

Supplementary Information

Ultrafast electronic energy relaxation in a conjugated dendrimer leading to inter-branch energy redistribution

D. Ondarse-Alvarez^a, S. Kömürlü^b, A. E. Roitberg^c, G. Pierdominici-Sottile^a, S. Tretiak^d, S. Fernandez-Alberti^{a*}, and V. Kleiman^{c*}

^a *Departamento de Ciencia y Tecnología, Universidad Nacional de Quilmes/CONICET, B1876BXD Bernal, Argentina*

^b *700,73rd St Dowers Grove 60516 IL*

^c *Department of Chemistry of Chemistry, University of Florida, Gainesville, Florida 32611, USA.*

^d *Theoretical Division, Center for Nonlinear Studies (CNLS), and Center for Integrated Nanotechnologies (CINT), Los Alamos National Laboratory, Los Alamos, NM 87545, USA.*

Figure S1. Atom types and RESP charges of Ph₃PG-1

Figure S2. Chemical structure of 1,4- bis(phenylethynyl)benzene

Figure S3. Steady state emission spectra of dendrimer **1** (black) and 1,4-bis(phenylethynyl)benzene (green) in THF.