

Abstract Submitted  
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**Observation of Multiple Activation in Tg of Se<sub>90</sub>In<sub>8</sub>Ag<sub>2</sub> Glassy Alloy** DIPTI SHARMA, WIT, Boston, MA, R. K. SHUKLA, A. KUMAR, HBTI Kanpur, India, J. C. MACDONALD, WPI, Worcester, MA — In the present study, multiple activation energy is reported for glass transition (T<sub>g</sub>) of Se<sub>90</sub>In<sub>8</sub>Ag<sub>2</sub> glassy alloy during cooling. The T<sub>g</sub> shows a linear relationship with cooling rates whereas the linearity of the transition follows three different linear trends for three different cooling ranges mentioned as (a) low range, (b) medium range, and (c) high range where they are defined as low range for 5 oC/min to 20 oC/min, medium range for 20 oC/min to 30 oC/min and high range for 30 oC/min to 50 oC/min. The activation energy is found to be positive for all three ranges and indicates that the Se<sub>90</sub>In<sub>8</sub>Ag<sub>2</sub> is a sensitive material to cooling rates and may bring the significance of being reused after multiple use of heating runs in memory devices. **Keywords:** Activation Energy, Kinetics, calorimetry, cooling, heat flow, glass transition.

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