Beyermann *et al.* Reply: As pointed out by Que [1], symmetry considerations rule out the possibility of a rotational acoustic mode assumed in the analysis of the specific-heat data on C_{60} [2]. Taking this into account, we fitted our specific-heat data for polycrystalline C_{60} with a model containing a Debye term for the vibrational acoustic branch, an Einstein term for the vibrational optic branch, and a single Einstein contribution for the rotational optic mode (i.e., $n_{DV}=0.25$, $n_{EV}=0.75$, $n_{DR}=0$, and $n_{ER}=1.0$ in Ref. [2]). Together with a small linear term γT, this model contains four parameters which were adjusted to fit the data. This analysis was performed on data taken in a more recent measurement on a sample that was heated to 160 °C under vacuum before being pressed into a pellet. Above $T\sim 3$ K, these data are identical to our previously published results; however, the large linear contribution at low temperatures is now significantly reduced. We believe the heat treatment drove off residual solvents that were incorporated into the crystal lattice and responsible for much of the disorder. A more extensive discussion of this will be published elsewhere [3].

The results of this analysis along with the data are displayed in Fig. 1. The best fit, which is comparable to the ones in Ref. [2], was obtained with the following parameters: $\gamma=2$ mJ/mol K^2, $\Theta_{DV}=37$ K, $\Theta_{EV}=30$ K, and $\Theta_{ER}=58$ K. If this model is used to fit the original data in Ref. [2], the Einstein modes are at approximately the same frequencies as found above, the linear coefficient is 45 mJ/mol K^2, and the Debye temperature of the vibrational mode is 20% higher. (The large linear term together with low-energy optic modes make it difficult to accurately determine the Debye temperature.) Other than the absence of the rotational acoustic mode, the frequencies that characterize the phonon density of states are close to those reported in Ref. [2]. The important conclusion in our original paper, which remains valid, is that there exists two large Einstein-like excitations at ~ 21 and ~ 40 cm^{-1}. We also want to point out that the mode at 40 cm^{-1}, which is associated with the librational motion, is significantly higher than the frequencies calculated by Que [1].

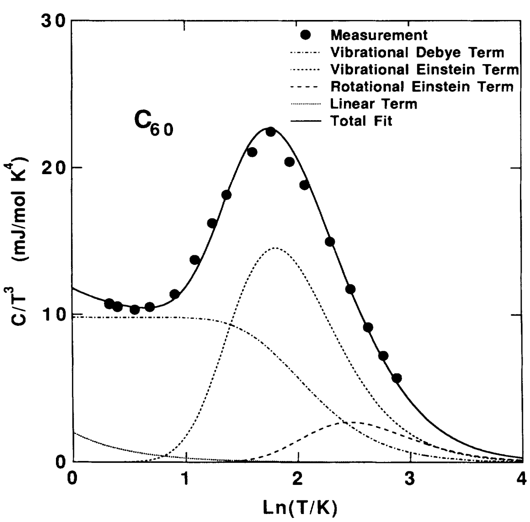

FIG. 1. The specific heat of polycrystalline C_{60} plotted as C/T vs $\ln(T)$. The parameters for the fit are given in the text.

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[3] W. P. Beyermann, M. F. Hundley, J. D. Thompson, and R. Kaner (to be published).