

# Development of highly degradable polyester-based multi-lock type bio-tough polymer and its fibers

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Our goal is to develop the new aromatic polyester polymers and their fibers that are stable during ordinary use and, start the decomposition by specific trigger. This polymer and fiber are applied new multi-lock type decomposition, non-edible bio-based monomers and polymer toughening technology.

[Technology]

- 1) Copolymer design and bio-based monomer
- 2) Decomposition accelerator technology
- 3) Release control of decomposition accelerators

We aim to realize the epoch-making marine biodegradable aromatic polyester polymers and their fibers in which hydrolysis (primary decomposition) and biodegradation of oligomers (secondary decomposition) are controlled.

