The collaboration research for the Dual Graduate School between VNU and JAIST

[Title of collaboration research]

Molecular composite of Biomass-based Plastics

[The members of collaboration research]

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http://www.jaist.ac.jp/ms/labs/yamaguchi/index.html

[Other references]

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New type of polymer blends in which the molecular aggregation state is well controlled is developed. In this study, biomass-based plastics, such as poly(lactic acid) PLA, poly(butylene succinate) PBS, poly(3-hydroxybutyrate) PHB, and cellulose-derivatives, are employed. Currently, the following projects are being carried out;

(1) Rheological control in a molten state and enhancement of the processability for PHB by blending a critical gel.

(2) Improvement of heat resistance property of PLA by blending a crystalline polymer.

(3) Improvement of processability for cellulose-derivatives by blending a plasticizer.

(4) Enhancement of melt elasticity by reactive polymers for PLA, PBS, and PHB.