

Abstract Submitted
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Absorbance Differentiation of Burned and Normal Tissue by the Addition of Glycerol¹ CHUAN-I. CHANG, HECTOR DE PEDRO, FARANAK ZARNANI, Physics Department, The University of Texas at Dallas, AHAMED IDRIS, Department of Surgery (Emergency Medicine), The University of Texas Southwestern Medical Center at Dallas, R. GLOSSER, Physics Department, The University of Texas at Dallas — Minimizing the removal of healthy/recoverable tissue would significantly increase the chances of the patients' survival. The purpose is to be able to optically differentiate between burned and normal tissue with the addition of glycerol. Under normal conditions (without glycerol), the absorption coefficient is large, which means there is a large amount of absorption in the tissue. Glycerol decreases the absorption coefficient by reducing the cell size as well as providing a more uniform index of refraction in the interstitial environment. A lower overall absorption will reveal absorption peaks specific to the differentiation of the tissue. Results will be presented on the day of the conference.

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