



Chemists Celebrate Earth Week 2020
Protecting Our Planet through Chemistry

Protecting the Planet Through Green Chemistry to Promote Social and Environmental Justice

By George Ruger

There are many modern conveniences that people tend to take for granted. When we turn on a light switch, we expect there to be light. When we open a faucet at the sink, we expect water to come out. When we wait for a bus or a train, we expect that our transportation will arrive soon. We often do not think of the waste stream that is produced or where that waste goes.

Waste from various sources is often referred to as pollution. It is possible to clean up polluted sites, but doing so is usually very costly and time consuming. One of the goals of Green Chemistry is to create materials that we use every day without also creating the level of waste that we currently do.

In a webinar sponsored by the American Public Health Association in June, 2019, Robert D. Bullard stated “a 1983 study by the US General Accounting Office showed that in Region 4, which is made up of eight Southern states, 75% of the hazardous waste was dumped in sites near people of color, while they made up only 22% of the population in those areas.” Dr. Bullard has been active in the field of Environmental Justice for several decades. He is the author of *Dumping in Dixie*, a book printed in 1990 to document the connection between waste dumping, pollution, income, and race. He further discussed the concept that this is not about environmental equity. We do not want to spread out hazardous waste among the different communities. “We want to reduce and eliminate environmental risks and vulnerability that have been the historical pattern.”

Grace Lasker, a professor from the University of Washington, has been promoting Green Chemistry and Environmental Justice at scientific meetings for a number of years. She commented, “Most people would agree that it’s not ethical to design and use chemicals that negatively impact humans, animals, and the environment. Applying the Principles of Green Chemistry can not only help prevent these potentially harmful chemicals from being produced and used, but it also calls upon scientists to consider issues of social and environmental justice in chemical design and use, too! All humans deserve equal access to health and wellness. Certain groups of people suffer more chemical exposure and health impacts than others and these same negative impacts are happening in other Earth systems that we rely on as well. When we apply social and environmental justice to achieve human and environmental rights, we can shift our focus toward supporting technology and products that will create positive impacts on all living things, climate, and the environment. We can, together, save the world.”

References

Bullard Robert D. (2019, July 18). The Quest for Environmental and Racial Justice in the U.S. In *Achieving Environmental Justice in the 21st Century: the Way Forward* [Webinar]. Retrieved from: [Achieving Environmental Justice in the 21st Century: The Way Forward](https://sustainabledevelopment.un.org/sdgs)
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