**LIST OF FIGURE CAPTIONS**

Figure 1: DMA result for a standard sample at 11 Hz with 0.01 % oscillatory strain at heating

rate of 2 oC

Figure 2: DMA curve (storage modulas, loss modulus, tan delta) for propellant I at 3, 5, 11

and 35 Hz frequency

Figure 3: DMA curve (storage modulas, loss modulus, tan delta) for propellant II at 3, 5, 11

and 35 Hz frequency

Figure 4: DMA curve (storage modulas, loss modulus, tan delta) for propellant III at 3, 5, 11

and 35 Hz frequency

Figure 5: DMA curve (storage modulas, loss modulus, tan delta) for propellant IV at 3, 5, 11

and 35 Hz frequency

Figure 6: Comparison of log aT vs temperature curves of propellants with different burning

rates

Figure 7: Comparison of master curves (log E’ vs log ω) for propellants with different

burning rates

Figure 8 : Comparison of E’ vs time curves of propellants with different burning rates upto

10 years