

# キャビタンドに包接されたアリル基のエポキシ化反応

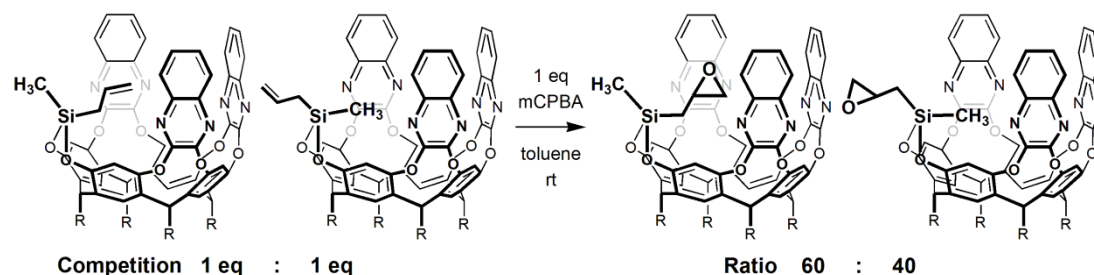
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Reaction of introverted and extroverted allyl silanes with meta-chloroperbenzoic acid. (Ryukoku Univ.) ○OHASHI, Kazuhiro; ITO, Kouhei; IWASAWA, Tetsuo

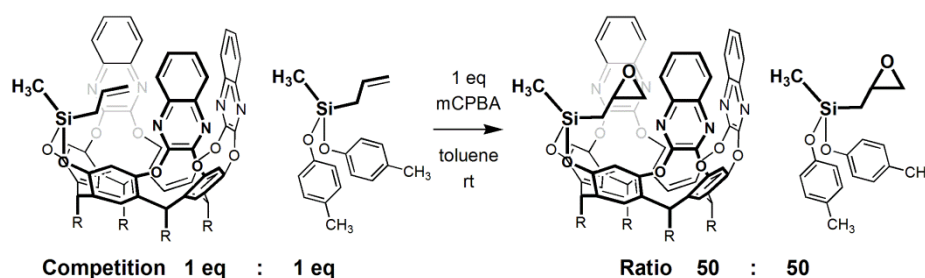
**Abstract:** Novel cavitands endowed with in- and outwardly directed allyl silanes are described, involving the epoxidation reactions of the allyl groups with meta-chloroperbenzoic acid. The competitive epoxidation experiments between two isomers disclosed that the introverted allyl was more reactive than the extroverted despite the obviously congested nuisance: the vase-formed cavity would actively stabilize the reaction process.

**Keywords:** Cavitand; Introverted functionality; Triquinoxaline-spanned resorcinarene; Supramolecular capsule; allyl silane

アリル基が包接空間の内側及び外側に配向した新規キャビタンドの合成と、それらキャビタンドとメタククロ過安息香酸 (mCPBA) とのエポキシ化反応について報告する<sup>1, 2</sup>。2つの異性体の競争的エポキシ化反応を行った結果、内側に配向したアリル基の反応性の方が高かった (Scheme 1)。また、包接されたアリル基がキャビタンド骨格を持たないアリル基と遜色ない反応性を示すことも見出された (Scheme 2)。



Scheme 1. Competitive reactions between introverted and extroverted allyl.



Scheme 2. Competitive reactions between introverted and small allyl.

## References.

1. Ohashi, K.; Ito, K.; Iwasawa, T. *Eur. J. Org. Chem.* **2014**, 1597-1601.
2. Iwasawa, T.; Nishimoto, Y.; Hama, K.; Kamei, T.; Nishiuchi, M.; Kawamura, Y. *Tetrahedron Lett.* **2008**, *49*, 4758-4762.