IGNITE CHANGE. GO GREEN.

Campus Sustainability Week Recap

2nd annual Mt. Trashmore event, where one day’s worth of trash from Connelly and Dougherty are piled up next to the Oreo. Check out our video to learn more.

This year marked the 3rd annual Sustainable Careers Panel. Big thank you to our panelist, (right to left) Ryan Krill, Daniel Weeden, Molly Duffy, Kevin Flynn, and Charlie Dolan.

University Grounds hosted Villanova’s first tree tour. There will be more tours held in the spring.

Congratualtions to our newest Green Labs:

- Dr. James Wilson, Biology
  Ashveen Bains, Green Lab Champion
- Dr. Metin Duran, Civil and Environmental Engineering
  Christopher Corin, Green Lab Champion
- Dr. Wenquing Xu, Civil and Environmental Engineering
  Christopher Corin, Green Lab Champion

Become a Green Lab today.
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Events

November 6th, 1pm CEER 312
“In silico Models Developed for Microbial Fuel Cells” by Zuyi (Jacky) Huang, Ph.D., Asst. Professor in the Department of Chemical Engineering.

November 10th, 7:30pm Tolentine 427A
“Billions in Change” movie viewing.

November 18th, 11am-2pm Dougherty Hall
“Sustainability Sweepstakes Challenge” is part of the Catholic Relief Services (CRS) Ambassador “I am Climate Change” Campaign to raise awareness of the COP21, The United Nations Conference on Climate Change. For a chance to win T-shirts, chocolate, stickers, and much more, CRS Ambassadors challenge you to post a video onto social media, using #Iamthesolution and #vucrs, of yourself doing something sustainable for the Earth and tag three of your friends to invite them to do same.

November 19th, 11am-8pm Friends Center, Philadelphia
“3rd Annual Fair and Sustainable Gift Fair” organized by the Fair Trade in Philadelphia group.

Academics

World Climate Simulation
Students participate in a mock simulation of the Paris COP21 Climate Negotiation, explore the science and geopolitics of international agreements on climate change through hands-on learning and a computer simulation depicting what will happen to the world if we don’t act appropriately. If you or your class would like to participate, contact Liesel.

PA Power Dialog
If you are teaching a course in spring 2016 that includes content on climate change, climate policy, environmental policy and/or energy policy, you and your students are invited to participate in the PA Power Dialog.
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What Should Villanova Do?

97% of recently surveyed students agree that Villanova has a responsibility to consider sustainability concerns when making decisions.

We want to hear from you! What should Villanova do to be a more sustainable institution? Tell us what you think.

How to Host a Sustainable Thanksgiving

Getting there: getting to Thanksgiving dinner can be carbon costly. Consider carpooling, or taking the train. If you have to fly, you can offset the emissions through Terrapass.

Help those in need: donate food through Campus Ministry.

The Turkey: everyone loves a good turkey on Thanksgiving, but not all turkeys are created equal. Consider buying your turkey from Lancaster Farm Fresh; it’s local, fresh, and organic.

Vegetables: there are so many wonderful vegetables in season now! Check out the VU CSA Pinterest page for ideas on how to cook your favorite vegetables.

Remake leftovers: don’t just eat cold turkey sandwiches for two weeks after Thanksgiving; discover new ways to remake old favorites.
Save the Date: VCASE Lecture Series
November 6th, CEER 312, 1:00 pm to 2:00 pm.

VCASE is proud to host the upcoming lecture series, “In silico Models Developed for Microbial Fuel Cells,” by Zuyi (Jacky) Huang, Ph.D., Assistant Professor Department of Chemical Engineering.

Abstract

Microbial fuel cells (MFCs) use the bacterial metabolism of a wide range of organic substrates, especially those in waste-streams, to produce electricity and conduct such important tasks as desalinating saline water and waste water treatment in an energy-efficient way. MFCs thus provide an environmentally sustainable approach for simultaneous wastewater treatment and recovery of value-added products. However, the research on MFCs is still in its infancy, as some key issues have not been well studied, such as optimizing the design and operation conditions and scaling up MFCs for practical applications. Those issues are complex as MFC performance depends on multiple operating and design parameters. Mathematical models can provide systems-level platforms to optimize the design and scale up of MFCs. We developed the first ODE model for a microbial desalination cell (MDC) and identified optimal design and operation parameters for this fuel cell. We then incorporated the space dimension to the MFC model and developed a partial differential equation (PDE) model for a small-scaled MFC with a planar anode electrode. Biochemical reactions were added in the 2D PDE model, and the CFD program Fluent was used to calculate current production in the MFC. We further extended our CFD model for a scaled up tubular MFC and evaluated the 3D fluid dynamics and multiphase aspects for the acetate solution in the anode compartment and for the sparging oxygen in the cathode compartment.

The talk will be streamed live and archived too.

Visit www.villanova.edu/vcase and go to Lecture Series to view all the previous talks.