Supporting Information for the article:

Structure and Dynamics of a Bisurea based Supramolecular Polymer in *n*-Dodecane

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Time-Temperature Superposition Principle: The time-temperature superposition principle was employed to obtain master curves of storage and less moduli (G' and G") over a wide scaled angular frequency (ω) range at the standard temperature of T_s = 25 ºC for the mentioned EHUT/C_{12} organo-gel system. A shift factor (a_T) for G' and G" along the ω axis was necessary to obtain smooth master curves. Another shift factor (b_T) along the modulus axis, of which value was close to unity, was also necessary to obtained perfect master curves. Although the simplest type time-temperature superposition principle which uses only one shift factor, a_T, for the entire frequency and temperature ranges was not perfectly applicable to the obtained data, two distinct a_T values responsible for each observed fast and slow relaxation mode were necessary for the EHUT/C_{12} organo-gel system. In this supporting information, some typically insufficient master curves for the EHUT/C_{12} system obtained supposing the simplest type time-temperature superposition principle with one a_T are shown in Figures SI1 and SI2 to show the necessity of the two distinct shift factors for each relaxation mode.

Figure SI1 shows master curves of G' and G" for the system at c = 40 mM obtained at the standard temperature of T_s = 25 ºC by using only one shift factor, a_T, which is responsible for the slow relaxation mode (S) found at $\omega a_T = 3.5 \times 10^{-2}$ s^{-1}. Insufficient superposition with systematically deviating data points from the curves obtained at the T_s is clearly observed in a high ωa_T region where the fast relaxation mode (F1) is found. Therefore, one must introduce distinct two shift factors responsible for each S and F1 mode to obtain smooth master curves for the system such as seen in Figure 2 of the main article.

Figure of SI2 shows master curves for the system at c = 4 mM obtained at the standard temperature of T_s = 25 ºC by using only one shift factor, a_T, which is responsible for the fast relaxation mode (F2) found around $\omega a_T = 10 \sim 10^2$ s^{-1}. In this case, systematic deviation of data is observed in a low ωa_T region where the slow relaxation mode S exists. Thus, another shift factor responsible for the S mode was also necessary to obtain a smooth master curves for the solution. These strongly suggest that the simplest type time-temperature superposition principle using one shift factor is not satisfied by the EHUT/C_{12} system as pointed out above.

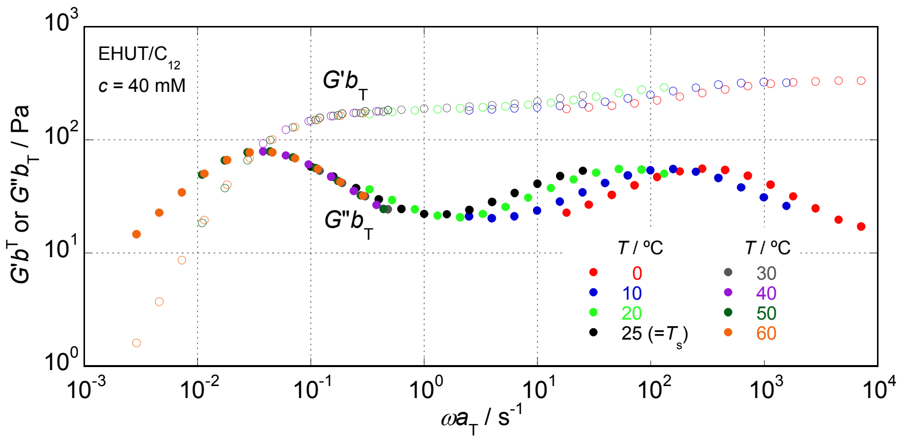

Figure SI1 Master curves of G' and G" for EHUT/C_{12} at c = 40 mM obtained at the standard temperature of T_s = 25 ºC using one shift factor, a_T, responsible for the slow relation mode S found at ωa_T = 3.5×10^{-2} s^{-1}.

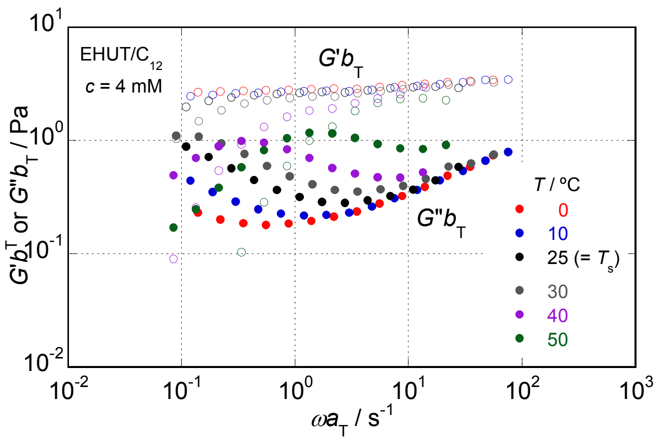

Figure SI2 Master curves for EHUT/C_{12} at c = 4 mM obtained at the standard temperature of T_s = 25 ºC using one a_T responsible for the fast relation mode F2 around $\omega a_T = 10 \sim 10^2$ s^{-1}.