Theme Talk

Green Chemistry and its Role in Achieving Sustainable Development Goals

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Abstract

In 2015 the United Nations declared a framework comprising 17 aspirational goals known as the Sustainable Development Goals (SDGs) which was meant to be adopted by governments, industries, and other stakeholders worldwide to end poverty, protect the planet, and ensure that all people live with peace and prosperity by 2030. It can make the environment sustainable, in other words. Chemistry can play an essential role in helping society achieve the SDGs and Green Chemistry (GC) specifically may be a key player in this regard. GC complements other streams of chemistry, including environmental chemistry. Environmental Chemistry is the 'chemistry of the environment' that explains nature and the impact of man on nature. At the same time, GC is 'chemistry for the environment' i.e., more environmentally friendly chemistry. GC may be defined as "invention, design and application of chemical products and processes to reduce or eliminate the use and generation of hazardous substances". New chemical research, green and sustainable chemistry education, green and sustainable chemical manufacturing practices, and a sense of social responsibility are critical for all chemists worldwide as we work together to protect our planet Earth. SDGs including Zero Hunger, Good Health and Well-being, Clean Water and Sanitation, Affordable and Clean Energy, Industries, Innovation and Infrastructure, Responsible Consumption and Production, Climate Action is directly related to chemistry at large and GC in precise. Therefore, if we rightly practice GC, it serves the purpose of environmental sustainability and will be useful in achieving the SDGs, which will ensure that all people enjoy peace and prosperity in the long run. Green Chemistry Education is quite important in this regard, which needs to be practiced more and more.