Supporting Information

Supramolecular Linear-Dendritic Nanoreactors: Synthesis and Catalytic Activity in "Green" Suzuki-Miyaura Reactions

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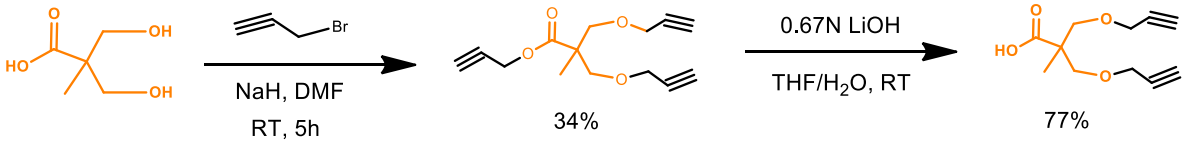
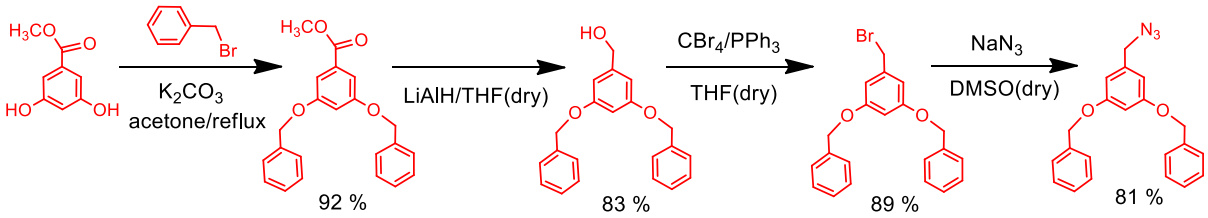
Scheme S1: Synthesis of 2,2-bis(propargyl) propionic acid (bis-PPA)



L. Wang, D.J. Kiemle, C.J. Boyle, E.L. Connors, I. Gitsov
"Click" Synthesis of Intrinsically Hydrophilic Dendrons and Dendrimers Containing Metal Binding Moieties at Each Branching Unit.
Macromolecules **47(6)**, 2199-2213 (2014)

Scheme S2: Synthesis of first generation poly(benzyl ether) dendron azide



C. Hawker, J.M.J. Fréchet
A New Convergent Approach to Monodisperse Dendritic Macromolecules.
J. Chem. Soc., Chem. Commun. **1990**, 1010-1013.

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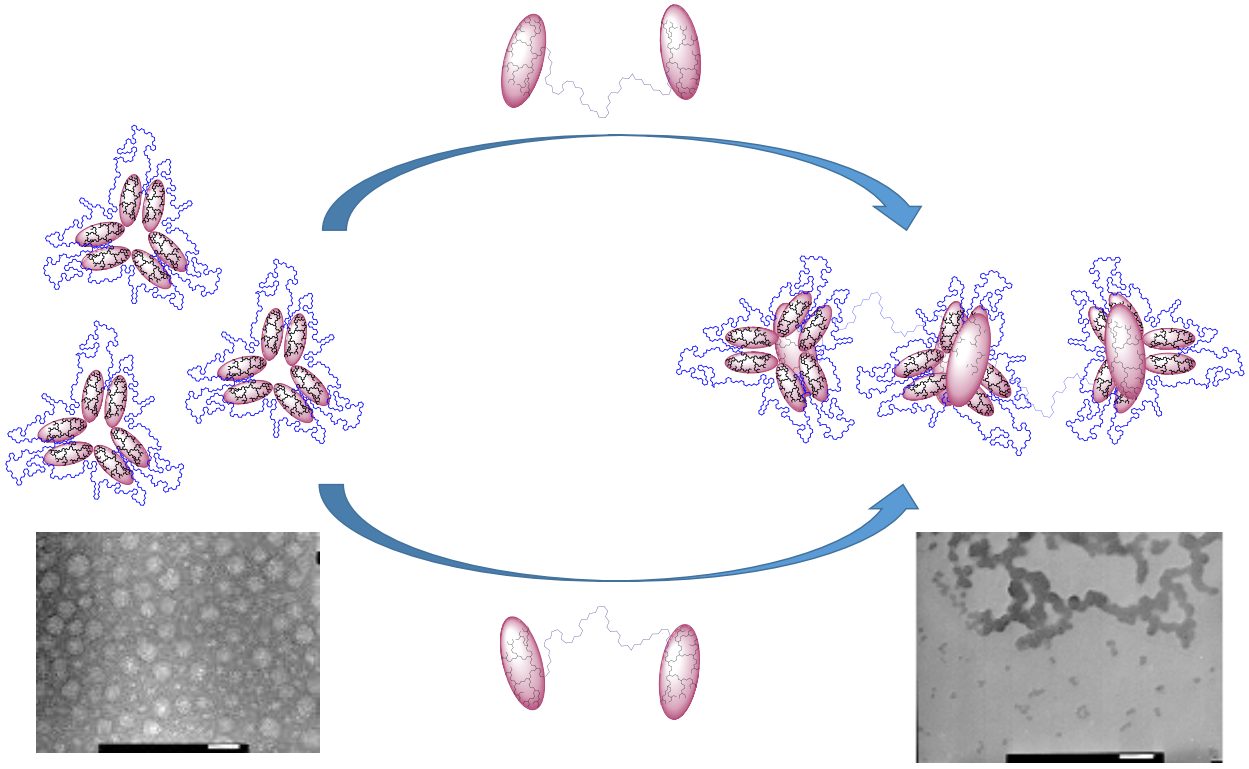
Polymers main text (2023)

Table S1: Molecular mass characteristics of initial PEGs, intermediates and final products in the synthesis of linear-dendritic copolymers

Compound	M_p[a)]	M_n[b)]	M_w[b)]	Đ[c)]
PEG5k	4210	4030	4140	1.03
(alkyne)-PEG5k-(alkyne)	4640	4500	4630	1.03
$(G1)_2$-PEG5k-$(G1)_2$	5150	4950	5100	1.10
$(G2)_2$-PEG5k-$(G2)_2$	6000	5710	6040	1.06
PEG11k	12200	9750	11800	1.21
(alkyne)-PEG11k-(alkyne)	12700	10600	13500	1.27
$(G2)_2$-PEG11k-$(G2)_2$	156000	11110	14150	1.27

[a)]Apparent molecular mass measured at the apex of the eluting peak, [b)]apparent molecular mass calculated against poly(styrene) calibration, [c)]polymer dispersity M_w/M_n.

Figure S1: Schematic representation of micelle "stitching" and TEM images of individual [G-3]-PEG11k-[G-3] micelles (a, scale bar 50 nm) and their interconnected supermolecules (b, scale bar 200 nm)



(a) (b)

Figure S2: ^{1}H NMR spectra of 4-bromoacetophenone (A) and S-M coupling product with phenyl boronic acid (B)