

Realization of a low carbon society through game changing technologies

Replacement from Benzene ring to Bifuran Structure in Materials

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Summary :

We should increase the use of biobased materials for realization of a low carbon society. However the present biobased materials are not enough as an alternative to the present fossil-based materials. To promote the use of biobased materials, our society requires game changing technologies. Because benzene ring as a building block endows some functions to the present fossil-based materials, the introduction of a unique function originated from a biobased building block can induce the game changing. Therefore, it is important to develop a new biobased building block as an alternative to benzene ring.

We are focusing on the bifuran structure made from biobased chemicals as a building block for biobased materials. In this project, we are proving that bifuran structure can replace benzene ring in materials.

