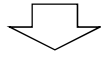


1. Issues to be cleared for mechanochromic fluorescent polymers

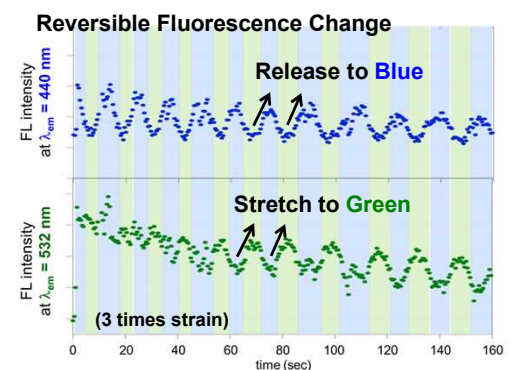
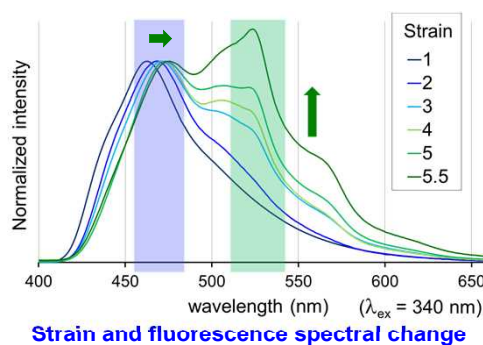
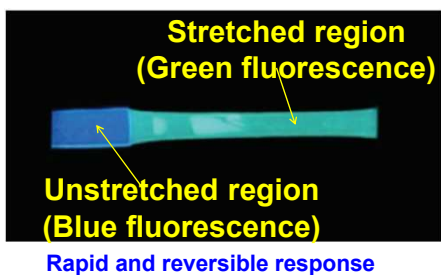
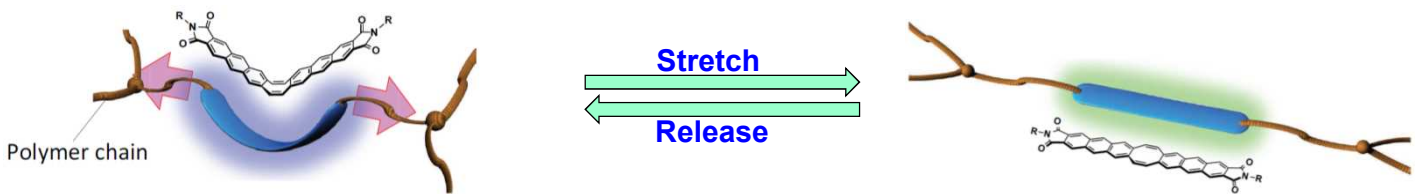
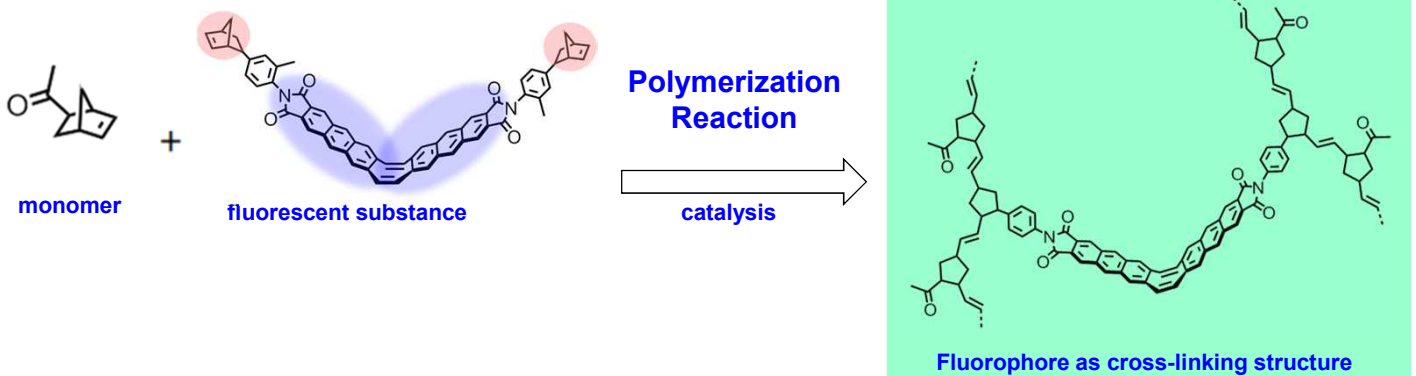
- Fluorescent color often changes when grinding the powder sample.
- By merely mixing the fluorescent materials with the polymer, fluorescent color does not change.
- Some of fluorescent polymers show an irreversible color change.
- Reported fluorescent polymer that shows a reversible color change takes 2 hours to be restored.



We have created a rapid and reversible fluorescent polymers.

2. Material Properties

The fluorescent polymers were synthesized with monomers and fluorescent substance as a cross-linking unit.



3. Possible applications

- Our polymer can visualize the tension.
- Our polymer can detect the distortion or destruction of objects.



- Visualization of material distortion on bridges and tunnels
- Visualization of traction force by undifferentiated cells

Patent Licensing Available

Patent : PCT/JP2015/82143
JST/ IP Licensing Group

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