

Investigation of applications for flow synthesis of flavan oligomers(*Department of Science, Tokyo Institute of Technology*) ○Naoki Narita, Keisuke Suzuki, Ken Ohmori

Keywords : Polyphenol; Flavonoid; Oligomer; Continuous Flow Synthesis; Solid acid catalyst

さらに、求核成分を加えずに求電子成分1のみを用いて自己縮合反応を行ったところ、興味深いことに、通常制御が困難な自己二量化反応が円滑に進行し、活性化基を有する二量体2を収率よく得ることができた(検討2)。さらに、2を再び同様のフロー条件に付すと、対応する四量体3を得ることができた。本発表ではこれらの検討について、その詳細を報告する。

Scheme 1 illustrates the synthesis of a dendritic dendronized polymer. The reaction starts with monomer **1**, which contains a benzodioxane core, a benzylidene-protected diol (OBn*), an acetoxy group (OAc), and a dendronizable ether (OEE). Monomer **1** reacts with a Lewis acid to form intermediate **2**, which has two OBn* groups. Intermediate **2** then reacts with another Lewis acid to form the final dendritic polymer **3**, which has four OBn* groups. The OEE group is defined as a dendronizable ether, and the Bn* group is defined as a benzylidene-protected diol.