

# 4<sup>th</sup> International Conference and Exhibition on Pharmaceutics & Novel Drug Delivery Systems

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## Chitosans for the Delivery of siRNA

Chitosan is a polymeric delivery vehicle that has increasingly been used for the delivery of nucleic acids. As of 2012 there were nearly 10,000 articles in the literature describing chitosan as a nanocarrier. Although there has been a phenomenal growth rate associated with chitosan as a delivery vehicle, there is still a need to understand the structure-function relationships associated with chitosan based delivery systems. In this presentation we hope to describe the optimal preparation conditions, physico-chemical properties, factors that affect the transfection efficiency, cytotoxicity, endolysosomal transit, intracellular release and potential *in vivo* applications in gene therapy.

## Biography

Walter Rudzinski did his Ph.D. in Analytical Chemistry, University of Arizona in 1977. Currently he is Professor at Texas State University, USA. He was Chairman of Chemistry and Biochemistry Department, Texas State University during 2007-2010. He was honored by Texas State Recipient of Presidential Award for Excellence in Research during 2004. His area of expertise is in analytical methods development, polymeric drug delivery, mass spectrometry (ESI/MS and MALDI/TOF/MS), crude oil characterization, electrochemistry (cyclic voltammetry), conducting polymers, and chromatography (HPLC, GC).

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