

13th International Symposium on Transport and Air Pollution
13 – 15 September 2004
National Center for Atmospheric Research
Boulder, Colorado USA

<http://www.acd.ucar.edu/TAP/TAP2004/index.html>

General Information for Participants

Shuttle bus pick-up of participants at hotels:

Monday, September 13

7:00am	Golden Buff
7:10am	Millennium Harvest House
7:20am	Broker Inn

Tuesday, 14 September

8:00am	Golden Buff
8:10am	Millennium Harvest House
8:20am	Broker Inn

Wednesday, 15 September

8:00am	Golden Buff
8:10am	Millennium Harvest House
8:20am	Broker Inn

Mountain Tour (Tuesday, 14 September 2004, afternoon):

A tour of the Rocky Mountain National Park has been arranged. A bus will take registered participants and spouses to the Park. There, we will be met by National Park Rangers who will give us a guided nature and wildlife tour. The bus will leave NCAR at 12:30 and return to NCAR at 17:30.

For your comfort, we suggest you bring sunscreen lotion, hat, sunglasses, water, and a sweater or jacket, of course in addition to a camera. Weather in the Park is quite variable. For September, the average daily maximum temperature is about 68-70 F (20-21 C). For more information on the Park, see <http://www.nps.gov/romo/index.html>

Information for speakers:

The following equipment will be available:

- Data projector and dedicated computer (Windows XP), with CD Rom and USB capability. The projector can accept connection from either Windows or McIntosh computers. However, we encourage you to load your presentation on our dedicated computer, in advance of your session.
- Overhead transparency projector
- Slide projector. Please let us know in advance so we can load your slides.
- VCR projector (NTSC format only)
- White-board
- Flip-board (paper)

If you require different equipment (e.g. VCR formats other than NTSC) please let us know in advance

Reminder: All oral presentations should be about 25 minutes long, plus 5 minutes for questions (30 min. total).

Weather Information for Boulder:

Boulder weather in September is usually sunny and mild, with daily maximum temperatures in the mid-to-upper 70's F (24-26 C), but considerably cooler at night and in the early morning, near 50F (11 C). Here is a climatology

from NOAA's web site, <http://www.cdc.noaa.gov/Boulder/dailyrecords/>

mid-September climatology

Day	Normal High	Normal Low	Record High	Year	Record Low	Year	snow/year
11	77	51	91/64	1974	34/43	1898	0.0
12	77	50	93/69	1956	31/40	1974	2.7/1974
13	76	50	95/69	1990	35/50	1898/99	1.0/1993
14	76	49	94/63	1948	32/44	1912	0.0
15	75	49	92/65	1948	30/44	1903	0.0
16	75	48	93/62	2000	30/48	1912	TR/1965

Temperatures in F. Note, for record highs, the first value is the highest daily maximum value. The 2nd is the highest daily minimum value. For lows, the first is the lowest daily minimum value and the 2nd is the lowest daily maximum value. Year is for the highest maximum temperature and for the lowest minimum.

As of Tuesday 7 September, the forecasts for 13-15 September indicates partly cloudy skies, temperatures slightly above the climatological averages, and small probability of rain (10% for Monday and Tuesday, 30% for Wednesday).

Preliminary Schedule:

Monday 13 September 2004

7:30-8:30 Registration

8:30-9:00 Welcome

9:00 Mitra, A.P., C. Sharma and R. Pundir, *Emissions of pollutants from transport sector in Indian mega-cities: Case studies of Delhi and Calcutta*

9:30 Oni, S. I., Transport Induced Air Pollution in Megacities: Case of Lagos, Nigeria

10:00 Jazcilevich, A., D., M. Gutter, V. Magaña-Rueda, E. Caetano-Neto and M. Moya, *Research on Meteorology and Air Pollution in Mexico City at the Center of Atmospheric Sciences at UNAM*

10:30-11:00 Break/Mount posters

11:00 Zavala, M., E. Dunlea, L. Marr, R. Slott, L. T. Molina, M. J. Molina, S.C. Herndon, J.T. Jayne, J. Shorter, D. Worsnop, M. Zahniser, T. Onash, C. Kolb, and B. Knighton, *Characterization of Vehicle Emissions in Mexico City during the MCMA-2003 Field Measurement Campaign*

11:30 Vega, E., E. Reyes, G. Sánchez, J. C. Chow and J. G. Watson, *Vehicular Emissions of Volatile Organic Compounds Determined in Two Tunnels in Mexico City*

12:00-13:30 Lunch

13:30 Zhang, Q., K. Dzepina, J. L. Jimenez, M. R. Alfarra, J. D. Allan, H. Coe, D. R. Worsnop and M. R. Canagaratna, *Quantitative Estimates of Primary and Oxygenated Organic Aerosol Mass Concentrations and Size Distributions with 5-min Time Resolution: Pittsburgh vs. Mexico City*

14:00 Wohnschimmel, H., E. Bueno, V. Mugica, B. Cardenas, S. Blanco, C. Marquez and J. Staehelin, *Ozone and VOC vertical profiles over the Southeast of Mexico City*

