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NEWS RELEASE

Client: Gelest
For Immediate Release

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New PEGylation Reagents available from Gelest

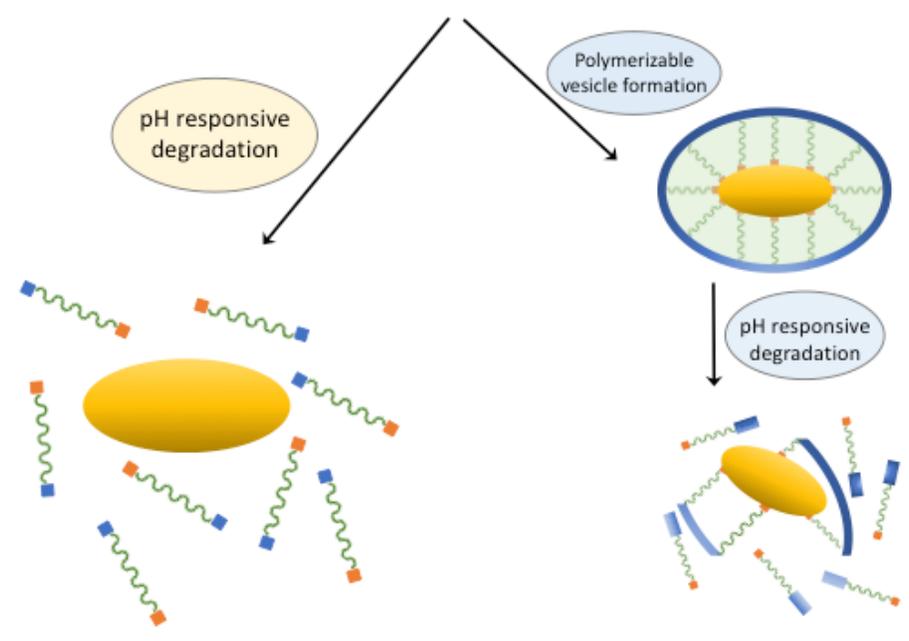
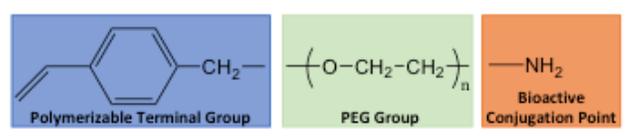
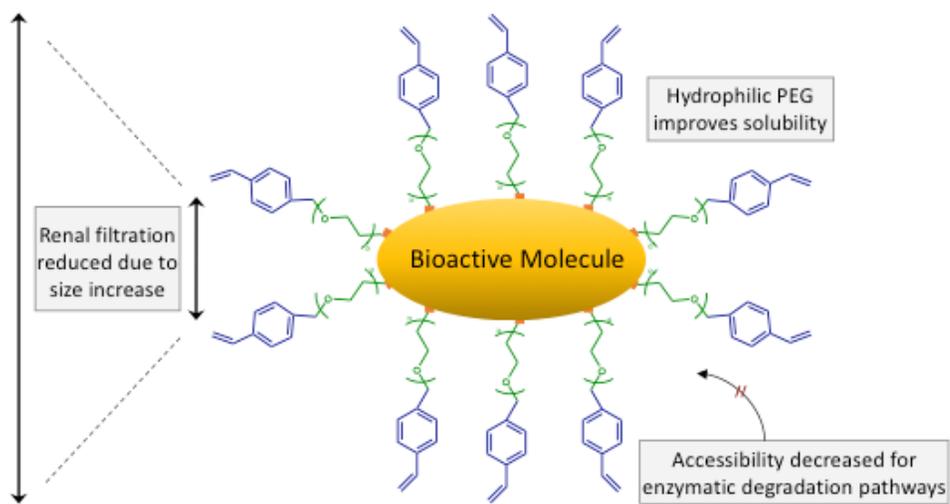
MORRISVILLE, Pa. (October 9, 2017) – Gelest has introduced a unique range of dual-function poly(ethylene glycol) (PEG) reagents that enable new approaches to PEGylation for bioconjugates, reduction of surface biofouling and formation of polymerizeable vesicles for drug transport. These “first of a kind” materials are heterobifunctional materials with an amine at one terminus and a choice of two different species at the other. One species can undergo radical reactions and the second can undergo hydrolytic condensation. In addition to reacting directly with appropriate functionality of drug or protein substrates, these materials have the potential to undergo polymerization.

