

Abstract Submitted
for the NEF15 Meeting of
The American Physical Society

Temperature Dependent Study of Dielectric Parameters for In-Ag Doped Glassy Alloy DIPTI SHARMA, WIT, Boston, MA, USA, SURESH SHARMA, RAJENDRA SHUKLA, ASHOK KUMAR, HBTI, Kanpur, India — Temperature dependent study of dielectric constant and dielectric loss were done for bulk chalcogenide glassy alloy of $\text{Se}_{90}\text{In}_8\text{Ag}_2$ varying temperature from 298 K to 476 K. The dielectric constant found to be increased as temperature increased and then showed a plateau decreased from the higher value for the higher temperatures whereas the dielectric loss found to be decreased first and then a small increase as temperature increased. The temperature dependence of dielectric constant and dielectric loss could be explained using Guintini and Elliott's model of correlated barrier hopping over a potential barrier.¹⁻³ (1) D. Sharma et al., *Thin Solid Films* 357 (1999) 214-217; (2) D. Sharma et al., *Adv. Mater. Opt. Electron.* 10 (2000) 251-259; (3) D. Sharma et al., *Materials and Manufacturing Process* 18 (2003) 93-104. Keywords: Temperature dependence, dielectric constant, dielectric loss, Ag doped glassy alloy.

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Date submitted: 29 Sep 2015

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