

Department of Chemistry

Bayer Lectureship in Sustainability

7 p.m. Thursday, April 18, 100 Smith Hall

In Pursuit of the Perfect Plastic

Can we create the perfect plastic, made from renewable resources and environmentally friendly?

*One of the top chemists in the world, Professor Geoffrey Coates, examines this question and presents his current research on the synthesis of sustainable polymers at a special Bayer Lectureship in Chemistry, which is scheduled for **7 p.m. Thursday, April 18, in 100 Smith Hall.***

Society depends on polymeric materials now more than at any other time in history. Although synthetic polymers are indispensable in a diverse array of applications, ranging from commodity packaging and structural materials to technologically complex biomedical and electronic devices, their synthesis and post-use fate pose important environmental challenges. The focus of our research is the development of new routes to polymers with reduced environmental impact. In this work, we aim to transition from fossil fuels to renewable resources, and are developing synthetic methods that limit energy and raw-material consumption. In addition, we are designing materials that will eventually degrade into non-toxic materials, and have properties comparable to current commodity plastics. In this lecture, the development of new methods for the synthesis of sustainable polymers will be presented.

Geoffrey W. Coates received a doctorate in organic chemistry with Robert Waymouth at Stanford University in 1994, and was a National Science Foundation Postdoctoral Fellow with Robert Grubbs at the California Institute of Technology. He joined the Cornell University faculty in 1997, where he is now the Tisch University Professor.



Professor Coates has received many awards, including the A.C. Cope Scholar Award, American Chemical Society Affordable Green Chemistry Award, and the Carl S. Marvel Creative Polymer Chemistry Award. In 2011, he was identified by Thomson Reuters as one of the world's top 100 chemists on the basis of the impact of his scientific research, and was inducted into the American Academy of Arts & Sciences. He is the scientific co-founder of Novomer Inc., and is a member of the *Dalton Transactions* Editorial Board, and is an associate editor of *Macromolecules*.



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Hosted by Chemistry Professor Marc Hillmyer, director of the University of Minnesota Center for Sustainable Polymers. Co-sponsored by the University of Minnesota Institute on the Environment.
Smith Hall: 207 Pleasant St. S.E. Minneapolis