

non-linear optical polymer

Polymer that exhibits an optical effect brought about by electromagnetic radiation such that the magnitude of the effect is not proportional to the irradiance.

Notes:

1. **See also:** non-linear optical effect.
2. An example of non-linear optical effects is the generation of higher harmonics of the incident light wave.
3. A polymer that exhibits a non-linear optical effect due to anisotropic electric susceptibilities when subjected to electric field together with light irradiation is called an electro-optical polymer. A polymer that exhibits electro-optical behavior combined with photoconductivity is called a photo-refractive polymer.

Source:

PAC, 2004, 76, 889 (*Definitions of terms relating to reactions of polymers and to functional polymeric materials (IUPAC Recommendations 2003)*) on page 900