

## **Exercise 26 "Catalytic dehydration of alcohols"**

### **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. Typical products Reaction mechanism, employed catalysts. Brönsted and Lewis acidic centers.
5. glc basic principles.
6. Knowledge on the exercise aim, procedure run and devices described in his manual.

### **Literature:**

Exercise manual nr 26 accessible in student laboratory and on the web page:  
<http://www.chem.uw.edu.pl/people/AMyslinski/nowy/lab.html>

### **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.