

Requirements for students

1. Catalysis, definition of catalysts. Catalysts classification. Catalyst activity, selectivity and stability.
2. Heterogeneous and homogeneous catalysts –characteristic properties, similarity and differences.
3. Catalytic processes classification. Example of catalytic reaction and typical catalysts.
4. Dehydration of alcohols. Reaction mechanism, employed catalysts. Brönsted and Lewis acidic centers.
5. glc basic principles.
5. Knowledge on the exercise aim, procedure runs and devices described in this manual.

Literature:

Exercise manual nr 26 accessible in student laboratory and on the Kampus platform.
Link: <https://kampus-student2.ckc.uw.edu.pl/course/view.php?id=15191>

Supplemental literature:

J.Hagen "Industrial catalysis. A practical approach."Wiley-VCH Verlag GmbH, Weinheim, Germany 2006.

R.A.Van Santen, M.Neurock "Molecular heterogeneous catalysis". Wiley-VCH Verlag GmbH, Weinheim, Germany 2006.

D.W.Grant, "Gas-liquid chromatography" Van Nostrand Reinhold Company London 1971.