



Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

Prof. Dr. Dmitry Yu. Murzin

Laboratory of Industrial Chemistry and Reaction Engineering
Abo Akademi University, Turku/Abo, Finland

E-mail: dmitry.murzin@abo.fi

Četrtek / Thursday 15.4.2021, ob / at 13:00

NA DALJAVO / ONLINE WEBEX

Povezava/link:

<https://ki-ljubljana.webex.com/ki-ljubljana/j.php?MTID=ma2c25fad6404cd4cf2e966af7cb7809d>

Meeting number: 121 780 6003

Password: KI2021

Catalyst preparation at the meso scale: The art of shaping

The catalyst scale-up process, which typically involves utilization of a binder and shaping it with the active phase into the catalyst body, often leads to different results compared to a powder catalyst. Moreover, presence of mass transfer limitations can lead to significant changes in activity, selectivity, and stability compared to a batch operation over a powder catalyst.

We have investigated direct synthesis of menthol from citral in flow using shaped catalysts. This reaction, being a subject of extensive research over the years, has not been reported yet in the open literature in a continuous mode.

We have thus investigated cascade transformations of citral and citronellal in a fixed bed reactor over bifunctional shaped ruthenium catalysts. Several types of extrudates with different binders were prepared varying the metal location and the metal-to-acid ratio. The metal location has a significant effect on the catalytic activity and selectivity as will be discussed in detail in the lecture.

info: Assist. Prof. Dr. Blaž Likozar blaz.likozar@ki.si



Vljudno vabljeni / Kindly invited