

**Colorado State University
Fall Session 2012**

**CHEM 431
Instrumental Analysis Laboratory**

**Notes for
Gas Chromatography of Aromatic Compounds
and Their Olfactory Assessment**

The following is a set of short notes to outline the experiment in question and to provide helpful guidance to those executing the experiment.

- A.** Configure the Gas Chromatograph without the smelloscope attachment and demonstrate proper operation using a series of pure, small molecules, for example, straight alkanes or primary straight-chain alcohols, individually and in a suitable mixture.
- B.** Test some "herbal" extracts, for example, an extract of lemon zest.
- C.** Attach the smelloscope and demonstrate its effect on the chromatograph's operation and performance.
- D.** "Observe" the odor performance of the smelloscope. Characterize and report on the odors and their correspondence with the corresponding chromatogram.