GC3 Statement on Racism & COVID-19

The COVID-19 pandemic and the recent killing of George Floyd have starkly highlighted the disparities, division, and fragility of our nation and its economic system. Yet, they represent only the tip of the iceberg, symptoms of the many systemic challenges we face – from institutional racism, to limitations in our health care and public health infrastructure, economic disparities, and the impacts of human activities on our environment and the health of its inhabitants.

Early in my career, while researching chemical accident risks in the United States, I spent three years working with fenceline communities in Louisiana where residents experiencing generational poverty, primarily African American, were not only worried about the impacts of air and water pollution on their health, but also lived in constant fear of the next accident. Ms. Imelda West, a 75-year-old grandmother - was an inspiration to me. She knew that having industry was critical for her community’s economic development. Yet, she and her community believed that it was possible to have a strong economy, jobs, and industry that didn't place health and environment at risk.

There is significant evidence, dating back to the 1980s, that minority communities are disproportionately impacted by environmental degradation in resource extraction, manufacturing, and disposal. More recent evidence demonstrates that these communities are also disproportionately affected by the impacts of climate change.

A number of reports and incidents in the 1980s and 1990s gave rise to the modern environmental justice movement, a diverse and now global movement focused on equity and justice to address disparities in environmental protections. Environmental justice is defined as the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved “when everyone enjoys: the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.” While we have made significant progress over time in highlighting and addressing the disproportionate impacts of environmental degradation on minority communities, we have a very long way to go to reach the environmental justice vision.
Green chemistry has a critical and positive role to play in addressing environmental disparities, responding to Ms. West’s vision of economic development that minimizes impact on health and environment. The Principles of Green Chemistry provide a concrete roadmap to safer, more sustainable chemistry. From “inherently safer chemistry for accident prevention,” to “designing safer chemicals,” to “design for energy efficiency” and “use of renewable feedstocks” to “design for degradation” and “prevention,” application of green chemistry has the potential to design out the environmental and health impacts – and environmental inequities - that occur during the entire lifecycle of chemistry – from production, to use, and end-of-life. A number of analyses provide ample evidence of the job and economic opportunities that green chemistry investment can provide. In essence, green chemistry investment, commercialization, and adoption has the potential to provide win-win solutions that not only address environmental inequities, but can also help address economic ones as well.

As professionals involved in the development, manufacture, and application of chemistry, we have a clear responsibility to use our skills and positions to make chemistry safer, more sustainable and, ultimately more just. We need to listen thoughtfully and compassionately to impacted communities. And, we need to increase diversity among our ranks – through education and recruitment – so that we can do a better job in ensuring our work is responsive to struggles and needs of so many communities. I certainly don’t have the clear answers as to what the GC3 and green chemistry community should do, but do know that the current crises implore us to act.

As such, we will be looking more aggressively at opportunities to engage with the environmental justice community and others in the green chemistry community to strengthen green chemistry’s role as a solution to structural inequities - environmental, social, and economic. I ask our GC3 members and others in the green chemistry community to help us identify both opportunities to engage with new partners and concrete actions we can take to address structural inequities in our collective work. Green chemistry can’t solve all of society’s challenges, but the sustainability platform from which green chemistry evolved, does require us to ask tough questions of ourselves and our field. The conversations and broad show of support for action that is happening in communities across this country and around the world give me great hope for the future.

Sincerely,

Joel Tickner