

At long last, new plastics for baby bottles, shopping bags, and much more

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With most of the plastics that define modern life dating to the 1930s-1960s, a new breed of these ubiquitous materials are starting to gain a foothold in products ranging from teapots to potato chip bags to plastic plant pots that biodegrade right in the soil. That's the topic of the cover story in the current edition of *Chemical & Engineering News*, ACS' weekly newsmagazine.

In the article, C&EN Senior Editor Alexander H. Tullo explains that a "golden age of polymers," spanning the late 1930s through the mid-1960s, engendered nylon, polyethylene, polypropylene, polycarbonate, polyester, and other [plastics](#) that have replaced everything from silk to steel in everyday products. Those traditional plastics were so successful that they fostered development of an infrastructure with multi-million-ton-per-year production for plastic beverage bottles, for instance, and shopping bags.

With that success, manufacturers were reluctant to switch to new and untested plastics, and companies that tried to introduce innovative polymers faced an Everest-like-landscape of hurdles. The article describes how a new genre of plastics is overcoming those barriers. Among them is a new plastic with the crystal-clear clarity, toughness, resistance to heat, and other advantages needed to compete with polycarbonate. Made without the worrisome bisphenol A (BPA), it is replacing polycarbonate in baby bottles and beverage [bottles](#). Another new plastic has potential for fighting global warming, consisting of consisting of 40 per cent carbon dioxide, the main greenhouse gas.

More information: “Breaking in the New”
pubs.acs.org/cen/coverstory/89/8938cover.html

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