

Joint International Conference on  
Intercontinental Transport of Atmospheric  
Mercury and Persistent Organic Pollutants

**POPs modelling**

9 April 2008, Rome, Italy

# Main topics of current session on POPs modelling

- Activities in POP emission inventories of the Netherlands Organization for Applied Scientific Research (TNO) including emission projections.
- Emission inventory of PAHs and outflow from China
- Transport of PCBs due to biomass burning emissions
- Global and regional multi-compartment POP modeling. Co-operation between RECETOX and MSC-E in the field of measurement-modelling approach
- Emission and outflow of polycyclic aromatic hydrocarbons.

# Main topics of current session on POPs modelling (cont.)

- Definition of a general applicable Pov – LRTP estimation method and ranking system for persistent organic pollutants.
- Multimedia chemical fate models for assessment of persistent organic pollutants. New tools and research developments.
- Modelling the fate of POPs on European scale using a gridded multi-media box model.
- Application of G-CIEMS model for evaluation of POP contamination
- Application of models of different types to evaluation of POP transport on global scale.

# ChapC4: Modeling

- ✓ What do current models tell us about the magnitudes of intercontinental transport of POPs (Q1)?
- ✓ What is the magnitude of the contribution of intercontinental transport to exceedances of standards or other policy objectives?
- ✓ Is there a simple relationship between changes in emissions and changes in pollutant concentrations and deposition levels? (Q4)
- ✓ What are possible methods for calculating source-receptor relationships (Q2)?
- ✓ How confident are we of our ability to predict these source-receptor relationships?
- ✓ At what spatial resolution (geographic region, individual countries) can such methods be applied reasonably? (Q2)

# ChapC4: Modeling

- ✓ How will these source-receptor relationships change due to expected changes in emissions over the next 20 to 50 years? (Q5)
- ✓ How will these source-receptor relationships be affected by changes in climate or climate variability? (Q6)
- ✓ How can models with different spatial resolutions be nested within one another to provide an appropriate level of spatial resolution for the entire hemisphere or globe? (Q2)
- ✓ What metrics and techniques are most appropriate for evaluating global and regional model simulations with observations? (Q3)