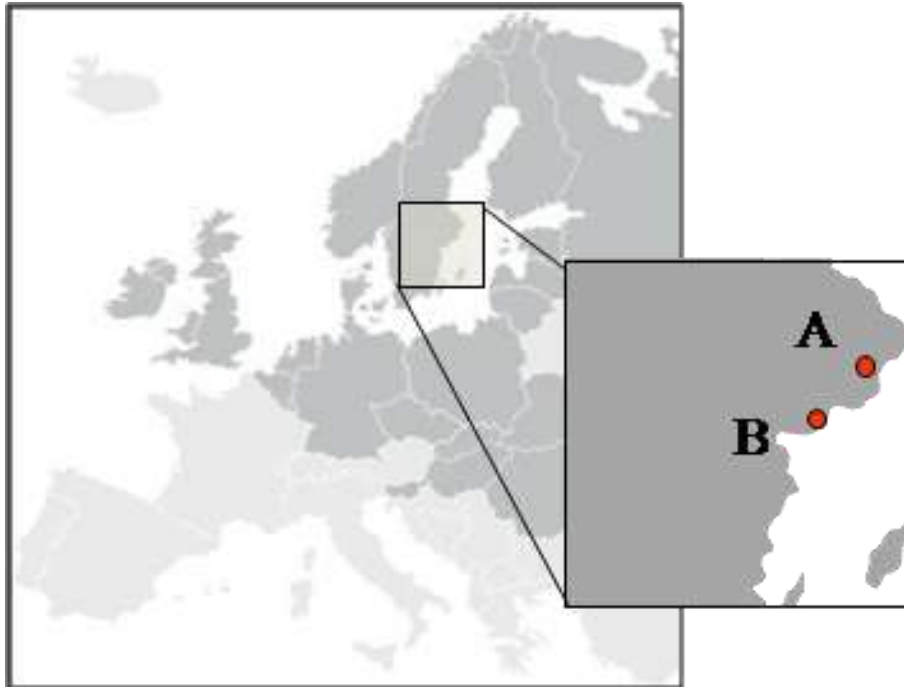


Determining the contribution of indoor air ventilation to outdoor contamination (ESR 5)

Cynthia de Wit

Stockholm University

Emissions of FRs from indoor air to the outdoor environment

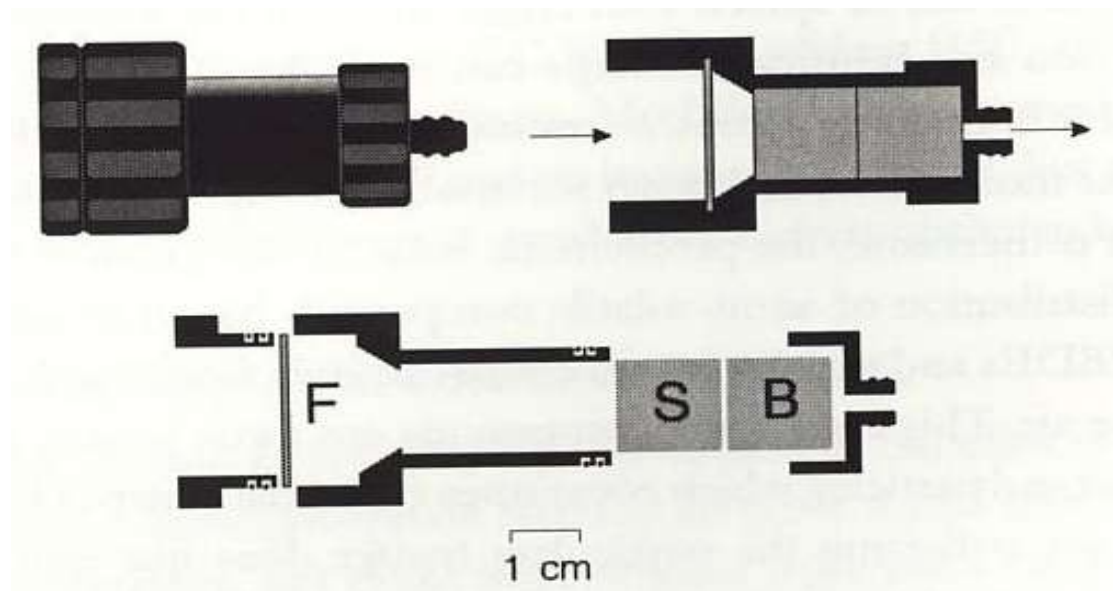


- Sampling of indoor air and dust
- Sampling of outgoing air from ventilation systems
- Sampling of outdoor air and topsoils
 - Urban site (A-Stockholm)
 - Rural site (B-Aspvreten)

Dust sampling– surfaces at least 1 m above the floor



Indoor air sampling– low volume personal sampling pump



Filter

PUFs

Indoor air sampling – 24 hours



Ventilation sampling – simultaneously with indoor air sampling



Outdoor air sampling – high volume sampler



Analyses

- Tri-decaBDEs
- Isomer-specific HBCDs
- Chiral HBCDs (secondment to U of Birmingham)
- New BFRs or other FRs of interest (VU and UA)

Multimedia fate model for Stockholm (IVL)

- Model contribution of indoor air to outdoor air concentrations of specific FRs (IVL – ESR 4, ER 2)
- Compare with outdoor air concentrations
- Chiral HBCD to determine source apportionment – differentiate between atmospheric deposition and indoor sources (U of Birmingham)
- Optimize model (IVL)

Recruitment complete

- Seth Newton – from US but doing MSc in Sweden
- Tentative start – mid-May or June at the earliest