14:30 Marley, N. A. and J. S. Gaffney, *Measurements of Ammonia in Mexico City in April 2003 using Near-IR TDLAS Open Path System*

15:00 Sosa-Iglesias, G., E. Vega, E. Reyes-Zarate, J. L. Arriaga, E. Gonzalez-Avalos, J. L. López-Martinez and V. R. Mora-Perdomo, *Local and Regional Air Quality Characterization in Salamanca, Mexico: The Field Campaign 2003*

15:30 – 16:00 Break/View posters

16:00 Massie, S., J. Gille, and D. Edwards, *Satellite observations of aerosol and CO over Mexico City*

16:30 Tie, X. and S. Madronich, *Evolution of Mexico City Air Pollution Plume: Simulation of WRF-Chem Regional Chemical/Dynamical Model*

17:00 Bassi, C., S. Becker and L. Calovi, *New motorway projects and proximity air pollution: Evaluating Sanitary Risks (inhalation and ingestion)*

18:00-20:00 Banquet

Tuesday 14 September 2004

- 8:30 Lonati, G., M. Giugliano, S. Cernuschi and M. Grosso, *The Role of Traffic Emissions from Weekend and Weekdays PM₁₀ Data in Milan*
- 9:00 Stutz, J., A. Geyer and S. Wang, *Chemistry in the Urban Nocturnal Boundary Layer: Influence of Vertical Mixing on the Processing of urban Pollutants*
- 9:30 Oetl, D., S. Hausberger, M. Rexeis and P. Sturm, *Detailed Simulation of Traffic Induced Air Pollution near the A 12 Autobahn in Austria*
- 10:00 – 10:30 Break/View posters
- 10:30 Dixon, N.S., R.J. Smalley, J.W.D. Boddy, J.E. Tate, and A.S. Tomlin, *The influence of 3-dimensional flow structures on the dispersion of a traffic related pollutant in a complex urban street canyon*
- 11:00 Volkmar, H., H. Ernst, C. Nagel, J. Kühlwein, R. Friedrich, S. Hausberger, P. Vortisch, W. Bächlin, and H. Frantz, *Calculation and Prediction of Urban Air Quality on the Base of a Microscopic Traffic Simulation Model*
- 11:45-12:30 Lunch
- 12:30-18:00 Mountain tour
- 17:30-19:00 Reception/poster session

Wednesday 15 September 2004

- 8:30 Lents, J. M., M. Osses, N. Davis, N. Nikkila, and M. Barth, *Comparison of On-Road Vehicle Profiles Collected in Seven Cities Worldwide*
- 9:00 Andre, M. and R. Joumard, *Real-world and specific to vehicle driving cycles for measuring car pollutant emissions*
- 9:30 Damm, C. J., H. D. Kuhns, and A. W. Gertler, *An Assessment of Motor Vehicle Particulate Matter Emissions Measurements*
- 10:00 Ntziachristos, L. and Z. Samaras, *Vehicle and Fuel Effects on Exhaust Particle Properties from Diesel Passenger Cars*
- 10:30 – 11:00 Break/View posters
- 11:00 Heeb, N. V., A.-M. Forss, S. Brühlmann, R. Luscher, C. Saxer, and P. Hug, *Three-way Catalyst-induced Formation of Ammonia-Velocity- and Acceleration-dependent Emission Factors*
- 11:30 Soltic, P. and S. Hausberger, *On-Road Emission Measurements and Emission Modelling Results for a Tractor-Semitrailer in Trans-Alpine Operation*
- 12:00-1:30 Lunch
- 13:30 Staehelin, J. and C. Colberg, *Comparison of Road Tunnel Measurements from Gubrist Tunnel (Switzerland) with Road Traffic Model*
- 14:00 Tartakovsky, L., M. Gutman, Y. Aleinikov, V. Baybikov, M. Veinblat, and Y. Zvirin, *Road Tests of Diesel Oxidation Catalysts on Urban Buses*
- 14:30 Gense, R., M. Weilenmann, and I. McCrea, *Direct NO₂ emission from road transport*

15:00-15:30	Break/View posters
15:30	<u>Gertler, A.</u> , H. Kuhns, C. Damm, J. Gillies, M. Abu-Allaban, R. Clayton, and D. Proffitt, <i>The Impact of Winter Road Sand/Salt and Street Sweeping on Road Dust Re-Entrainment</i>
16:00	<u>Stevens, G.</u> , A. Wilson, and J. Hammitt, <i>The Benefits and Costs of Ultra-Low Sulfur Diesel in Mexico</i>
16:30	McKinley, G., M. Zuk, M. Hojer, M. Avalos, I. González, R. Iniestra, I. Laguna, M. A. Martinez, P. Osnaya, L. M. Reynales, R. Valdés, and J. Martinez, <i>Local and Global Benefits from Transportation Measures in Mexico City</i>
17:00	<u>Faiz, A.</u> , B. B. Ale, and R. K. Nagarkoti, <i>The Role of Inspection and Maintenance (I/M) in Controlling Vehicular Emissions in Kathmandu Valley, Nepal</i>
17:30	END OF SYMPOSIUM

