## Ureas and thioureas having potential antifouling action

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## **Abstract**

Antifouling coatings have long been the most effective method to avoid the accumulation of marine organisms on the submerged surfaces. The traditional antifouling coatings are toxic biocides because they contain organic tin compounds, especially, and cause serious environmental pollution. The use of coatings which are contain a heavy metal are now prohibited or restricted in most of countries. The International Maritime Organization decided to ban completely the use of the organotin compounds starting with 2003. Therefore, alternatives to the traditional coatings are of course seriously under consideration. To prevent biofouling many ideas have been proposed. Further, it should be encouraged to investigate and to develop natural products, silicone coatings and electrical methods as environmentally friendly antifouling coatings.

Keywords: biocide, antifouling proprieties, ureas, thioureas.