



## **EMeRGe Topical Workshop TEAM:**

Transport and transformation of pollutants from **E**uropean and **A**asian **M**ajor population centres



### **Agenda**

**Tuesday 14.02.2017**

**8:30 Registration**

09:00 - 9:30	<b>Welcome</b> Objective of TEAM workshop Overview EMeRGe HALO and EMeRGe international	John P. Burrows (IUP- University Bremen)
09:30 - 9:45	TEAM meeting information and agenda	Lola Andrés Hernández (IUP- University Bremen)
<b>First session: Transport of pollution from European MPCs: state of art</b> Chair: U. Platt		
Time	Title	Speaker
09:45 - 10:15	Use of perfluorocarbon tracer for MPC pollution plume experiments	Hans Schlager (IPA-DLR, Germany)
10:15 - 10:45	What can we learn from previous Falcon field campaigns for EMeRGe?	Heidi Huntrieser (IPA-DLR, Germany)

**10:45 - 11:15 Coffee break**

Time	Title	Speaker
11:15 - 12:00	Results and lessons learned from the Megapoli Paris campaign	Matthias Beekmann (LISA –CNRS, France)
12:00 - 12:20	Aerosol measurements in the outflow of large major population centres – Emissions and atmospheric processing	Johannes Schneider (MPIC-PC, Germany)
12:20 - 12:40	Pollution measurements in and around London from ground and airborne platforms	Hugh Coe (University Manchester, UK)
12:40 - 13:00	Contribution of road traffic emissions to tropospheric ozone in Europe	Mariano Mertens (IPA-DLR, Germany)

**13:00 - 13:15 Group photo**

**13:15 - 14:30 Lunch**

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Time	Title	Speaker
14:30 - 15:10	Ozone and aerosol studies over Japan: Perspectives of continental outflow and megacity pollution	Yugo Kanaya (JAMSTEC, Japan)

**Second session: EMeRGe in Europe: Mission planning**

Chair: H. Ziereis

15:15 - 15:35	General overview of the EMeRGe campaign in Europe	Lola Andrés Hernández (IUP-University Bremen)
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**EMeRGe HALO instrumentation: measurement and science objectives**

15:35 - 15:45	Peroxy radicals in EMeRGe	Lola Andrés Hernández (IUP-University Bremen)
15:45 - 15:55	Trace gases: SO <sub>2</sub> , CO, CO <sub>2</sub> , CH <sub>4</sub> , O <sub>3</sub> and PAN	Hans Schlager (IPA-DLR, Germany)
16:00 - 16:10	NOx and NOy measurements	Helmut Ziereis (IPA-DLR, Germany)
16:15 - 16:25	Measurements of Stable Carbon Isotopes in Volatile Organic Compounds with MIRA-H aboard HALO	Marc Krebsbach (Univ. Wuppertal, Germany)
16:30 - 16:40	VOC measurements via PTRMS onboard aircraft	Marco Neumaier (KIT-MIK, Germany)

**16:45 - 17:05 Coffee break**

Time	Title	Speaker
17:05 - 17:15	Aerosols on board HALO	Johannes Schneider/ Daniel Sauer (MPIC-PC/ IPA-DLR, Germany)
17:20 - 17:30	CCN on board HALO	Oliver Lauer (MPIC-MPC, Germany)
17:30 - 17:45	Heidelberg Airborne Imaging DOAS Instrument - Requirements - Capabilities- Science"	Ulrich Platt (IUP-Uni. Heidelberg, DE)
17:50 - 18:00	HALO mini-DOAS instrument and objectives during EMeRGe	Tilman Hüneke (IUP-Uni. Heidelberg, DE)
18:05 - 18:15	Summarising remarks: Data policy	John P. Burrows (IUP- University Bremen)

**Free evening: Information at the registration desk**

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**Wednesday 15.02.2017**

<b>Third session: EMeRGe in Europe: Flight tracks and target cities</b> Chair: M.Gauss		
<b>Time</b>	<b>Title</b>	<b>Speaker</b>
09:00 - 09:15	Current status and timeline for EMeRGe-EU	Katrin Witte (FX-DLR, Germany)
09:20 - 09:35	Flight operations within EMeRGe (EU) and its limitations	Frank Probst (FX-DLR, Germany)
09:40 - 09:55	MSS Tool and forecast	Vladyslav Nenakhov/ Andreas Hilboll (IUP/ University Bremen)
10:00 - 10:15	Chemical forecast for EMeRGe in Europe	Anne Blechschmidt (IUP-University Bremen)
10:20 - 10:30	HYSPLIT Trajectories	Hans Schlager (IPA-DLR, Germany)
10:30 - 10:40	Webpage and Seafire during EMeRGe campaigns	Vladyslav Nenakhov (IUP-University Bremen)
10:45 - 11:00	Modelling for EMeRGe	Mihalis Vrekoussis (University Bremen)

