

Preliminary Program

GEIA Open Conference

November, 29, morning: Introduction talks

Chairs: C. Granier and A. Guenther

Rapporteurs:

9:00 - 9:15: Welcome address, K. Law (SA/IPSL)

9:15 – 9:30: The GEIA project and practical information, C. Granier and A. Guenther

9:30 – 10:15: Climate response to natural aerosols: Natalie Mahowald, NCAR (#35)

10:15 – 10:45: Coffee break

10:45 – 11:30: The Expanding Scale of Air Quality Management: Challenges and Opportunities for Emissions Inventory Development: Terry Keating, EPA/ André Zuber (EU) (#25)

11:30 – 12:15: Emissions and biogeochemistry: Andi Andreae, MPI-Chemistry

November, 29th, afternoon: Anthropogenic emissions: past, present, future

Chairs: H. Akimoto and J. VanAardenne

Rapporteurs: J.F. Lamarque and S. Reimann

2:00 – 2:30: Frank Dentener/J. VanAardenne (JRC, Italy): emission trends, methodologies, existing emission inventories and comparison of different datasets.

2:30 – 2:50: C. Liousse (LA, France): global emission inventory of gases and particles from fossil fuel and biofuel consumption for the period 1860-2030 (#33)

2:50 – 3:10: H. Akimoto (JAMSTEC, Japan): regional emission inventory in Asia 1980-2020 (#1)

3:10 – 3:30: C. Granier (IPSL, France): Surface emissions from future ship traffic in the Northern Passages (#21)

3:30 – 3:50: G. Pétron (NOAA, USA): Transportation and the carbon cycle (#42)

3:50 – 4:10: J. Borken (DLR, Germany): Emission inventory of road passenger and freight transportation in 2000 (#9)

4:10 – 4:30: E. Behrentz (Univ. Los Andes, Columbia), Comparative Assessment of Road Transport Emission Inventories in Five Metropolitan Areas of South America (#2)

4:30 – 6:00: Poster session and drinks

November, 30th : Integration spatial/temporal scales; emissions for air quality

Chairs: Jos Olivier and Vigdis Vestreng

Rapporteurs: W. Winiwarter and B. deJong

9:00 – 9:10: Introduction, V. Vestreng (EMEP, Norway)

9:10 – 9:40: J. Olivier (MNP, The Netherlands), The EDGAR emission database and review of links between anthropogenic emissions databases at the global and regional scales

9:40 – 10:00: B. Pennell (NARSTO, USA), Improving Emission Inventories in North America (#41)

10:00 – 10:20: T. Pregger (IER, Germany), Improvement of regional emission data in temporal and spatial resolution (#44)

10:20 – 10:40: Coffee break

10:40 - 11:00: I. Konovalov (Russian Acad. Sci, Russia)/ M. Beekmann (LISA, France), Validation and improvement of emission inventories for nitrogen oxides using satellite measurements and the inverse modeling technique (#28)

11:00 – 11:20: G. Frost (NOAA, USA), Satellite-Observed USA Power Plant NO_x Emission Reductions and Their Impact on Air Quality (#18)

11:20 – 11:40: S. Jagovkina (MGO, Russia): Atmospheric methane variability over the largest Northern European industrial region (St.-Petersburg area, Russia) (#24)

11:40 – 12:00: T. Butler (MPI-C, Germany), Modelling the effects of megacities on global atmospheric chemistry (#11)

November, 30th, afternoon: Terrestrial ecosystems and biomass burning

Chairs: L. Ganzeveld, J.F. Muller and C. Reeves

Rapporteurs : D. Serça and M. Sanderson

2:00 - 2:10: Introduction: L. Ganzeveld (MPI-C), J.F. Muller (IASB) and C. Reeves (UEA)

2:10 – 2:40: W.M. Hao (USDA), Forecasting Smoke Emissions, Dispersion, and Impact on Air Quality Using Real-Time MODIS Data and Meteorology in North America (#23)

