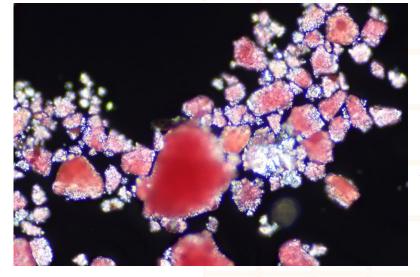
High levels of nanoplastics in bottled water

Slide by Neil Goalby. Available from rsc.li/3SuNqt1

New research reveals that bottled water contains hundreds of thousands of tiny plastic particles, with nanoplastics making up around 90% of the detected particles. The study identified particles from seven plastic types, including commonly used poly(ethene) and polyamide found in plastic bottles. They detected other plastic types, which could not be identified.

Nanoplastics are thought to be more toxic to humans than microplastics because their small size means they can pass more easily from the gut into the body.



Microplastics like these can break down into smaller nanoplastics

Questions

- 1. What is the difference in size between a nanoplastic and a microplastic?
- 2. Suggest how some of the nanoplastics get into the water.
- 3. Why are nanoplastics possibly toxic to humans?