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Low temperature dynamic transitions of L-cysteine and L-proline amino acids: a specific heat study MARIANA ISHIKAWA, THAMIRES LIMA, HERCULANO MARTINHO, Universidade Federal do ABC — Studies have shown that several macromolecules present two dynamic transitions at T* $\sim$ 80 K and TD $\sim$ 280 K which have intrinsic correlation to their biological activity. The present work concerns the detailed analysis of the low temperature transition at T* by specific heat. This transition is usually described as originated on the CH2SH dynamics. We compared the experimental results with simulations based on rigid rotor specific heat model by Caride and Tsallis [J. Stat. Phys. **35**, 187 (1984)] and we found an excellent agreement.

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