



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.1, pp 70-74, 2019

Microhardness Studies on Nonlinear Optical Urea Salicylic Acid (USA) crystal

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Abstract : The organic Urea Salicylic Acid (USA) crystal was grown using slow evaporation solution method. The single crystal XRD study of the grown crystal was observed to confirm its crystal structure. The third order nonlinear optical properties of the grown crystal were calculated using Z-scan technique studies. The Vicker's microhardness studies of the grown crystal were carried out to observe its different mechanical parameters. The thermal stability of the grown USA crystal was observed using TG/DTA analyses.

Keywords : Solution method; Single crystal XRD studies; Z-scan technique; Vicker's Microhardness test; Thermal analyses.

C. Andal *et al* /International Journal of ChemTech Research, 2019,12(1): 70-74.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.120107>
