



American Chemical Society

NOTE: Abstracts public availability on June 30, 2008; rooms and times subject to change.

RAFT, a powerful tool to bioactive peptide-polymer conjugates

POLY 543

Hans G. Börner, hans.boerner@mpikg.mpg.de and Jens Hentschel, Jens.Hentschel@mpikg.mpg.de.
Department of Colloid Chemistry, Max Planck Institute of Colloids and Interfaces, Am Mühlberg 1,
Potsdam, 14424, Germany

A versatile synthesis platform is described to access highly-defined peptide-polymer conjugates by a convenient and cost-effective RAFT polymerization route. The CTA moiety could be introduced to the peptide in a fully automated manner to obtain the peptide-CTA. The approach does not rely on dithioester-based CTAs but on trithiocarbonates, which have been recently evidenced to be more robust against nucleophiles than the dithiobenzoates. The peptide-CTAs effectively control the polymerization of various monomers, allowing to access a broad range of peptide-polymer conjugates for the design of bio-relevant materials.

[5th Controlled/living Radical Polymerization Symposium](#)

1:30 PM-5:25 PM, Wednesday, August 20, 2008 Sheraton Philadelphia City Center -- Liberty Blrm
A, Oral

[Division of Polymer Chemistry](#)

[The 236th ACS National Meeting, Philadelphia, PA, August 17-21, 2008](#)