PEGylation, the formation of a conjugate of a protein, peptide, drug or other bioactive material by linking it with one or more PEG chains, in many instances imparts desirable properties to a biomolecule: increased solubility, resistance to metabolic degradation and reduced immunogenicity.

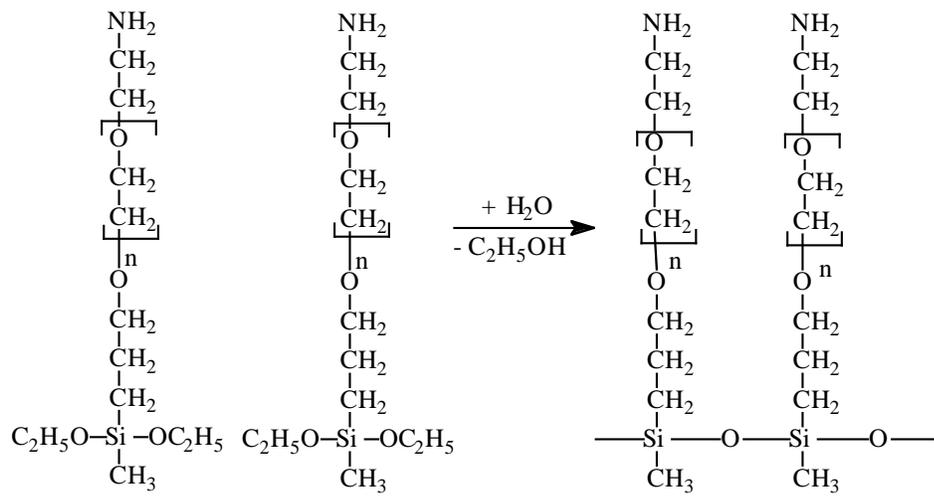
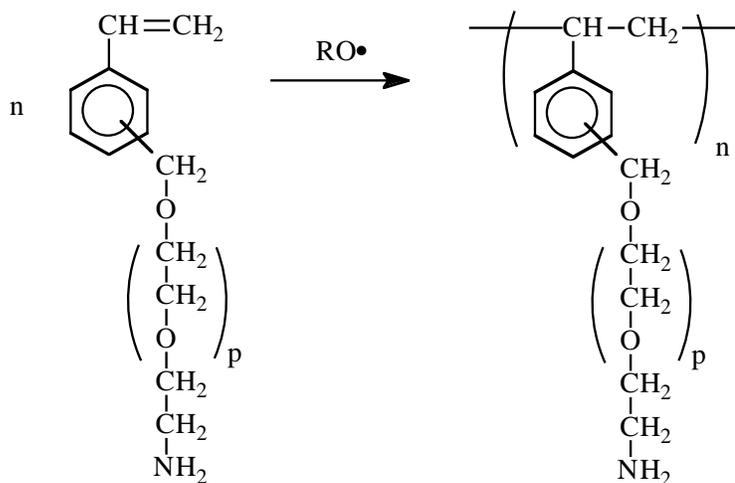
The new polymerizeable PEG materials have the potential to form polymerizeable vesicles, stabilizing PEGylated drugs or acting as comonomers

for microencapsulated drug delivery. The polymerization can proceed by either free radical organic polymerization or hydrolysis-condensation siloxane polymerization.

The motif below depicts PEGylation of a bioactive substance and the benefits of the PEGylation with a PEG terminated by styryl and amine functionality. It also shows potential pathways for both stabilized vesicle formation by polymerization and pH-responsive release of the bioactive.



Exemplary reactions for heterobifunctional PEG polymerization by radical and hydrolytic mechanisms are shown below.



For more information on PEGylation reagents, [click here](#) to download Gelest's new brochure.

About Gelest

Gelest, Inc., headquartered in Morrisville, Pennsylvania, is recognized worldwide as an innovator, manufacturer and supplier of commercial and research quantities of organosilicon compounds, metal-organic compounds and silicones. Gelest serves advanced technology markets through a materials science-driven approach. The company provides focused technical development and application support for semiconductors, medical materials, pharmaceutical synthesis, diagnostics and separation science, and specialty polymeric materials: "Gelest – Enabling Your Technology." www.gelest.com

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