

Technical Tour of Ecovative Design

Tour leader: Eben Bayer, CEO of Ecovative Design, RPI ME/Product Design graduate

Date: Tuesday April 7th, 2009

Time: 6:30 – 8 PM

Place: 1223 Peoples Avenue, "J Building" (Incubator Center), Troy, NY 12182

Non-Disclosure Agreement: Ecovative is requiring all tour participants to sign a non-disclosure agreement prior to the tour. The NDA form can be found here:

http://sections.asme.org/hudson-mohawk/Ecovative_Unilateral_NDA.doc.

RPI Campus Map:

http://www.rpi.edu/virtual_tour/rpi_campus_map_1206.pdf

Driving Directions:

http://www.rpi.edu/dept/incubator/homepage/contactus_direct_ion.html

Parking: Park up top in the Main Lot (J-Lot). Group will gather at entrance and CEO Eben Bayer will let us in (tour is after-hours so building is locked)

RSVP by Noon Monday, April 6th, 2009

Contact: Larry Kelley (kelleylb@asme.org) or 880 0200 x5378. E-mail contact preferred.

Introduction of Ecovative Design

Ecovative's Mission statement: At Ecovative Design we are creating cost competitive alternatives to synthetics like foams and plastics. We believe you can achieve sustainability without sacrificing performance or affordability. That's why we are replacing fundamentally unsustainable plastic and

synthetic products with natural composites—products that perform just as well as the current state of the art, at a lower cost to both you and the environment. Ecovative Design is innovating alternatives you can feel good about.

From June 24, 2007 AP article by Jessica Pasko, "CEO of Ecovative Design, Eben Bayer, grew up on a farm in Vermont learning the intricacies of mushroom harvesting with his father. Now the Rensselaer Polytechnic Institute graduate is using that experience to create an organic insulation made from mushrooms.

Combining his agricultural knowledge with colleague Gavin McIntyre's interest in sustainable technology, the two created their patented "Greensulate" formula, an organic, fire-retardant board made of water, flour, oyster mushroom spores and perlite, a mineral blend found in potting soil.

They're hoping the invention will soon be part of the growing market for eco-friendly products. The two young developers graduated May 2007 from RPI with dual majors in mechanical engineering and product design and innovation



Properties of Greensulate:

- R-Value: 3 per inch
- Flammability: Non-Flammable
- Density: 6 lbs/ft³
- Compressive σ : 150 psi (ASTM C165-07)
- Flexural σ : 50 psi (ASTM C203-05a)

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The two say recent tests at the National Institute of Standards and Technology have shown it to be competitive with most insulation brands on the market. A 1-inch-thick sample of the perlite-mushroom composite had a 2.9 R-value, the measure of a substance's ability to resist heat flow. Commercially produced fiberglass insulation typically has an R-value between 2.7 and 3.7 per inch of thickness, according to the Oak Ridge National Laboratory in Tennessee."

YouTube Video:

<http://www.youtube.com/watch?v=xTpus9BH2V8>

Courtesy Science Channel HD "Mushroom insulation invention nation

Special Requirements:

Non-Disclosure Agreement needs to be signed to take tour (will be posting on web section site). Contact Larry Kelley if you are unable to obtain the NDA form. Form will also be available at the beginning of the tour.

Cost: Free

Reservations:

To reserve your seat, please contact Larry Kelley (kelleylb@asme.org), or 880 0200 x5378 by April 5th, 2009. E-mail contact is preferred.

Letter from the Chair

April is a busy month for Hudson-Mohawk section. In addition to the tour of Ecovative Design on April 7th, there are two other events that want to bring to your attention.

First, is a reminder that the ASME Emerging Technologies division is sponsoring a three-day workshop on Nanoscale Measurement Challenges for Energy Applications. The event will be held at the College of Nanoscale Science and Engineering (CNSE) University at Albany on April 26 – 28,

2009. A link to the nanoscale conference's website follow: <http://www.asmeconferences.org/Nanomeasurement09>

If you are not attending the nanoscale workshop, you might be interested in attending this year's 70th Steinmetz Memorial Lecture at Union College on Monday, April 27th, 2009 at 7:30 PM in the Nott Memorial on the Union College campus in Schenectady. This year, Dr. Lawrence L. Kazmerski (Executive Director, Science and Technology Partnerships, National Renewable Energy Laboratory) will present a talk on "Solar Photovoltaics Technology: The Beginning of the Revolution". A banquet will be held at the Hale House prior to the lecture at the Nott Memorial.

More information can be found at:

http://www.ewh.ieee.org/r1/schenectady/apr27_2009.html

The Steinmetz Memorial Lecture Series is co-sponsored by Schenectady Section of IEEE and Union College.

Regards,

David Smith

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Distribution of Section Newsletter

The Hudson Mohawk newsletter is posted at:

<http://sections.asme.org/hudson-mohawk/>

Once each newsletter is posted on the Section's web page, an e-mail notification and link to the above website is sent to members who have e-mail addresses in the ASME member database. If you are an active member of ASME and did not receive an e-mail notification, please go to the ASME web site and update your membership information. Additionally, please make you're your e-mail service does not block e-mail sent from ASME.

<http://members.asme.org/myasme/login/myasme.cfm>