

**ORAL PRESENTATION****Open Access**

# Feature selection in Enose applications

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In my presentation I will summarise results for feature selection from a number of Enose applications ranging from general chemical classification and breath analysis with metal-oxide based Enoses to work scoping the use of biological receptors, in particular receptors of the fruit fly *Drosophila*, for applications in wine making and explosives detection. The common thread in all applications is the availability of high-dimensional data which is often noisy and in all of its details not necessarily very information rich for any particular application. The challenge for building useful classification systems is to define, extract and select the most “informative” features from the high-dimensional data. I will give an overview over our work using exhaustive “wrapper” approaches and a brief comparison to information-theory based methods. I will conclude by highlighting the most pertinent open questions encountered in this research area.

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