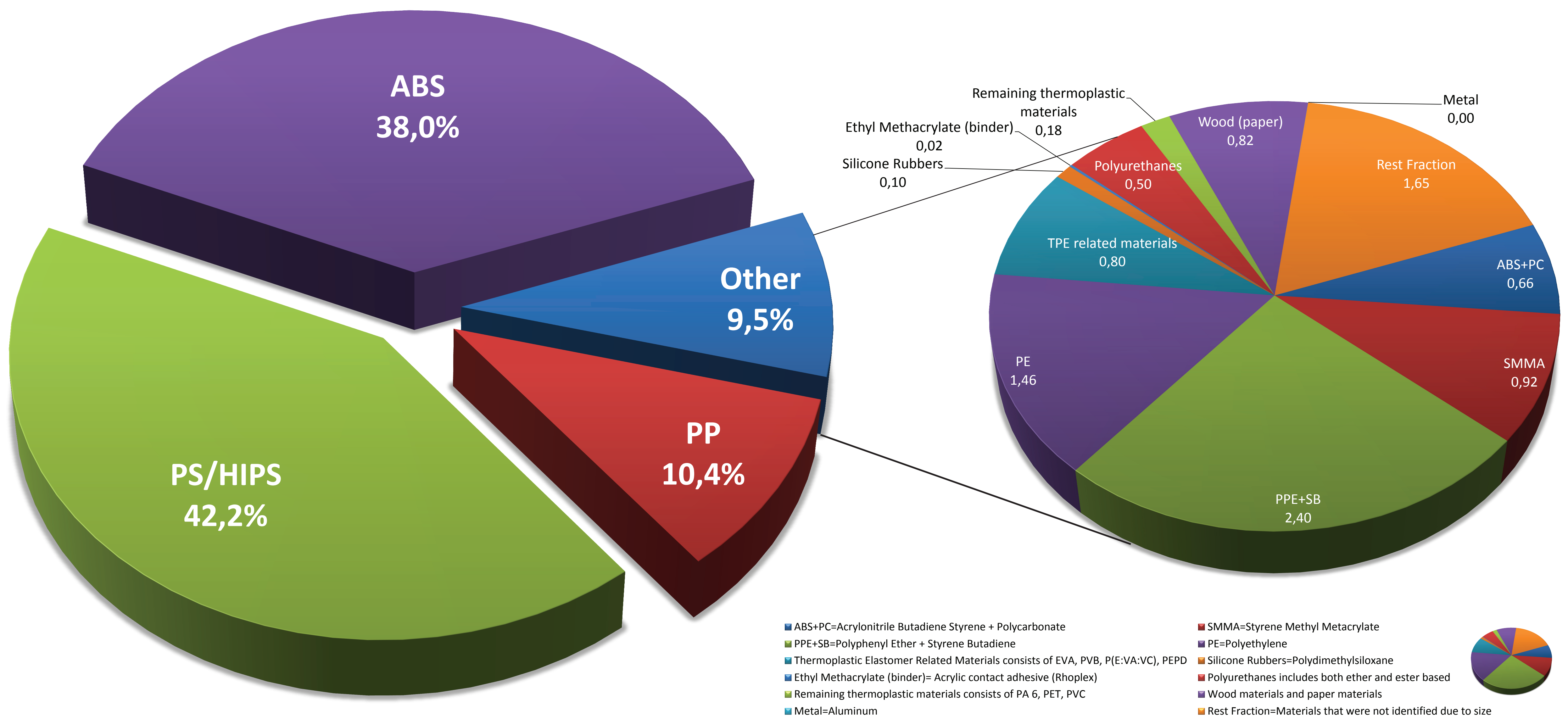


# WEEE Plastics Composition

Composition in the recyclable plastics fraction of Waste from  
 Electrical and Electronic Equipment (WEEE)  
 Samples collected from a 600 kg batch in Sweden, 2011-07-05



## Sampling and characterization of WEEE Plastics

- The plastics composition represents the recyclable plastics fraction (without BFR). Composition analysis based on 14 samples, each sample contains 100-200g or 40-120 flakes.
- Sampling performed on a falling stream at spread out time intervals.
- Characterization by initial drying of samples, then FT-IR characterization of each individual flake.

