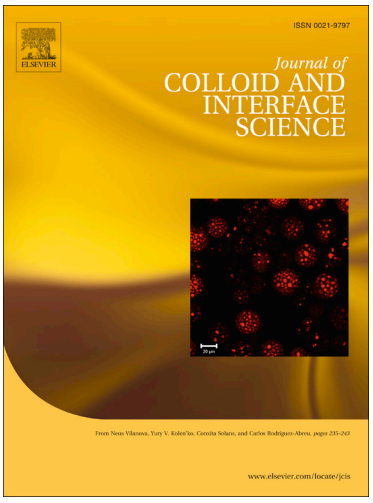

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Sytze Buwalda, Assala Al Samad, Ayman El Jundi, Audrey Bethry, Youssef Bakkour, Jean Coudane, Benjamin Nottelet

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Stabilization of poly(ethylene glycol)-poly(ε-caprolactone) star block copolymer micelles via aromatic groups for improved drug delivery properties

Sytze Buwalda,[a*] *Assala Al Samad,*[a,b] *Ayman El Jundi,*[a,b] *Audrey Bethry,*[a] *Youssef Bakkour,*[b] *Jean Coudane,*[a] *Benjamin Nottelet*[a]

[a] Institut des Biomolécules Max Mousseron (IBMM UMR 5247), Université Montpellier, CNRS, ENSCM, Faculté de Pharmacie, 15, avenue Charles Flahault BP14491, 34093 Montpellier cedex 5, France

[b] Laboratory of Applied Chemistry (LAC), Faculty of Science III, Lebanese University, P.O. Box 826, Tripoli, Lebanon

[*]Corresponding author. Telephone number: +33(0)4-11-75-96-97; Fax number: +33(0)4-11-75-97-28

E-mail addresses: sijtze.buwalda@umontpellier.fr; assalasamad@hotmail.com; aymanjondi91@gmail.com; audrey.bethry@univ-montp1.fr; ybakkour@ul.edu.lb; jcoudane@univ-montp1.fr; Benjamin.Nottelet@umontpellier.fr

Abstract

Hypothesis. The functionalization of poly(ethylene glycol)-poly(ε-caprolactone) (PEG-PCL) block copolymers with moieties allowing for core-crosslinking is expected to result in improved micellar stability and drug delivery properties.

Experiments. PEG-$(PCL)_8$ star block copolymers were functionalized with pendant benzylthioether (BTE) groups by applying an anionic post-polymerization modification technique followed by photoradical thiol-yne addition of benzyl mercaptan. The micellar properties of PEG-$(PCL)_8$ and PEG-