

T⁴ Conference

Section: Exchange processes in the surface layer and their environmental impacts
(May 24-25, 2012)

<http://theop11.chem.elte.hu/T4>

Plenary lectures:

Regina Hitzenger (University of Vienna, Austria) and J. Burkart:
Cloud condensation nuclei (CCN) activation in urban and continental background regions

Paola Fermo (University of Milan, Italy), A. Piazzalunga, V. Bernardoni, G. Valli, R. Vecchi:
Estimation of wood burning contribution to PM in Northern Italy: a review on recent results

Joseph Pinto (EPA, USA):
Issues and progress in modeling intercontinental transport of ozone

Workshop:

Exchange processes in the surface layer and their environmental impacts (organizers: Imre Salma and Tamás Weidinger)

Location: Room 160 Chemistry Building

Thursday, 24 May 2012

- 14:30–14:40 Imre Salma (ELTE, Budapest, Hungary)
Opening and comments on importance of atmospheric aerosol
- 14:40–14:55 Zita Ferenczi (HMS, Budapest, Hungary)
The effect of meteorological conditions on PM₁₀ concentrations in Budapest
- 14:55–15:10 Zsófia Kertész (INR HAS, Debrecen, Hungary), Zs. Török, Z. Szikszai, Z. Szoboszlai, A. Angyal, E. Furu, E. Dobos, I. Borbély-Kiss and E. Koltay
Elemental fingerprints of atmospheric aerosol sources and transport in Debrecen, Hungary
- 15:10–15:20 Györgyi Baranka (HMS, Budapest, Hungary)
Recent trends in air quality modelling for cities
- 15:20–15:35 István Matyasovszky (ELTE, Budapest, Hungary) and L. Makra
Analysing Ambrosia pollen concentrations in Szeged, Hungary
- 15:35–15:45 Imre Balásházy (ELTE, Budapest, Hungary)
Recent achievements in modelling lung deposition of aerosol particles
- 15:45–16:15 Break
- 16:15–16:30 Tibor Borsós (ELTE, Budapest, Hungary) and I. Salma
Ultrafine aerosol in different urban environments
- 16:30–16:45 Ágnes Molnár (MTA-PE, Veszprém, Hungary), V. Gácser and Zs. Bécsi
Characterization of the optical properties of rural and urban aerosol in Hungary

- 16:45–17:00 Gyula Kiss (MTA-PE, Veszprém, Hungary), N. Törő, A. Hoffer, J. Dautovic, S. Frka and Z. Kozara
Characterization of humic-like substances in size segregated atmospheric aerosol collected in different environments
- 17:00–17:10 András Gelencsér (MTA-PE, Veszprém, Hungary)
Closing remarks and comments on advances in aerosol science
- 17:10–17:30 Discussions

Friday, 25* May 2012

- 14:30–14:35 Opening
- 14:35–14:50 A. Machon, László Horváth (HMS, Budapest, Hungary), B. Grosz and T. Weidinger
Weather induced variability of nitrogen exchange between the atmosphere and a grassland in the Hungarian Great Plain
- 14:50–14:55 Szilvia Kugler (ELTE, Budapest, Hungary)
Ammonia exchange between Lake Balaton and the atmosphere
- 14:55–15:10 Andrea Pogány (University of Szeged), Á. Mohácsi, T. Weidinger, L. Horváth, Z. Bozóki and G. Szabó
A novel photoacoustic instrument for ammonia concentration and flux monitoring - results of field measurements
- 15:10–15:15 Györgyi Baranka (ELTE, Budapest, Hungary)
Ammonia dispersion simulated by AERMOD
- 15:15–15:30 Eszter Tóth (TAKI, Budapest, Hungary) and Cs. Farkas
Soil CO₂ emission measurements on laboratory and field scales
- 15:30–16:00 Break
- 16:00–16:15 Ferenc Ács (ELTE, Budapest, Hungary) and H. Breuer
Estimation of the actual evapotranspiration: an overview of Hungarian efforts
- 16:15–16:20 Albert Ruman (RHS, Novi Sad, Serbia)
Influence of lake mask changes of Lake Balaton on local surface temperature
- 16:20–16:35 Balázs Szintai (HMS, Budapest, Hungary)
Parameterization of boundary-layer turbulence in the AROME non-hydrostatic numerical weather prediction model
- 16:35–16:40 Árpád Bordás (ELTE, Budapest, Hungary)
Invited comments on description of the PBL structure using combined 1D vertical model
- 16:40–16:55 Joseph Pinto (EPA, USA)
Issues in downscaling for climate change studies
- 16:55–17:15 Discussion

*The workshop is a result of a joint program with the Group on Atmospheric Dynamic and Synoptic Meteorology of the Committee on Meteorology of the Hungarian Academy of Sciences.