

Purdue membrane technology could help cleanup oil spills

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(PhysOrg.com) -- A new type of membrane that separates oil from water developed by Purdue University material engineers may be used to clean up oil spills such as BP's massive spill in the Gulf of Mexico.

Jeffrey Youngblood, a Purdue assistant professor of materials engineering, has created technology that could eventually be used to help with environmental cleanups. The technology could be used for a variety of other applications, including water purification and industrial uses.

The new technology, which is being licensed through the Purdue Research Foundation's Office of Technology Commercialization, would last longer than conventional filters for separating oil from water and works by attracting water while beading oil, traits that are usually mutually exclusive.

Researchers have tested the materials with solutions containing oil suspended in water, similar to concentrations existing in oil spills and other environmental cleanup circumstances.

"Oil dispersed in water and then run through these filters is resulting in a 98 percent separation," Youngblood said.

Such <u>filters</u> also might be used in other situations, such as removing oil from a ship's bilge water or cleaning <u>wastewater</u> contaminated with oil.



Provided by Purdue University

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