



## “Environmental Innovation in the Offshore”

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***Research towards low-cost carbon capture processes: a case study with unexpected outcomes***

Two of the major problems facing the world today have their roots in energy issues. First, there is the need for the replacement of declining fossil fuel reserves. This is intimately coupled with the second issue which results from the increased burning of fossil fuels - increasing atmospheric carbon dioxide levels which are predicted to affect the global climate. While it is clear that significant carbon emissions can be achieved using non-carbon-based energy sources such as solar, wind, nuclear and geothermal energies, the energy-rich nature of fossil fuels means that we will likely be using them long into the future. In order to reduce carbon emissions at large fixed sites, such as power generating stations, carbon capture technologies can be adopted to mitigate the emissions. In this presentation the current carbon capture technologies will be surveyed, as will, briefly and in a non-technical fashion, some of the recent results from our lab.