2:40 - 3:00: G. Van der Werf (Vrije Univ., The Netherlands), Climatic and ecological controls on interannual variability of fire activity in the tropics and subtropics (#59)

3:00 – 3:20: C. Werner (IMK-IFU, Germany), A N₂O emission inventory for tropical rainforest soils: From the site to the global scale (#63)

3:20 – 3:40: L. Ganzeveld (MPI-C, Germany), The impact of land cover and land use changes on atmosphere-biosphere reactive nitrogen exchanges (#19)

3:40 – 4:00: Coffee Break

4:00 – 4:20: A. Arneth (Lund Univ., Sweden), CO₂ inhibition of leaf isoprene production can offset effects of temperature and fertilisation of terrestrial productivity in global emission estimates (#4)

4:20 – 4:40: S. Falke (Washington Univ.), Interoperable Web Services for Distributed Data Access and Analysis of Emissions Inventories (#67)

4:40 – 6:30 : Poster session

7:30 : Conference dinner

December, 1st, morning: Aerosols

Chairs: I. Isaksen and C. Liousse

Rapporteurs: K. Tsigaridis and Shekar Reddy

9:15 – 9:30: Introduction: C. Liousse (LA)

9:30 – 10:00: W. Winiwarter (ARC, Austria), Quantifying emissions of Primary Biogenic Aerosol Particles in Europe + review on the subject (#64)
(paper + review)

10:00 – 10:20: B. Laurent (LISA, France), Modeling mineral dust emissions from North-eastern Asian and North African deserts (#30)

10:20 – 10:50: P. Ginoux (NOAA GFDL, USA), Reconstruction of dust emission from Western Africa since 1900 (#20)

10:50 – 11:10: Coffee break

11:10 – 11:30: B. Guillaume (LA, France), Development of fossil fuel carbonaceous aerosol

emission inventories at European, National and Regional scales (#22)

11:30 – 11:50: D. Simpson (EMEP, Norway), Comparison of modelled and observed carbonaceous aerosol in Europe: implications for emission inventories (#50)

11:50 – 12:10: A. Konare (LPA, Ivory Coast): Anthropogenic aerosols over Africa (#27)

December, 1st, afternoon

Chairs: C. Granier and A. Guenther

2:00 - 3:15: summary of sessions by the rapporteurs (10 minutes each) and general discussion on future activities

3:15 - 4:15: general discussion on the assessment/synthesis of emissions

End of the conference

Poster session:

#3: R.J. Andres (ORNL, USA), An update on the fossil-fuel carbon dioxide inventory

#5: D. Bachelet (OSU, USA), Climate change, fire and CO₂ interactions in North American forests

#6: L. Bao (CAES, China), Ammonia Emission Inventory in China

#7: S. Beirle (U. Heidelberg, Germany), Satellite observations of Glyoxal

#8: T. Bond (Univ. Urbana-Champaign, USA), What can (and can't) we learn about the future by studying the past?

#10: T. Butler (MPI-C, Germany), Quantification of the fluxes of methane and carbon monoxide due to the 1997-8 biomass burning event using a simultaneous mass balance inverse modelling approach

#12: M. Chandrasekhar (REC, India), Airborne metallic particulates from urban sources in a growing tropical town

#13: A. Chedin (IPSL, France): Correlations between tropical vegetation fire emissions and the diurnal excess of tropospheric CO₂ concentration seen by NOAA-10 over the period 1987-1991

#14: L. Dagar (IIT Delhi, India), A Decadal Gridded Emission inventory of Criteria Pollutants over Megacity Delhi

#15: C. Déandreis (IPSL, France), Past, present and future anthropogenic aerosols emissions: their impact on climate

#16: B. DeJong (Mexico), Emissions from land use, land-use changes and forestry in Mexico

#17: O.A. Ediang (NMA, Nigeria), combination of : *Networking*:A management strategy for Future of Natural aerosols in Nigeria, and Research and Capacity Building in future of

Natural aerosols in Nigeria.

