, and even in food and water we daily consume. In addition to these "natural" radiations, man has in the past five decades created many new sources of radiations, X-rays and other types of radiations (neutrons, electrons, heavy charged particles) are used for a host of medical purposes both diagnostic and therapeutic. Fall-out from nuclear explosives and radioactive materials released from nuclear power plants has also increased the radiation background.

For this reasons we must search to obtain on substitute and a local product for measuring the ionizing radiations, so that we think our study are very significance., Will offer my presentation in the following steps:

- An Introduction and containing on, general view of the presentation study, definition of some glass phenomenon, Structural Theories, Interaction of radiation with matter, Thermo luminescence phenomena, General Model for Thermo luminescence, Thermo luminescence parameters.
- Literature review of international studies and natural selection to the golden researches and features of some standard thermoluminescence dosimetry phosphors.
- Results discussions.
- Presentation of the results.
- References.
- Summarization and recommendations of the study.