

# Climate Change and Global Warming

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## Renewable carbon: An active path to improve global carbon footprint: Advanced carbon materials

Emission reduction is not an option but a necessity for human existence. Last 5 decades are dominated by the materials innovation and their rapid commercialization without a properly regulated accounting for human and environmental damages. With recent breakthroughs in discovering new attributes of biological and renewable materials there is a new trend to shape up our future with a much safer and business friendly advanced materials. Organic carbon is abundant in nature. When latest discoveries

in graphene and graphitic carbon materials opened a new domain of advanced materials, resourcing this carbon from abundant natural residues making a significant roadway for their broader usage in a wide span of sectors ranging from transportation to construction to biomedical and electronics. This paper will highlight the global availability of renewable carbon and their functional application by combining with the highly controversial greenhouse gas (CO<sub>2</sub>) to obtain materials that could potentially replace construction materials such as steel and concrete, transportation industry's requirement of greener energy and lighter body and biocompatible devices and drug delivery systems.



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### Biography

Mohini M Sain is the founding director of the Centre for Biocomposites and Biomaterials Processing at University of Toronto: A highly cited author on advanced renewables materials and CO<sub>2</sub> derived materials.

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