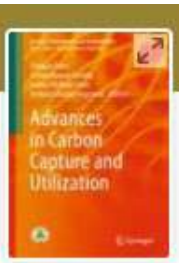

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Simultaneous Wastewater Treatment and Carbon Capture for Energy Production

Priyanka Verma, Deepshikha Pandey, Usharani Krishnaswamy, Kasturi Dutta, Achlesh Daverey ✉ & Kusum Arunachalam

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Abstract

Carbon capture and utilization technologies utilize carbon dioxide as a feedstock and convert it into value-added products such as fuels, energy, and hydrogen generating technologies, chemicals, or building materials (EC in Novel carbon capture and utilisation technologies. European Commission Group of Chief Scientific Advisors, 2018). Such sustainable technologies reduce carbon footprint, mitigate climate change, and remediate the environment. The overall aim of such carbon capture and utilization technologies is to reduce the CO_2 emissions to achieve the global average temperature increase below 2 °C, as suggested in the Paris Agreement on Climate Change.