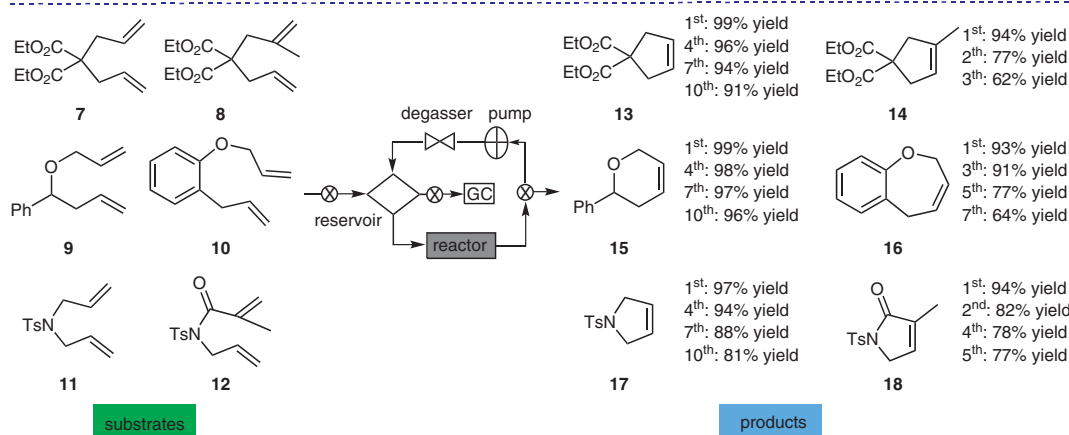
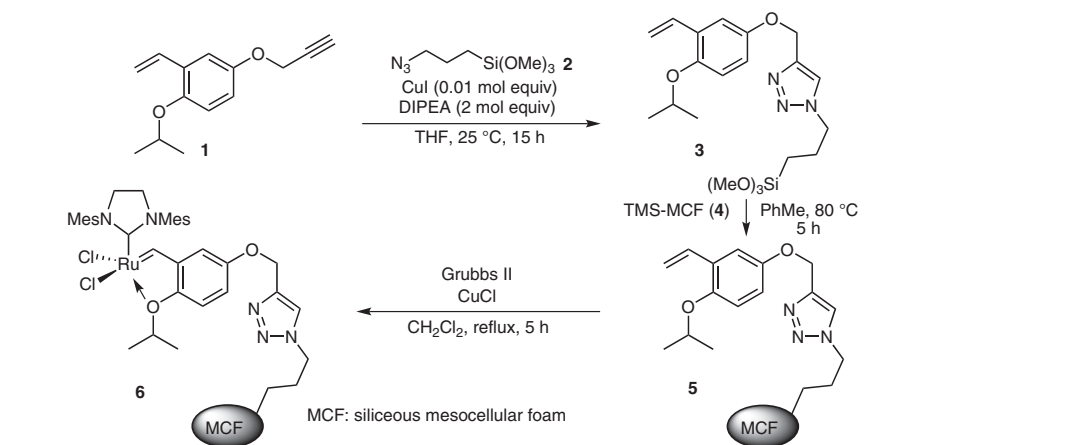


# A Mesoporous Silica-Supported Ruthenium Catalyst for Metathesis



**Significance:** A mesoporous silica-supported catalyst **6** for metathesis was prepared and applied to a circulating flow reactor system. Thus, the Grubbs II catalyst was immobilized on siliceous mesocellular foam (MCF) microparticles **5** to give the catalyst **6**. The ring-closing metathesis of dienes **7–12** was performed in a circulating flow reactor system filled with **6** (225 mg; reactor size = 4.6 mm x 50 mm) at 50 °C with a flow rate of 5 mL/min to afford the corresponding products **13–18** in 93–99% yield.

**Comment:** The mesoporous silica-supported catalyst **6** was recycled nine times without or with loss of catalytic activity in a circulating flow reactor (**15**: 1<sup>st</sup> use: 99% yield, 4<sup>th</sup> use: 98% yield, 7<sup>th</sup> use: 97% yield, 10<sup>th</sup> use: 96% yield **18**: 1<sup>st</sup> use: 94% yield, 2<sup>nd</sup> use: 82% yield, 4<sup>th</sup> use: 78% yield). The authors mentioned that their circulating flow system was superior to the continuous flow system filled with **6** in terms of recyclability.

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