



**Convention on Long-range Transboundary Air Pollution**

**Working Group on Effects**

**International Cooperative Programme on Effects  
of Air Pollution on Natural Vegetation and Crops**

# Programme

**26<sup>th</sup> Task Force Meeting  
of the ICP Vegetation**

**28<sup>st</sup> January – 30<sup>th</sup> January, 2013  
Halmstad, Sweden**



SWEDISH ENVIRONMENTAL  
PROTECTION AGENCY



UNIVERSITY OF  
GOTHENBURG

Department of  
Biological Sciences

With the financial support of  
the Swedish Environmental  
Protection Agency



## **Programme 26<sup>th</sup> Task Force Meeting of the ICP Vegetation**

**Monday 28<sup>th</sup> January, 2013**

**15:00 Ozone workshop expert group on ‘Ongoing ozone flux model development, and AOT40 and flux map validation’**

**18:00 Registration**

**19:00 Welcome buffet**

**Tuesday 29<sup>th</sup> January, 2013**

**08:00 Registration for late arrivals**

**Session 1: 08:30 – 10:30 (Plenary session) Chair: Gunilla Pihl Karlsson**

8:30 Welcome: Titus Kyrklund (Swedish Environmental Protection Agency) and John Munthe (Vice president research IVL)

9:00 Harry Harmens et al. – Overview of the achievements of the ICP Vegetation.

9:20 David Simpson – The EMEP MSC-W model: Recent developments, what to do next?

9:40 Lars Lundin – Report on the ICP Integrated Monitoring activities 2012.

10:00 Ludwig De Temmerman et al. – What about nanomaterials? Future considerations about the deposition of nanoparticles from long range transport.

10:20 General discussion

**10:30 – 11:00 Coffee/tea and poster viewing**

**Session 2: 11:00 – 12:30 Plenary session Chair: Patrick Büker**

11:00 Gina Mills et al. – Impacts of ozone on ecosystem services and biodiversity.

11:20 Jürgen Bender et al. – Introduction of a study to assess the impacts of ozone on biodiversity in terrestrial ecosystems: Database review and analysis of methods and uncertainties in current risk assessment approaches.

11:40 Harry Harmens et al. – Results of the European moss survey 2010/11.

12:00 Eiliv Steinnes et al. - Is terrestrial moss a useful substrate for assessment of the atmospheric deposition of POPs? Implications from the 2010 moss survey in Norway.

12:20 General discussion

**12:30 – 13:40 Lunch**

**Session 3: 13: 40 – 15:00 Plenary session      Chair: Håkan Pleijel**

- 13:40      Peringe Grennfelt – Update of the recent work under the LRTAP Convention.
- 14:00      Harry Harmens et al. – Medium-term workplan ICP Vegetation: how does it fit in with the implementation of the long-term strategy of the LRTAP Convention?
- 14:10      Patrick Büker et al. – Collaboration with the Task Force on Hemispheric Transport of Air Pollution.
- 14:25      Antonio Ballerin-Denti – CLRTAP and Alpine Convention: a chance for cooperation on the effects of air pollution on alpine vegetation.
- 14:40      Per Erik Karlsson et al. – S-POD - a simplified ozone index to be used to assess the risk for negative ozone impacts on vegetation at the national level.

**15:00 – 16:00 Coffee/tea and poster session with authors present at posters**

**Session 4: 16:00 – 18:00 (Two parallel sessions: Ozone & Heavy Metals/N/POPs)**

**Session 4a: Ozone:      Chair: Felicity Hayes**

- 16:00      Silvano Fares et al. – The effect of ambient ozone on carbon assimilation in trees: estimates using continuous flux measurement.
- 16:20      Zhaozhong Feng – Leaf mass per area elucidates ozone sensitivity of woody species.
- 16:40      Alessandra De Marco et al. – The phytotoxic ozone dose performs well in Mediterranean forests.
- 17:00      Sabine Braun et al. – Reporting back from the working group discussion on further flux based developments and mapping validation.
- 17:15      Patrick Büker et al. – Re-analysis of forest ozone flux-response relationships and some considerations for their application.
- 17:25      Discussion (led by Gina Mills).

**Session 4b: Moss:      Chair: Sebastien Leblond**

- 16:00      Jesus Santamaria – Preliminary results of <sup>15</sup>N analyses in mosses.
- 16: 20      Mitja Skudnik et al. – Influence of sampling location on nitrogen and trace elements content in mosses.

16:40 Lotti Thöni et al. – Relationship between site-specific nitrogen/sulphur concentrations in mosses and atmospheric nitrogen/sulphur deposition rates in selected European countries: preliminary results.

17:00 Discussion on the 2010/11 survey report and maps, and the future of the European moss survey (led by Harry Harmens).