#26: M. Kesik (IMK-IFU, Germany), Future scenarios of N₂O and NO emissions from European forest soils

#29: V. Lagun (AARI, Russia), Russian North and Siberian natural methane fluxes variability study

#31: L. Levin (EPRI, USA), Balancing the Mercury Inventory: Why Does 2006 Look Like 1750?

#32: C. Lioussé (LA, France), How to access global and regional burnt biomass from satellite observations to derive gases and particle emission inventories?

#33: C. Lioussé (LA, France), Global historical emissions of gases and particles for the period 1860-2003

#36: S. Mavrodiev (INRNE, Bulgaria), On Some Consequences of Global Warming

#37: C. Michel (IPSL, France), ECCAD: a GEIA-ACCENT database of driving variables

#38: G.A. Millard (U. Cambridge, UK), A temporally and spatially-resolved global database of volcanic sulphur dioxide emissions 1998-2005

#39: J.F. Müller (IASB, Belgium), Pyrogenic and Biogenic Emissions of NMVOCs inferred from GOME Formaldehyde data

#40: H. Palatella (JRC, Italy), Calculation of emissions from iron and steel making: evaluation of methodologies and calculation on different scales

#43: A. Poupkou (U. Thessaloniki, Greece), Estimating the biogenic NMVOCs emissions from vegetation in Europe

#45: S. Reimann (EMPA, Switzerland): Top-down assessment of European emissions of halocarbons

#46: M. Sanderson (Hadley Centre, UK): Emissions of NO_x by soils

#47: M. Schulz (IPSL, France): Constructing an AeroCom transient climate aerosol emission scenario

#48: D. Serça (LA, France), Assessment of NO emissions from agricultural soils in France

#49: J.P. Sibaja (LAQAT, Costa Rica): Measurements of the vertical structure of ozone in Costa Rica

#51: M. Steinbacher (EMPA, Switzerland), Quasi-continuous CH₄, N₂O, and SF₆ measurements at the high Alpine site Jungfraujoch: influence of transport processes and emissions estimates

- #52: R. Steinbrecher (IMK-IFU, Germany), Biogenic Emission of Volatile Organic Compounds in Germany: A Modelling Study for the Years 1994 to 2003
- #53: T. Szegvary (Univ. Basel, Switzerland), European ^{222}Rn flux map for atmospheric tracer applications
- #54: J. Theloke (Univ. Stuttgart, Germany), Improved Methods for the calculation of natural and biogenic emissions
- #55: K. Tsigaridis (IPSL, France), Impact of biogenic emissions on secondary organic aerosol formation in the future atmosphere
- #56: V. Ulevicius (Inst. Physics, Lithuania), Modeling of temperature and solar radiation dependent biogenic emissions
- #57: K. Vadrevu (OhioSU, USA), Regional scale Biomass burning emissions Inventory from Forestry and Agricultural Sector in India - Estimates from satellite remote sensing datasets
- #58: J. VanAardenne (JRC, Italy), Coupling of EDGAR and RAINS: developing a global emission inventory and projection tool for emissions of greenhouse gases and air pollutants
- #60: L. Viegas de Barros (Univ. Edinburgh, UK), The project "Vegetation Fires and the Earth's Atmosphere", developed at The University of Edinburgh, Scotland, studies the impact of wildfires in climate change and in the chemical composition of the atmosphere.
- #61: H. Voemel (NOAA/ERSL, USA), Dehydration, transport and wave activity in the tropical tropopause layer: Ticosonde-Aura/TCSP-2005 campaign
- #62: Z. Wadud (Bangladesh and Australia), Modeling Exhaust emissions from the Australian road transport sector up to 2025
- #64 : W. Winiwarter (ARC, Austria): A method of sensitivity analysis to describe the uncertainty in emissions inventories
- #66: A.S. Zakey (ASICTP, Italy): Modeling of sea-salt in regional climate model: fluxes and radiative impact