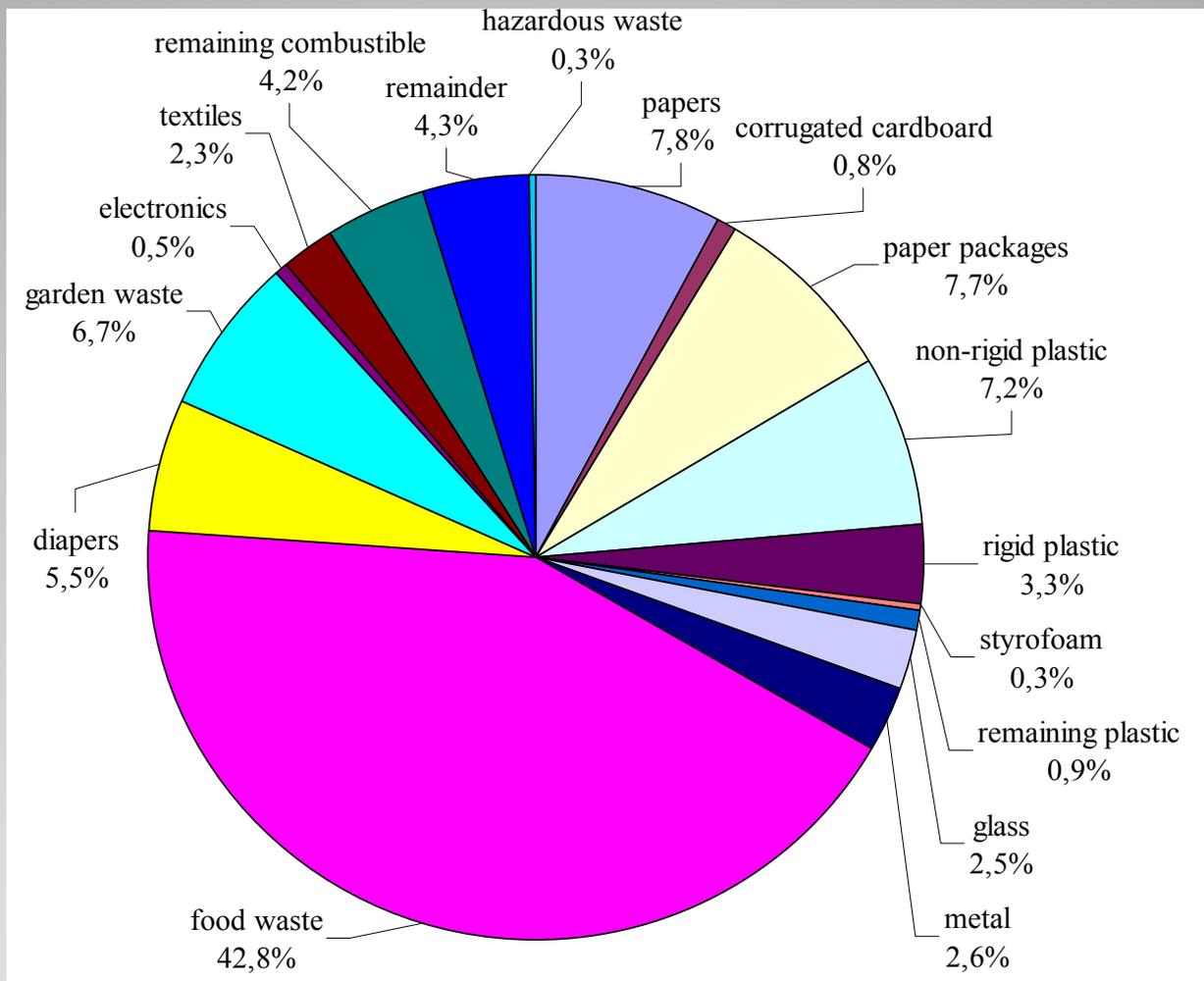


Experimental realization of waste burn

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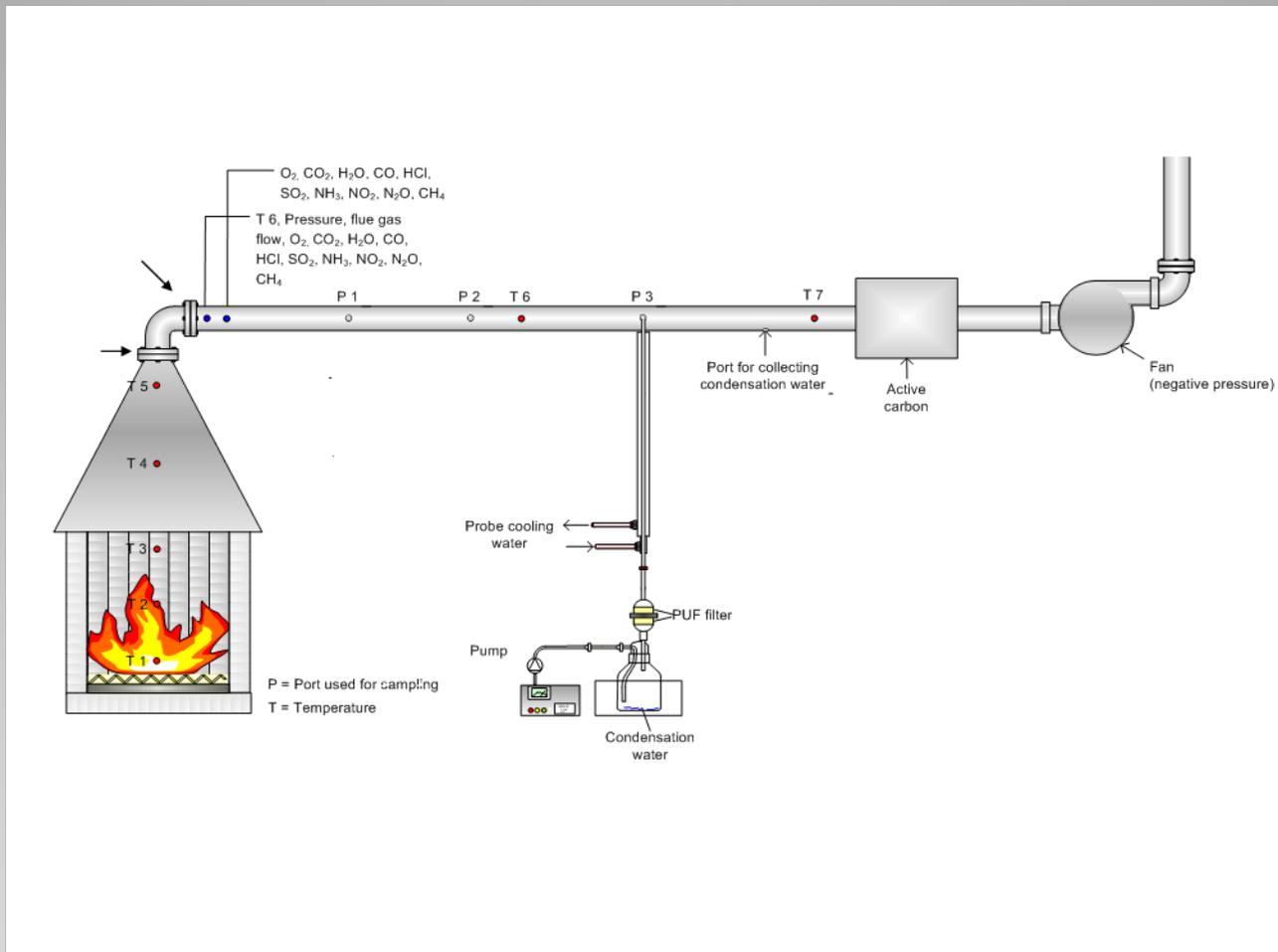
Swedish Waste

- The wet and dry fraction of the waste is storied separately and mixed prior combustion experiments.
- The dry fraction is storied in plastic bags at room temperature.
- To the Swedish waste we use fresh food as the wet fraction which is obtained from a Supermarket in Umeå.
 - It consist of lettuce and pees (25 w%), grounded beef (25 w%), potatoes in the form of French fries (25 w% and bread (25 w%).

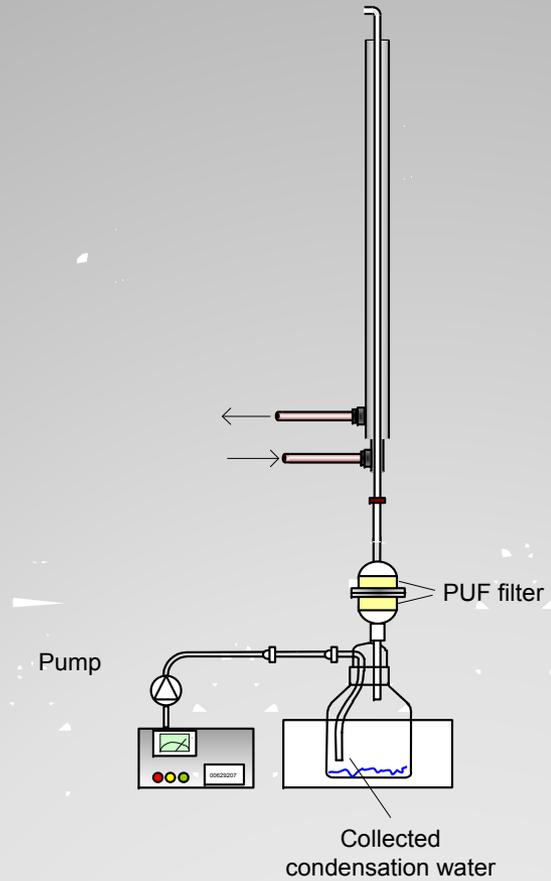
Swedish Waste



Shredding



Experimental set-up in Umeå



Sampling device

- The samples will be collected during the combustion of 4 kg of waste; a total weight of 5 kg will be ignited.
- Ignition will be done with propane for 1 min and sampling of flue gases will start immediately.
- Sampling is ended when 4 kg of waste have been burned.

Burning experiment

- In case re-ignition will be needed (bed temperature below 100 °C) it will be done with propane for 1 min, sampling will be carried on during this time. No stirring of the waste will take place during the sampling. If the waste does not burn properly it will be removed and a new batch of waste will be burned.

Interruption

- Flue gases are sampled iso-kinetically according to the EN:1948 standard with the exception that only a PUF-plug will be used
- The flue gases will be cooled in a cooling probe and then pass the PUF-cartridge. In the cartridge glass wool will be placed before the two PUF-plugs to capture particles. No filter will be used. After the cartridge a condensate flask will be placed to collect water

Sampling

- PCDD/Fs (2,3,7,8 substituted #17)
- dl-PCBs
- PCB
- HCB

POPs

