

2004 Hancock Memorial Student Award in Green Chemistry  
Amy S. Cannon, Department of Chemistry, University of Massachusetts,  
Boston

Amy S. Cannon, under the guidance of Professor John C. Warner at the University of Massachusetts Boston, was selected for designing an environmentally benign, efficient, and inexpensive Titanium Dioxide Dye-Sensitized Solar Cell (DSSC). Titanium dioxide solar cells are typically constructed at high temperatures (400-500 °C), in an energy-intensive process that limits the choice of substrate. Amy found that adding catalytic amounts of trimesic acid to titanium dioxide permits the films to coalesce at ambient temperature, producing films with the same physical characteristics as those prepared by traditional methods. Amy is also investigating a series of spiropyrans as possible co-sensitizers to prevent back electron transfer in DSSCs, thereby improving efficiency. Amy's research projects will advance the development of sustainable methods of manufacturing DSSCs.

**American Chemical Society  
Division of Environmental Chemistry  
Student Awards Committee**

**Fall Meeting 2004**

1. There were 9 applicants for the Graduate Student Paper Award. Manuscripts were sent out for review in January. Thanks to the following reviewers: Pamela Rice, Sadika Baladi, Chris Pepper, Kevin Johnson, Audra Morse, and Andrew Jackson.

Each manuscript received at least 2 reviews. Based on the average scores and reviewer comments, I sent letters to George Anipsitakis, Tomar Kohn, Mira Stone Olson, Hoon Young Jeong, and Rahmat Ullah indicating that they were the 2004 winners. The Award Symposium is scheduled for Tuesday afternoon followed by the Division dinner at which the award presentations will be made.

2. The 2005 award announcements will be mailed in September.