POSTER PRESENTATIONS

- Ajtay, D., M. Weilenmann, T. Auckenthaler and C. Onder, Modelling Catalyst-out NO_x Emissions Based on the Relative Oxygen Level in the Catalyst
- Ale, B. B., R. K. Nagarkoti, Evaluation of Kathmandu Valley Inspection and Maintenance Program on Diesel Vehicles
- Andre, J.-M., R. Joumard, and M. Hugot, Modelling of Cold Start Emissions for Passenger Cars
- Brown, R. C., D. M. Dussault, R. C. Miake-Lye, P. Heimbach, and J. W. Hurd, Back-tracking Atmospheric Plumes using Stand-off Sensor Data
- Caplain, I., F. Cazier, H. Nouali, A. Mercier, J.-C. Déchaux, V. Nollet, R. Joumard, J.-M. André, R. Vidon, Measurement of non regulated pollutants from gasoline and diesel passenger cars.
- Cardenas, E. G., An approach to street distribution of emissions due to mobile sources in the downtown of a medium size metropolitan area using a Geographical Information System. Case of Toluca, México.
- Chakraborty, S., S. K. Jha, Monitoring of Trace Element Atmospheric Pollution Using Nuclear Technique
- Chaney, A. M., D. J. Cryer, P. W. Seakins, Preliminary Comparisons of Modelled and Predicted Spatial NO, NO₂ and O₃ Concentrations in an Urban Environment
- Coelho, M. C., T. L. Farias, N. M. Roupail, Measuring and Modelling Traffic and Emission Impacts of Toll Facilities
- Ctyroky, J., M. Kazmukova, J. Macoun, M. Pochmann, HEAVEN Project in the City of Prague
- Fernández-Bremauntz, A., L. Rojas-Bracho, V. Garibay-Bravo, P. Franco-Sandoval, M. Zuk, Assessing Alternatives for Lowering Sulfur Content in Gasoline and Diesel in Mexico
- Gaffney, J. S., N. A. Marley, Black Carbon Measurements in Mexico City in April 2003

- Gilbert, N. L., M. S. Goldberg, B. Beckerman, M. Jerrett, J. R. Brook, Predicting Spatial Variability of Ambient Nitrogen Dioxide in Montréal, Canada, with a Land Use Regression Model
- Graham, L.A., Trends in Emissions and Fuel Economy of Urban Buses from 1989 to 2003
- Hendriksen, P., R. Vermeulen, R. Rijkeboer, D. Bremmers, The environmental impact of four different automotive fuels
- Hugrel, C. and R. Joumard, The contribution of passenger cars to the greenhouse effect: the influence of air-conditioning and ACEA's commitment (JAMA and KAMA included) on the CO₂ emissions
- Ionel, I., S. Ionel, D. Bisorca, A Correlative Comparison of Measured, Traffic Induced Carbon Monoxide Concentrations
- Jazcilevich, A. D., M. Grutter, M. Hojer, R. Gonzalez-Oropeza, R. Rincón-Gomez, P. Rincón-Gomez, M. Huerta-Garcia, M. Zuk, 329Preliminary Results of a Cost/Benefit Study for New Car Technologies in Mexico City
- Kuntasal, O.O., D. Karman, S.G. Tuncel, G. Tuncel, Measurement of motor vehicle related volatile organic compounds in Ankara, Turkey
- Madronich, S., Chemical Transformations Down-wind of Large Urban Areas: Mexico City Case Study
- Negrenti, E. and A. Agostini, ISHTAR Suite: an Integrated Software for Health, Transport Efficiency and Artistic Heritage Recovery
- Pospisil, M., G. Sebor, K. Hornicek, V. Pisa, J. Karel, Calculation of automobile transport emissions in the Czech Republic
- Reyes, F., A. Jaczilevich, R. González-Oropeza, R. Rincón, P. Rincón, M. Huerta, M. Grutter, Detailed Gas-phase Analysis of Vehicular Emissions by Extractive FTIR Spectrometry
- Riemersma, Dijkhuizen, Van Aken, Hendriksen, Smokers, Expert judgement on the potential for further reduction of the exhaust gas emissions of Heavy Duty vehicles
- Saxer, C., A.-M. Forss, C. Rűdy, N. V. Heeb, Benzene Emissions of 4-stroke Motorbikes - Potential of the Current TWC-Technology
- Tran, C., R. Chi, A. Pollack, A. Gertler, An Assessment of the USEPA MOBILE6 Model Using Tunnel Study Data
- Trozzi, C., M. P. Ancora, S. Crocetti, Road Transport Emission Models and Their Use in Local transport Policies: A Comparison Between Copert III and SETS Models
- Tsubota, Y, Y. Arai, H. Kawashima, Dynamic Conditions of Air Pollution along the Congested Trunk Road
- Villegas-López, A., Elements of a Framework for Policy Recommendations on Air Quality and Transportation in the Mexico City Metropolitan Area using the 1998 Emissions Inventory
- Weilenmann, M., A.-M. Vasic, P. Stettler, Effect of Air Conditioning Activity on Fuel Consumption and CO₂ Emissions in Europe