



Center for Environmentally  
Beneficial Catalysis

# CEBC Industry Colloquium

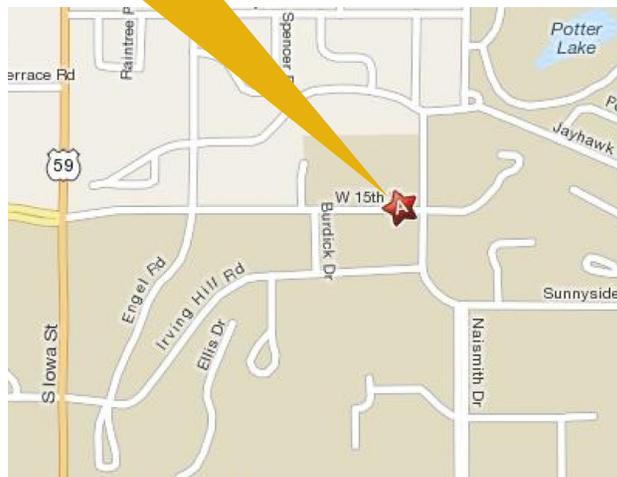
## Green Chemistry: The Missing Elements

Imagine a world where all segments of society demanded environmentally benign products!

Imagine if all consumers, all retailers and all manufacturers insisted on buying and selling only non-toxic materials! The unfortunate reality is that, even if this situation were to occur, our knowledge of materials science and chemistry would allow us to provide only a small fraction of the products and materials that our economy is based upon. The way we learn and teach chemistry and materials science is for the most part void of any information regarding mechanisms of toxicity and environmental harm. Green Chemistry is a philosophy that seeks to reduce or eliminate the use of hazardous materials at the design stage of a materials process. It has been demonstrated that materials and products CAN be designed with negligible impact on human health and the environment while still being economically competitive and successful in the marketplace. This presentation will describe the history and background of Green Chemistry and discuss the opportunities for the next generation of materials designers to create a safer and more sustainable future.

**11:00 a.m. Tuesday  
December 5, 2017**

**Spahr Auditorium  
Room 2 Eaton Hall, 1520 W. 15th St.,  
Lawrence, KS**



The Center for Environmentally Beneficial Catalysis (CEBC) at the University of Kansas and its partners are developing green technologies to help the chemical industry prevent waste and conserve the earth's natural resources.

[www.cebc.ku.edu](http://www.cebc.ku.edu)

### Dr. John Warner

President and CTO,  
Warner Babcock Institute  
for Green Chemistry  
Wilmington, MA

#### About the presenter

*John is the recipient of the 2014 Perkin Medal, widely acknowledged as the highest honor in American Industrial Chemistry, and was named a 2016 AAAS-Lemelson Invention Ambassador. He is one of the founders of the field of Green Chemistry, co-authoring the defining text **Green Chemistry: Theory and Practice**, with Paul Anastas.*

*He received a BS in Chemistry from UMASS Boston, and PhD in Chemistry from Princeton University. After a decade at the Polaroid Corporation, he served at UMASS Boston and Lowell as a tenured full professor in Chemistry and Plastics Engineering. In 2007 he founded the Warner Babcock Institute for Green Chemistry, LLC (a green chemistry research organization), and Beyond Benign (a non-profit dedicated to sustainability and green chemistry education). He has published nearly 300 patents, papers and books. His recent work in the fields of pharmaceuticals, personal care products, solar energy and construction and paving materials are examples of how green chemistry principles can be immediately incorporated into commercially relevant applications.*

*Warner received The 2004 Presidential Award for Excellence in Science Mentoring (considered one of the highest awards for US science education), the American Institute of Chemistry's Northeast Division's Distinguished Chemist of the Year for 2002 and the Council of Science Society President's 2008 Leadership award. He was named by ICIS as one of the most influential people impacting the global chemical industries. In 2011 he was elected a Fellow of the American Chemical Society and named one of "25 Visionaries Changing the World" by Utne Reader.*