**18:30 – 20:00 Dinner at the hotel:**

**20:00 – 21:00** Discussion on methodology for calculating ozone effects on C sequestration in Europe.

### **Wednesday 30<sup>th</sup> January, 2013**

**Session 5: 8:30 – 10:15 (Two parallel sessions: Ozone & Heavy Metals/N/POPs)**

**Session 5a: Ozone: Chair: Silvano Fares**

8:30 Seraina Bassin et al. – Effect of elevated combined ozone and nitrogen deposition on the species composition of a sub-alpine grassland.

8:50 Ignacio González-Fernández et al. – Progress in modelling annual pasture ozone flux.

9:10 Jean-Francois Castell et al. – Bio-Economic Assessment of ozone impacts on French farming systems.

9:30 Sheikh Saeed Ahmad – Assessing spatial and temporal variability of tropospheric ozone concentration in areas of different scales.

9:50 Feedback from Tuesday evening ozone discussion, followed by a general discussion.

**Session 5b: Moss: Chair: Eiliv Steinnes**

8:30 Zdravko Spiric et al. – Croatian moss survey 2010 – preliminary results.

8:50 Pranvera Lazo et al. – Multi-element atmospheric deposition study in Albania.

9:10 Flora Qarri et al. – Middle-term biomonitoring of Vlora-Fier area, Albania.

9:30 Sebastien Leblond et al. – Quantifying uncertainty of element concentrations in mosses.

9:50 Helena Danielsson et al. – Heavy metals in mosses – what are the advantages of an increased sampling density at the county level?

10:10 General discussion.

**10:15 – 10:45 Coffee/tea and poster viewing**

**Session 6: 10:45 – 12:30 (Two parallel sessions: **Ozone & Heavy Metals/N/POPs**)**

**Session 6a: **Ozone:** Chair: **Jean-Francois Castell****

10:45 Kent Burkey et al. – Soybeans from Fiskeby, Sweden - a potential source of tolerance genes for ozone and a broad range of abiotic stresses

11:00 Yoshiaki Ueda et al. – Genetic approaches to increase tolerance to ozone in rice.

11:15 Anne Repellin et al. – Controlled field ozone fumigation of maize plants: Impact on leaves and grain yield.

11:30 Deborah Moura Rebouças et al. – Effects of combined ozone and water stresses on physiology and membrane lipids of two tropical cowpea cultivars.

11:45 **Jesús Ramírez et al. – The early warning system SAT-O<sub>3</sub> in Cuba: the protection of crops and the effects on food security (tbc).**

12:00 General discussion.

**Session 6b: **Moss:** Chair: **Zdravko Spiric****

10:45 Winfried Schröder et al. – Landscape-specific correlation between atmospheric depositions and their concentrations in mosses across Europe?

11:05 Erika Hiltbrunner et al. – Enlarged nitrogen availability due to increased atmospheric nitrogen deposition and expansion of N<sub>2</sub> fixing plants: effects on alpine and montane ecosystems.

11:25 Stefanie Boltersdorf et al. – Germany-wide comparison of spatial distribution of nitrogen concentrations and stable isotope signatures of bryophytes and lichens.

11:45 Hilde Uggerud et al. – PAH in moss from Norway: Spatial distribution and comparison with metal concentrations.

12:05 Ludwig De Temmerman – Accumulation of airborne As, Cd and Pb in *Phaseolus* bean.

12:25 Discussion.

**12:30 – 13:40 Lunch**

**Session 7: 13:40 – 15:00 (Plenary session) Chair: Ludwig de Temmerman**

13:40 Gina Mills et al. – Progress with the European Framework 7 project ECLAIRE.

14:00 Gerosa et al. - Photosynthetical response to ozone exposure and nitrogen enrichment of *C. betulus* and *Q. robur* saplings. Results of the first year of experimentation under the ECLAIRE project.

14:20 Håkan Pleijel et al. – Ozone risk assessment for the 21<sup>st</sup> century based on ozone and climate change scenarios

14:40 Eero Kubin et al. - Nitrogen deposition and leaching in the boreal forest environment.

**Coffee/tea and poster viewing: 15:00 – 15:30**

**Session 8: 15:30 – 17:00 (Plenary session) Chair: Harry Harmens**

- Decisions 26<sup>th</sup> ICP Vegetation Task Force meeting.
- ICP Vegetation work programme for 2013 – 2016.
- Collaboration with other relevant bodies/organizations.
- Any other business.
- Closure of the 26<sup>th</sup> Task Force Meeting.

**17:15 - 18:30. Art exhibition at Hotel Tylösand**

**19:30 Conference dinner**

**Thursday 31<sup>st</sup> January, 2013**

08:30 – 11:00 EU ECLAIRE project meeting – update of C3 data mining and experimental plans for 2013 season.

Participants are to make their own travel arrangements to the airport.