



Biofouling: The underwater battle of science and nature



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Materials scientists and biologists at PNNL are working together to find solutions to a problem called biofouling, which occurs when living creatures, like bacteria or mussels, attach themselves to ships, docks, and pipes. Scientists have created a non-toxic coating, called SLIC, that prevents these creatures from attaching to surfaces. Scientists are working together to solve the “five C’s” of biofouling: Costs, Carbon, Corrosion, Continuity, and Critters. Biofouling increases fuel and maintenance costs, increases carbon emissions, accelerates corrosion, stops equipment from working, and transports invasive or disease-causing species.



When boats and ships are free from biofouling organisms, they burn less fuel because they can glide through the water more efficiently. Reducing biofouling lessens human impact on the environment, supporting a healthier ocean and planet.



For more information, visit:
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What is biofouling?

What kinds of problems are created by biofouling?

How can scientists stop biofouling from occurring?