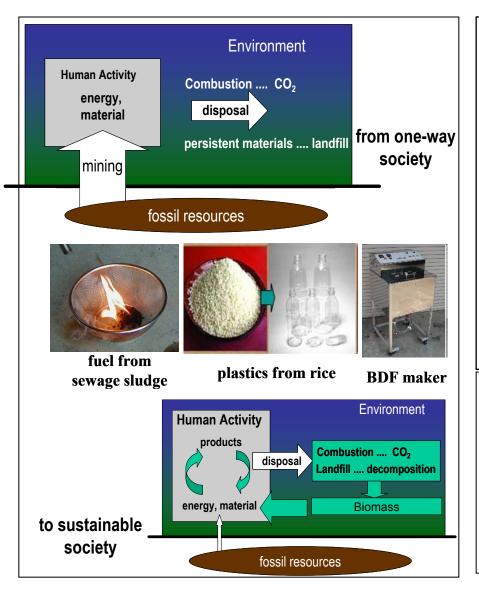
Creation of Sustainable Society with Biomass Refinery Process

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Content:

It is pointed out that it is one direction to discharge carbon dioxide in the atmosphere, that is, the flow of the carbon by consuming the fossil resource gathered from the earth as a cause of global warming.

. Therefore, the renewable energy sources attracts attention. The biomass was paid to attention as renewable energy sources in this laboratory. The origin of carbon in the biomass is carbon dioxide in atmosphere by photosynthesis. Therefore, the carbon dioxide generated by the combustion of the biomass is counterbalanced by the growth of the biomass (carbon-neutral).

However, the biomass can not be used easily like oil and coal, etc due to its structure. It is requested to do the various biomass refinery processing - with chemical, biochemical and mechanical treatment.

I research material production of polymer or ethanol from rice or wood with microorganism, fuel production from sewage sludge, BDF production from waste edible oil.

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Research Interest: Bioreaction Engineering

Environmental Engineering

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