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# **Alleviating Climate Change and Pollution with Nanomaterials**

Guest Editor:

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Deadline for manuscript submissions:

closed (31 January 2019)

## Message from the Guest Editor

Dear Colleagues,

Nanomaterials that can be utilized to extract carbon from air, capture dyes and toxic pollutants from water and degrade solid waste into useful products, are being developed:

- Researchers have developed nanoCO2 harvesters that can suck atmospheric carbon dioxide and deploy it for industrial purposes, to help slow the climate-changing rise in atmospheric CO2levels.
- Most toxic dyes used in textile and leather industries can be captured with nanoparticles. Adsorption processes using materials containing magnetic nanoparticles are highly effective and can be easily performed because such nanoparticles have a large number of sites on their surface that can capture pollutants and don't readily degrade in water
- Nanomaterials are also being explored for managing organic waste, which can pollute land and water if not handled properly. Relevantly, nanoparticles can accelerate the anaerobic digestion of the sludge, thus making it more efficient in terms of duration and enhanced production of biogas.

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Dr. Muralidharan Paramsothy *Guest Editor* 











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## **Message from the Editor-in-Chief**

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