

# **Regioselective Synthesis of Curdlan Derivatives**

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Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State  
University in partial fulfillment of the requirements for the degree of

**Doctor of Philosophy**

**In**

**Macromolecular Science and Engineering**

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**Author:** Ruoran Zhang, Kevin J. Edgar  
**Publication:** Biomacromolecules  
**Publisher:** American Chemical Society  
**Date:** Apr 1, 2014

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**Author:** Ruoran Zhang, Kevin J. Edgar

**Publication:** Carbohydrate Polymers

**Publisher:** Elsevier

**Date:** 25 May 2014

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**Author:** Ruoran Zhang, Kevin J. Edgar

**Publication:** Carbohydrate Polymers

**Publisher:** Elsevier

**Date:** 20 May 2015

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**Title:** Regioselective synthesis of cationic 6-deoxy-6-(N, N, N-trialkylammonio)curdlan derivatives

**Author:** Ruoran Zhang, Shu Liu, Kevin J. Edgar

**Publication:** Carbohydrate Polymers

**Publisher:** Elsevier

**Date:** 20 January 2016

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**Author:** Ruoran Zhang, Xueyan Zheng, Joyce Kuang, Kevin J. Edgar

**Publication:** Carbohydrate Polymers

**Publisher:** Elsevier

**Date:** 26 November 2014

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