

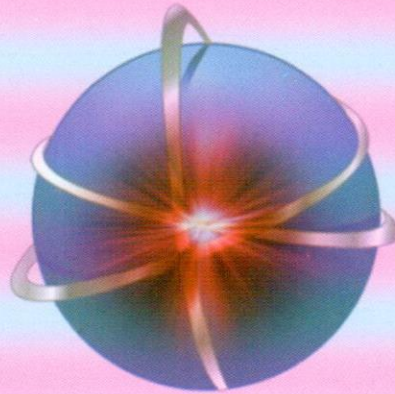
TESNAT 2015



23-26 April 2015 Osmaniye Korkut Ata University, Turkey

International Workshop
on Theoretical and Experimental
Studies in Nuclear Applications
and Technology

Abstract Book



Editors

Eyyup TEL, Abdullah AYDIN, İsmail Hakkı SARPÜN

Optically Stimulated Luminescence (OSL) Properties of Oltu Stone

DOĞAN T.¹, YÜKSEL M.², TOPAKSU M.²

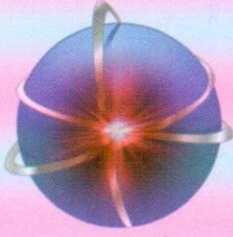
¹*Cukurova University, Vocational School of Imamoglu, Adana, Turkey*

²*Cukurova University, Physics Department, Adana, Turkey*

Oltu stone, sometimes called also "Erzurum stone", is especially mined in the villages northeast of Oltu town. This work focuses on the Optically Stimulated Luminescence (OSL) response of Oltu stone from Erzurum previously characterized by means of X-ray diffraction (XRD) and X-ray fluorescence (XRF) techniques. So, we investigated dosimetric properties of Oltu stone as an accidental dosimetry. For this purpose, dose-response, reproducibility and fading of the OSL signals were analyzed. As a result of these studies, it is possible to conclude that Oltu stone show promising features to be used as an environmental dosimeter with regard to a suitable OSL signal, range of linearity, repeatability in response.

Keywords: OSL, Oltu stone, Environmental dosimeter, Dose response

tdogan@cu.edu.tr



TESNAT 2015

Theoretical and Experimental Studies in
Nuclear Applications and Technology



TÜBİTAK



Contact

web tesnat2015.osmaniye.edu.tr
e-mail tesnat2015@osmaniye.edu.tr
tel +90-328-8271000 / 2086
fax +90-328-8271042

Osmaniye Korkut Ata University,
Physics Dept., Osmaniye, Turkey

