

Realization of a low carbon society through game changing technologies

Production of plastics from natural rubber and rubber wastes

Project Leader : Daisuke Kasai
Associate Professor, Nagaoka University of Technology



Summary :

- Development of biomass plastic production system from poly(*cis*-1,4-isoprene) (natural rubber) and its waste by natural rubber-degrading bacteria
- Development of plastic production technology from biomass using the metabolic function of bacteria can contribute to solving problems, such as environmental pollution and depletion of fossil resources.
- Establishment of plastic production technology using natural rubber and its waste will contribute to the effective use of non-edible biomass and organic waste.
- Establishment of the system to convert fossil resource-derived polyisoprene rubber waste into plastic can contribute to reducing the amount of carbon dioxide emitted by incineration.

