

## The note on deconstruction of a polymer

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### Abstract

Polymers are everywhere. Just look around. Your plastic water bottle. The silicone rubber tips on your phone's ear buds. The nylon and polyester in your jacket or trousers. The rubber in the tires on the family auto. Now take a look in the glass. Numerous proteins in your body are polymers, too. Consider keratin (KAI-uh- drum), the stuff your hair and nails are made from. Indeed the DNA in your cells is a polymer.

By description, polymers are large molecules made by relating (chemically linking) a series of structure blocks. The word polymer comes from the Greek words for "numerous corridor." Each of those corridors is what scientists call a monomer (which in Greek means "one part"). Suppose of a polymer as a chain, with each of its links a monomer. Those monomers can be simple — just a snippet or two or three — or they might be complicated ring-shaped structures containing a dozen or further tittles.

In an artificial polymer, each of the chain's links will frequently be identical to its neighbors. But in proteins, DNA and other natural polymers, links in the chain frequently differ from their neighbors.

In some cases, polymers form raying networks rather than single chains. Anyhow of their shape, the molecules are veritably big. They're so big, in fact, that scientists classify them as macromolecules. Polymer chains can include hundreds of thousands of tittles — indeed millions. The longer a polymer chain, the heavier it'll be. And, in general, longer polymers will give the accoutrements made from them a advanced melting and boiling temperature. Also, the longer a polymer chain, the advanced its density (or resistance to inflow as a liquid). The reason they've a lesser face area, which makes them want to stick to bordering molecules.

### Introduction

Polymer structures can have two different factors. All launch with a introductory chain of chemically clicked links. This is occasionally called its backbone. Some may also have secondary corridor that suspend from some (or each) of the chain's links. One of these attachments may be as simple as a single snippet. Others may be more complex and appertained to as pendant groups. That's because these groups hang off the main chain of the polymer just as individual charms hang off the chain of a charm cuff. Because they're exposed to the surroundings further than are the tittles that make up the chain itself, these "charms" frequently determine how a polymer interacts with itself and other effects in the terrain [1, 2].

Occasionally pendant groups, rather of hanging loose from one polymer chain, actually connect two chains together. (Suppose of this as looking like a pealed that stretches between the legs of a graduation.) Druggists relate to these ties as crosslinks. They tend to strengthen a material (similar as a plastic) made from this polymer. They also make the polymer harder and more delicate to melt. The longer the crosslinks, still, the more flexible a material becomes [3].

### Bracket of Polymers

Polymers cannot be classified under one order because of their complex structures, different behaviours and vast operations. We can, thus, classify polymers grounded on the following considerations [4, 5].

Polymers are accoutrements made of long, repeating chains of molecules. The accoutrements have unique parcels, depending on the type of molecules being clicked and how they're clicked. Some polymers bend and stretch, like rubber and polyester. Others are hard and tough, like bonds and glass. Polymers touch nearly every aspect of ultramodern life. Chances are most people have been in contact with at least one polymer-containing product — from water bottles to widgets to tires — in the last five twinkles [6].

### Conclusion

Polymers is a peer-reviewed, open access journal of polymer

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## References

1. Ward DA, Ko EI. (1995) Preparing catalytic materials by the sol-gel method. *Industrial and Engineering Chemistry Research* 34: 421-433.
2. Liu Z, Davis RJ. (1994) Investigation of the structure of microporous Ti-Si mixed oxides by X-ray, UV reflectance, FT-Raman, and FT-IR spectroscopies. *Journal of Physical Chemistry* 98:1253-1261.
3. Schraml-Marth M, Walther KL, Wokaun A, Handy BE, Baiker A. (1992) Porous silica gels and TiO<sub>2</sub>/SiO<sub>2</sub> mixed oxides prepared via the sol-gel process: characterization by spectroscopic techniques. *Journal of Non-Crystalline Solids* 143: 93-111.
4. Hay JN, Raval HM. (1998) Solvent-free synthesis of binary inorganic oxides. *Journal of Materials Chemistry* 8:1233-1239.
5. Oter O, Ertekin K, Derinkuyu S. (2009) Photophysical and optical oxygen sensing properties of tris (bipyridine) ruthenium (II) in ionic liquid modified sol-gel matrix. *Materials Chemistry and Physics* 113: 322-328.
6. Bagheri H, Babanezhad E, Khalilian F. (2008) A novel solgel-based amino-functionalized fiber for headspace solid-phase microextraction of phenol and chlorophenols from environmental samples. *Anal Chim Acta* 616: 49-55.