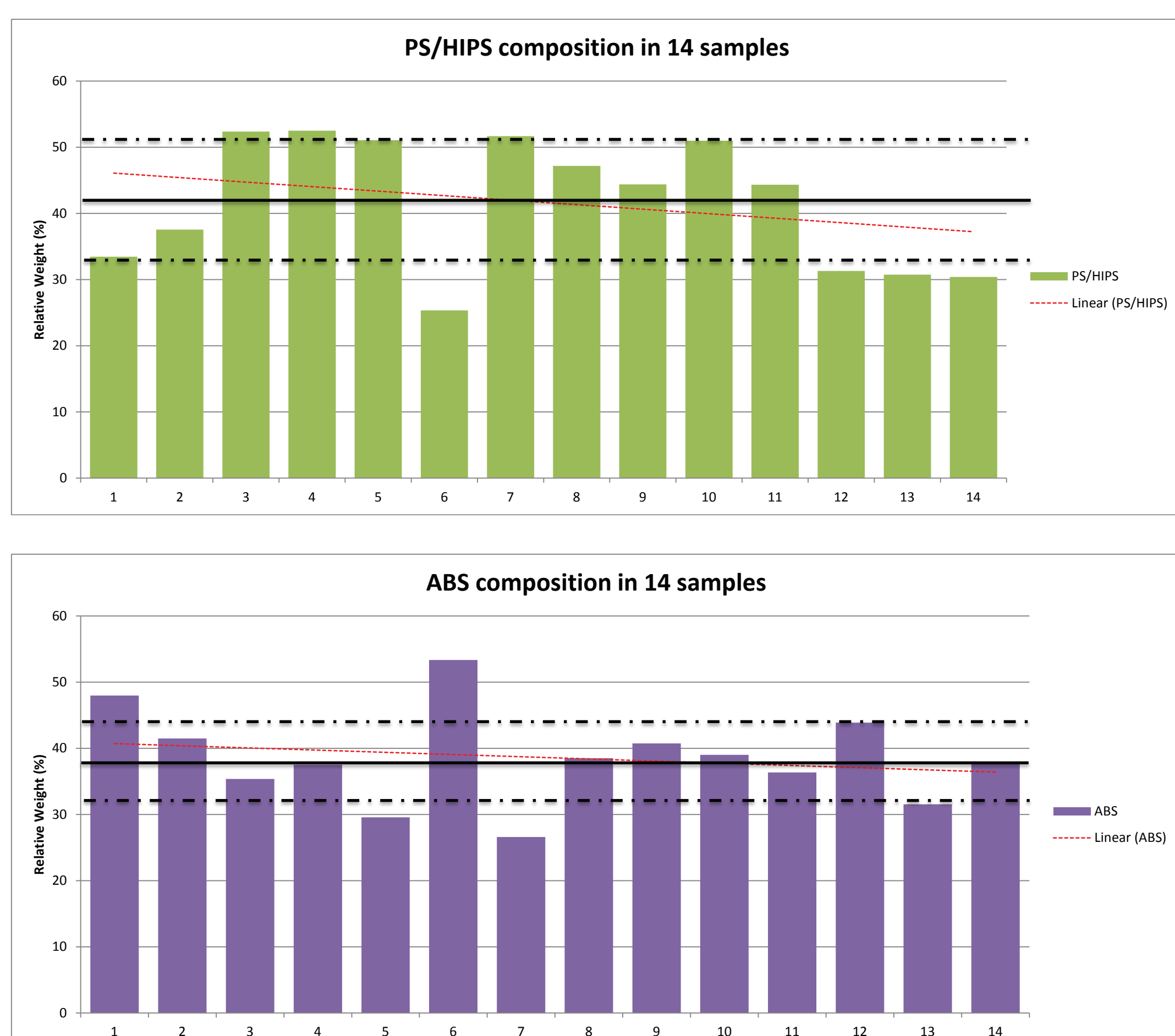
## Antimony content in ABS computer housing

### Experiment

Flakes, 2x2cm, of one discarded computer housing were digested in boiling DMSO (dimethyl sulfoxide) for 20 hours. The antimony level in the ABS plastics was determined by ICP-OES measurement.

### Motivation for experiment

The amount of available antimony is decreasing in the world and it is on the list; "Critical raw materials at EU level". Therefore it can be both economically- and environmentally beneficial to recover the antimony from the plastics.



Trends in the sample content of PS/HIPS and ABS. The thick black line represents the total sample average, while the dashed lines represent the weighted sample standard deviation. The red thin dashed line represents the trend of PS/HIPS and ABS content in the different samples.

