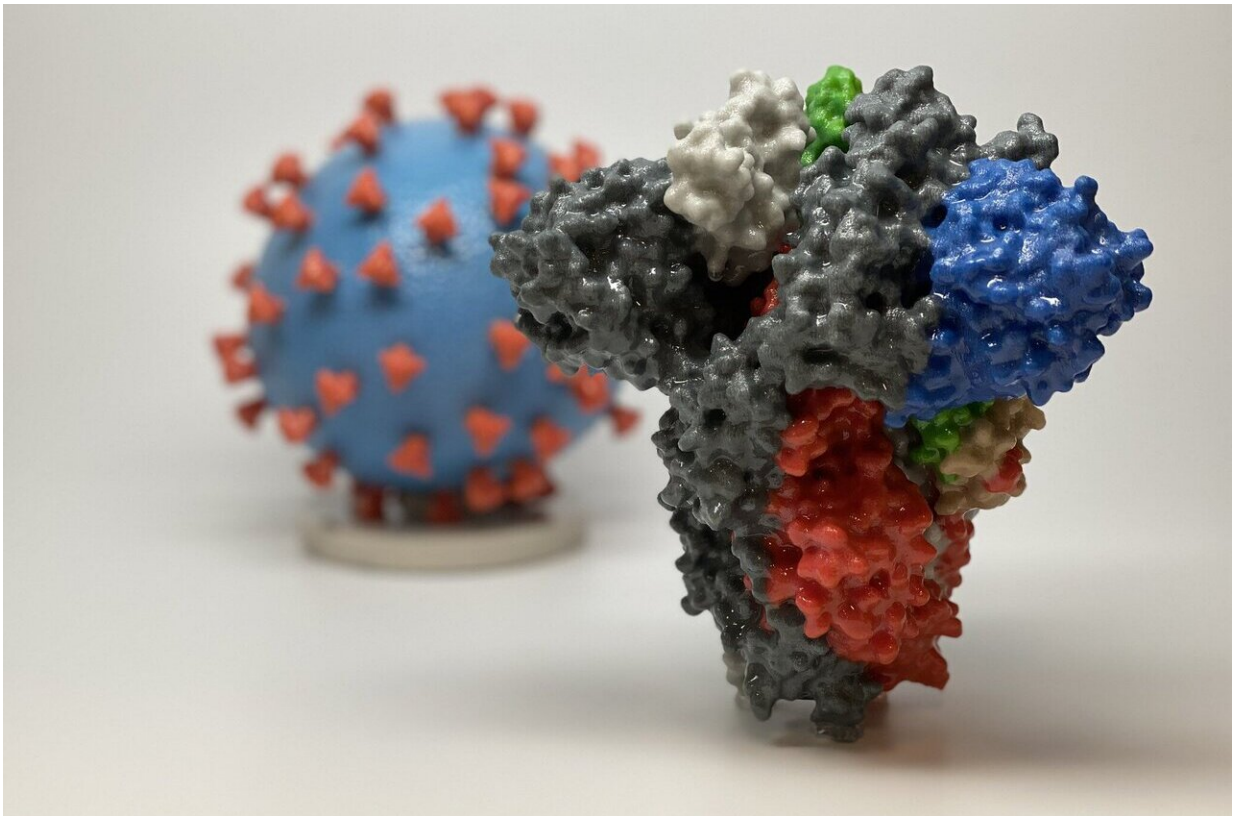


# Plastics markets adapt in the age of COVID-19

June 24 2020

---



3D print of a spike protein of SARS-CoV-2, the virus that causes COVID-19—in front of a 3D print of a SARS-CoV-2 virus particle. The spike protein (foreground) enables the virus to enter and infect human cells. On the virus model, the virus surface (blue) is covered with spike proteins (red) that enable the virus to enter and infect human cells. Credit: NIH

The COVID-19 pandemic has upended life around the world, leaving industries to find creative solutions to stay open and keep up with demand. The polymer industry has been especially "plastic" during this time, adapting materials and equipment to produce personal protective equipment (PPE) and more. A new article in *Chemical & Engineering News*, the weekly newsmagazine of the American Chemical Society, details how plastics markets have adjusted to their new realities.

The U.S. Department of Homeland Security has deemed workers in the chemical sector as essential, but at the onset of the pandemic, shutdowns and stay-at-home orders led to decreased demand for some materials, writes Senior Editor Alex Tullo. For example, industrial plants that produce plastics for automotive manufacturers saw their assembly lines go quiet, and demand for polymer-based materials used in constructing homes has cratered in recent months. In contrast, demand for food packaging, PPE and other [medical equipment](#) has skyrocketed. Consumers are purchasing more groceries to cook at home, leading to increased production of polystyrene foam for egg cartons and meat trays. And with take-out eclipsing in-restaurant dining, the need for to-go containers has increased dramatically.

The biggest pivot plastics manufacturers have made is in the medical sector. COVID-19 has led to an unprecedented need for PPE for [medical practitioners](#), essential workers and average consumers alike. Raw materials for PPE, most of which are polymer-based, are in short supply because of the demand. Companies have retooled their production to make medical materials, including nasal testing swabs, face shields and parts for ventilators, from the raw plastics they already produce. While companies have stepped up to the plate to provide the necessary materials to keep communities safe, they are also concerned about the health and safety of their own employees. Bulk chemical plants are already largely automated and don't require close human contact, but other facilities have had to modify their procedures to ensure social

distancing and proper sanitization of work areas. With these [best practices](#) in mind, manufacturers hope that their diligence and flexibility will be rewarded as the world begins to re-open.

**More information:** "Plastics during the Pandemic," [cen.acs.org/materials/polymers ... ring-pandemic/98/i24](https://cen.acs.org/materials/polymers...ring-pandemic/98/i24)

Provided by American Chemical Society

Citation: Plastics markets adapt in the age of COVID-19 (2020, June 24) retrieved 24 April 2024 from <https://phys.org/news/2020-06-plastics-age-covid-.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.