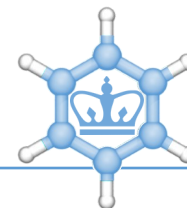


THE GRANDPIERRE LECTURE

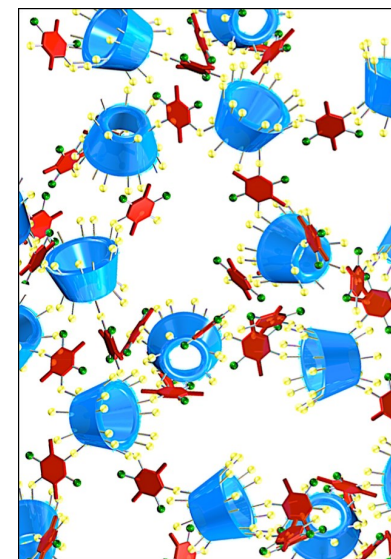


Thursday, February 14, 2019 at 4:30pm
Room 209 Havemeyer

Removing Organic Pollutants from Water Using Polymers Derived from Corn

**William Dichtel, Robert L. Letsinger Professor of Chemistry
Northwestern University**

Organic micropollutants, such as pesticides and pharmaceuticals, have raised concerns about negative effects on ecosystems and human health. These compounds are introduced into water resources by human activities, and current wastewater treatment processes do not remove them. Activated carbons are the most widespread adsorbents used to remove organic pollutants from water, but they have several deficiencies, including poor removal of relatively hydrophilic micropollutants, inferior performance in the presence of naturally occurring organic matter, and energy intensive regeneration processes. I will describe polymers based on β -cyclodextrin, an inexpensive, sustainably produced derivative of glucose that binds these emerging contaminants from water. We also recently modified our original polymer design to target perfluorinated compounds such as PFOA, which are environmentally persistent associated with negative effects at trace concentrations



Hosted by the Chandler Society



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Tea and cookies will be served prior to the lecture at 4:00pm in the Miller Room 328 Havemeyer

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