## Abstract Submitted for the MAR06 Meeting of The American Physical Society

Statics and Dynamics in model Dendrimer Melts<sup>1</sup> KOSTAS KARATASOS, Aristotle University of Thessaloniki, Thessaloniki, Greece — Molecular Dynamics simulations were employed in order to explore the static and dynamic response of model AB2 dendrimer melts of generations 3 to 6. This study was performed in a temperature range covering the states of enhanced mobility, as well as the states where a significant dynamic slow-down led to the freezing-in of the dendrimer motion. Particular emphasis was given to the investigation of the effects of the dendritic geometry and the dendrimer size to local polymer dynamics associated with the glass transition phenomena.

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