

Realization of a low carbon society through game changing technologies

R&D Project Title

Controlled Biodegradation of Biodegradable Polymers by Multiple-Stimuli

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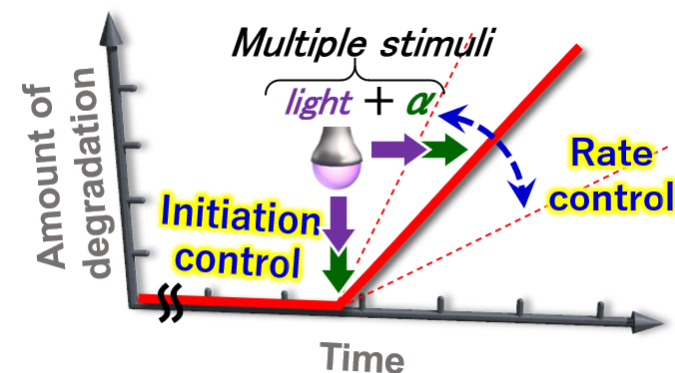


R&D Team :

Summary :

In recent years, increasing attention has been directed toward biodegradable polymers because they are regarded as one of the solutions to environmental issues related to plastics. However, controlled biodegradation of biodegradable polymers has not been achieved so far, and therefore their use is currently restricted to specific applications.

In this project, we will develop the method to control the initiation of biodegradation for biodegradable polymers by light irradiation. Our final research goal is to produce the biodegradable polymers, whose initiation and rate of biodegradation can be controlled by multiple stimuli such as light and the other stimuli.



Schematic diagram of our research goal