Nanotechnology and Environmental Clean-Up: A Refined Solution - Distillation of Oil

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We spend billions of dollars to clean up our environment from oil disasters all over the planet. The current methods never fully remove all of the oil that is spilled. The winds and ocean currents disperse the oil faster than we can contain them. To combat this, I used Nano sized magnetic particles as a new efficient method to clean up spills. As a continuation of this research, the purpose of this experiment is to see if the magnetic particles can be refined back out of the collected oil and be reused. The current methods for cleaning up the oil spills and accidents don't allow for the collected oil to be reused completely. It is often combined with soaps and other chemicals. It also does not allow for the cleaning agent to be recycled and reused for future spills. By using the magnetic particles and then refining the collected oil from either the oceans or shorelines, allows companies to remove those particles and continue using the oil. By refining the oil and magnetic particle ferrofluid through the process of distillation it will allow for the magnetic particles to separate from the oil and be able to be reused. The collected spilled oil will also be able to return to the market. Oil spills continue to effect the environment. This is why we need a solution now to this ever increasing problem.

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