**11:00 - 11:20      Coffee break**

<b>Time</b>	<b>Title</b>	<b>Chair: J. Burrows Speaker (all)</b>
11:20 - 12:45	General discussion for target cities and flight tracks: coordination with FAAM	
	Air Quality Measurements and Modelling for Berlin in the context of the Stadtklima 3DO campaign	Erika von Schneidemesser (IASS- Potsdam, Germany)
	Discussion coordination with FAAM	Hugh Coe/Frank Probst (University Manchester, UK/ FX-DLR, Germany)

**12:45 - 14:15      Lunch**

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**Fourth session: EMeRGe International: complementary activities during and around the HALO EMeRGe campaign in Europe**

Chair: R. Koppmann

Time	Title	Speaker
14:15 - 14:45	EMeRGe for EMEP / EMEP for EMeRGe	Michael Gauss (Norwegian Met.Institute)
14:45 - 15:05	Atmospheric observations in Rome (Italy): a potential contribution to the EMERGE summer campaign in support of/comparison with the HALO measurements over the Central Mediterranean	Francesca Barnaba (ISAC-CNR-Italy)
15:10 - 15:30	Aerosol and trace gases measurements: contribution to EMeRGe from National and International networks and facilities over Italy and Europe	Monica Campanelli (ISAC-CNR-Italy)

**15:30 - 16:00 Coffee break**

Time	Title	Speaker
16:00 - 16:15	Satellite trace gas observations over Europe and Asia	John P. Burrows / Andreas Richter IUP-University Bremen
16:15 - 16:30	Aerosol optical depth retrieved from Sentinel 3	Marco Vountas IUP-University Bremen
16:30 - 16:45	Summarising remarks Description of dinner location	John P. Burrows (IUP- University Bremen)

**17:00 - 17:30 Meeting Steering Committee**
**19:00 Workshop dinner**

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**Thursday 16.02.2017****Fifth session: Transport of pollution from Asian MPCs: Chinese perspective**

Chair: H. Coe

Time	Title	Speaker
09:00 - 10:00	Transport and transformation of air pollutants in megacity Beijing and North China Plain	Tong Zhu (CESE, Peking Univ., China)
10:00 - 10:30	Air pollution in Yangzte River Delta of China: characteristics, transformation and transport	Tjan Wang/ Guangyuan Liu (Nanjing University, China)

**10:30 - 11:00      Coffee break****Sixth session: Transport of pollution from Asian MPCs: Taiwanese perspective**

Chair: H. Schlager

Time	Title	Speaker
11:00 - 11:45	Seasonality of aerosol concentration and composition in northern Taiwan: Implications for Asian continental outflows	Charles C.-K Chou (RCEC, Taiwan)
11:45 - 12:15	The vertical distributions and optical properties of aerosols in free atmosphere observed by lidar over Taiwan	Wie Nai Chen (RCEC, Taiwan)
12:20- 12.50	Long-range transport of Asian dust and air pollutants to Taiwan	Chuan-Yao Lin (RCEC, Taiwan)

**12:50 - 13:45      Lunch****Seventh session: Transport of pollution from Asian MPCs: Japanese perspective**

Chair: tbd

Time	Title	Speaker
13:45 - 14:15	Anthropogenic and biomass burning emissions in East Asia: Views from space, ground and models	Hiroshi Tanimoto (NIES, Japan)
14:15 - 14:35	Demonstration of the aerosol simulation around Fukuoka city with the horizontal resolution of ~5km using Stretch NICAM-Chem	Takeshi Kuroda (NIICT, Japan)



<b>Eighth session: EMeRGe International: complementary activities during and around the HALO EMeRGe campaign in Asia</b>		
<b>Time</b>	<b>Title</b>	<b>Chair: J.P. Burrows Speaker (all)</b>
14:40 - 16:30	First planning and coordination of activities for EMeRGe in Asia	
16:30 - 17:00	Concluding remarks	John P. Burrows (IUP- University Bremen)

**17:00**                      **End of the workshop**

**17:15 - 18:30**            **IUP Bremen lab tour (optional)**

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