Design Students Win National Awards for Bioroll Geotextile Mat

The bioroll geotextile mat can be used on construction sites to prevent sediment runoff and is a sustainable alternative to silt fencing.

A team of fourth-year industrial and interaction design (IID) students in the College of Visual and Performing Arts’ Department of Design won three $1,000 awards in the Royal Society of Arts U.S. (RSA-US) Student Design Awards.

Boaz Cohen, Jesse Handelman, Jon Langer, Miles Ray, Kevin Scheiferstein, Zach Stringham and Shelby Zink and their project “Bioroll Geotextile Mat” won the RSA-US Leadership Award for Applied Industrial Design, the Techmer PM Award for Sustainable Design and the Techmer PM Award for Materials Science.

The mat, which the students created in the fall 2013 semester for the IID program’s annual 360° IID Competition, is made out of mushroom spores manufactured into a biodegradable fiber roll. The mat can be used on construction sites to prevent sediment runoff (required by law) and is a
sustainable alternative to silt fencing, which is made from petroleum-based black plastic and discarded after a single use.

“In that the brief for the RSA was to create an ‘innovation step in the built environment,’ this clearly represented an innovative idea,” says Don Carr, a professor of IID and the students’ advisor. “Also, working with the range of experts here on our campus, they were able to provide the technical research and documentation to back up their claims.”

RSA–US’s Student Design Awards is an awards program to inspire collaborative, multidisciplinary design-led social change that connects design students and faculty with industry needs. RSA–US is an affiliate of the Royal Society for the Encouragement of Arts, Manufactures and Commerce, founded in London in 1754.