Development of Functional Polymer Materials Based on Interface Control Professor Hisao Matsuno



Content:

While the demand for polymer materials continues to rise, serious problems are emerging when materials come into contact with the environment and humans. In order for people to prosper sustainably while improving their QOL, the key is to put materials in an appropriate circulation cycle during and after use. In this laboratory, by elucidating the mechanism of monomerization of solid polymers in an aqueous environment from the perspective of surface chemistry, we are developing materials that are tough, durable, and degradable. We also design structural materials composed of biomacromolecules that do not rely on fossil resources. We construct green structural materials that exhibit unique mechanical properties by taking advantage of characteristics such as diversity, monodispersity, environmental compatibility, and biocompatibility.

Appealing point:

We can handle both synthetic- and bio-macromolecules. Based on surface/interface selective characterizations, we contribute to improving the performance and functionality of polymer materials.

Yamagata University Graduate School of Organic Materials Science Research Interest : Interface chemistry,

Functional polymers

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